REPORTING INTERNAL CONTROL DEFICIENCIES:
HAVE THINGS CHANGED AFTER THE INITIAL SECTION 404 SURGE?

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ABSTRACT

An analysis was done by Krishnan & Visvanathan (2007) to look at reporting internal control deficiencies in the initial stages after the Sarbanes-Oxley Act had been enacted. The time period examined by Krishnan et al. (2007) was very brief encompassing from November 15, 2004 (when the Sarbanes-Oxley Act was first required) to March 1, 2005. Given that this time period is so short and much has been done by public companies to address their internal control assessment via Section 404 of that act, the purpose of this paper is to see if those initial findings regarding audit committee composition and diligence and auditor attributes remained the same or changed over time. In addition two other hypotheses were added, one a more granular look at auditor size previously examined by testing the occurrence of internal control deficiencies reported for each of the Big 4 firms (Deloitte & Touche, Ernst & Young, KPMG and PricewaterhouseCoopers) separately versus in the aggregate and finally to look at the reporting of internal control deficiencies relative to industry specialized auditors.

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Problem:

This study takes a more recent and longer look at the effect of audit committee composition and diligence, auditor attributes and an examination of auditor industry specialization and separate reporting of the Big 4 firms on the occurrence of internal control deficiencies (ICD) reported under Section 404 of Sarbanes-Oxley Act (SOX) introduced in 2002 (U.S. House of Representatives, 2002). This act was introduced after many fraud cases occurred in the early 2000’s including Enron Corporation (Enron) and WorldCom, Inc. to name a few of the larger ones. The U.S. government introduced this act to reduce fraudulent financial reporting and to improve auditor quality (Coates, 2007). In order to improve auditor quality, the Public Company and Oversight Board (PCAOB) was created to oversee all the accounting firms that audit U.S. listed public companies. The reduction of fraudulent financial reporting is focused on improving the internal control framework within companies. Much has been discussed about increased corporate governance in a Post-SOX era, has it helped, how has it manifest itself and how to measure it. A significant element of SOX is section 404 that requires management’s assessment of the company’s internal controls over financial reporting and an auditor’s opinion on the management’s assessment. In addition, PCAOB Audit Standard 2 requires audit firms do their own assessment about the effectiveness of the internal control framework of the companies. All internal control deficiencies discovered during an audit need to be reported to the Securities and Exchange Commission, this has been in effect since November 15, 2004. Implementing section 404 has been the primary focus of audit committee members and many companies have borne enormous costs to comply with it. Prior to SOX, disclosures of internal controls were not required except when a company changed its external auditor. Because both SOX and stock exchange guidelines have mandated rules governing auditors and the composition of audit committees, the role of governance mechanisms with respect to detection of internal controls has undergone substantial change (Krishnan et al. 2007). In particular, SOX requires that all members of the audit committee be independent and companies disclose they have a financial expert on their committee. This study will be a follow-on to one performed by Krishnan et al. (2007) wherein they examined the role of audit committees and auditors in reporting ICD after the passage of SOX for the time period November 15, 2004 to March 1, 2005. In this paper, we will focus on
material weaknesses in internal control over financial reporting versus significant deficiencies. “A significant deficiency is a deficiency, or a combination of deficiencies, in internal control over financial reporting that is less severe than a material weakness, yet important enough to merit attention by those responsible for oversight of the company’s financial reporting” (PCAOB, 2007, p. 434). However, indicators of material weaknesses in internal control over financial reporting include: 1) Identification of fraud, whether or not material, on the part of senior Management 2) Restatement of previously issued financial statements to reflect the correction of a material misstatement 3) Identification by the auditor of a material misstatement of financial statements in the current period in circumstances that indicate that the misstatement would not have been detected by the company's internal control over financial reporting 4) Ineffective oversight of the company's external financial reporting and internal control over financial reporting by the company's audit committee. When evaluating the severity of a deficiency, or combination of deficiencies, the auditor also should determine the level of detail and degree of assurance that would satisfy prudent officials in the conduct of their own affairs that they have reasonable assurance that transactions are recorded as necessary to permit the preparation of financial statements in conformity with generally accepted accounting principles. If the auditor determines that a deficiency, or combination of deficiencies, might prevent prudent officials in the conduct of their own affairs from concluding that they have reasonable assurance that transactions are recorded as necessary to permit the preparation of financial statements in conformity with generally accepted accounting principles, then the auditor should treat the deficiency, or combination of deficiencies, as an indicator of a material weakness (PCAOB Release No. 2007-005A June 12, 2007).

The sample time period Krishnan and Visvanathan tested was the early stages Post-SOX when there was heightened sensitivity by all parties involved (i.e. management, audit committees and external auditors) to this issue and now that more time has passed it will be our intention to see if the initial findings remained constant or things have changed. The Krishnan et al. (2007) study looked at two major categories for testing ICD. The first category was audit committee composition and diligence in which three hypotheses were tested. It was found that the size of the audit committee of firms that report ICD is not different, that firms with a lower proportion of financial experts report more ICD and that the number of meetings held by ICD firms is
different from those who don’t. For the proposed study, we would expect that the audit committee size would not change since both the Nasdaq and New York Stock Exchange have mandated that all audit committee be comprised of at least three independent directors. We would expect that companies with a lower proportion of financial experts would continue to report more ICD and that companies that have more audit committee meetings are doing so due to more internal control issues which manifest themselves in more ICD. The next category from the study was auditor attributes in which two hypotheses were tested. It was found that auditor size of the firm (specifically Big 4 versus Non Big 4) performing the audit did not report more ICD. Also noted was that auditor changes are greater for firms that report ICD. We assume that the auditor size will not have an effect on reporting ICD. However we propose to look at the Big 4 firms separately to see if there is a difference between the four firms regarding reporting ICD individually versus in aggregate. We also intend to examine industry-specialist auditor companies and assume that they will report less ICD than the general population.

With the stock market meltdown in 2008, and the demise of a number of financial institutions (i.e. Lehman Brothers Holdings Inc., Merrill Lynch and Co., Inc. etc.) in the ensuing time period, reliance on strong internal controls and the role of the audit committee and auditors continues to be a major issue for all corporations. There has been much time and expense incurred by corporations especially around implementing section 404 that requires management’s assessment of the company’s internal controls over financial reporting and an auditor’s opinion on the management’s assessment, the question is what have we learned and what has worked and not worked from this increased activity.

**Objectives:**

The objective of this study is to analyze the quality of governance and the external auditors and the role that they play in maintaining good internal controls that are required in order that corporations can have high quality and reliable financial reporting. Therefore we will examine firms that reported ICD under section 404 of SOX and to assess the characteristics of their audit committees and auditors. These firms will be compared against similar organizations that did not report deficiencies. These results will be compared against the Krishnan et al. (2007)
analysis to see what if anything has changed during the ensuing period of time since especially given that the focus was much greater when SOX was initially introduced and is now receiving less attention. During that initial time period, companies had just implemented their 404 testing and much was unknown. We theorize as noted above that regarding the audit committee composition and diligence that audit committee size will not be a major factor however the percentage of financial experts on the committee as well as the number of meetings held will be significant. Regarding the auditor attributes, the size will not be significant but the auditor changes will be. In addition, we refer to the Doyle, Ge & McVay (2007) study that examines the attributes of firms reporting ICD and tend to be smaller, younger, financially weaker, more complex, growing rapidly or undergoing restructuring. Therefore the research question will be the following. Have the possible determinants of material weaknesses in internal control over financial reporting for U.S. publicly traded companies regarding the role of the auditor and corporate governance stayed the same, improved or worsened since the early phase of Section 404 implementation?

**Literature Review:**

Internal control over financial reporting has been recognized for some time as an important role of a company (see Kinney et al., 1990; Kinney, 2000, 2001). Prior to SOX, the standards in place were very limited in scope. The only regulation regarding internal controls over SEC registrants previously was the Foreign Corrupt Practices Act of 1977 and the only disclosure required regarding significant internal control deficiencies for all SEC regulated firms was in the companies’ form 8-K when they made public a change in auditors (Doyle et al., 2007). The focus on having good internal controls has been a major issue for many corporations because it is considered an important factor in achieving good quality financial reporting (Krishnan, 2005). One of the major criticism levied against Enron regarding its inadequate financial reporting was the charge that there had been a major failure in their system of internal controls to identify all the illicit activities taking place, especially those that had been off the balance sheet (Verschoor, 2002).

The role of audit committees in helping to structure, maintain and monitor sound internal controls has been demonstrated by several studies (DeZoort, 1997; BRC, 1999; Carcello et al., 2002). There have been prior studies that examined the broader role of audit committees
regarding earnings manipulation and restatements (Klein, 2002; Abbott et al., 2004). In addition, J. Krishnan (2005) hypothesized that firms that report internal control deficiencies in the pre-SOX period have audit committees that are smaller, less independent and have lesser expertise compared to firms that do not report such deficiencies. Companies with audit committee financial expertise are also less likely to have internal control deficiencies (Krishnan, 2005; Zhang et al. 2007) and less likely to have suspicious auditor switches (Archambeault and DeZoort, 2007). Adding independent financial experts to audit committees can improve disclosure quality and excluding family members as member of the audit committee has been shown to be beneficial (Felo & Solieri, 2009).

There has been much movement in the accounting profession since the demise of Arthur Andersen. The Big 5 (The Big 4 plus Arthur Andersen) became the Big 4 and in the early stages of SOX and when testing section 404, the firms were strapped for resources and therefore they purged their client base and generally focused on larger public company clients. Grant Thornton and BDO picked up some of the slack during this era. As a result, some studies found it more appropriate to group them with the Big 4 and have effectively a Big 6 category (Ashbaugh et al., 2007). Big 4 firms are larger, have more market based incentives, expertise and resources than the smaller firms and are more interested in protecting their reputation capital and have therefore historically been more conservative than non-Big 4 auditors (Francis & Krishnan, 1999; Basu et al., 2000; G. Krishnan, 2007). Although based on the Krishnan et al. (2007) study, there was no difference in internal control deficiency occurrences between the Big 4 and smaller firms. Structural shifts by audit firms in the direction of greater industry focus also suggest that industry specialization may play an increasingly important role in audit quality (Hogan & Jeter 1999; Solomon et al. 1999). In a current working paper, Hodiamant (2009) has explored the relationship between industry specialization and reporting of ICD looking at the years 2005 and 2006. The effect of industry specialization of audit firms on internal control deficiencies is interesting to investigate, because there is an increasing trend within audit firms to specialize themselves along certain industries (Bell et al., 1997; Emerson, 1993). Specialized audit firms are considered to invest in industry specific audit methods, support materials, education, and training of their employees (Dunn and Mayhew, 2004). Prior research suggests that auditors can use their industry experience and knowledge to
provide more effective and higher quality audits (Hammersley, 2006; Velury, 2003; Gramling et al., 1999). The increased industry knowledge and higher quality is valued by the respective client firm. For example, Mayhew and Wilkins (2003), and Craswell et al. (1995) showed that audit firms could earn a fee premium if they successfully differentiate through industry specialization.

**Hypotheses:**

Audit Committee Hypotheses:

H1a: The size of the audit committee of firms that report internal control deficiencies does not differ from firms that do not report internal control deficiencies

H1b: Audit committees of firms that report internal control deficiencies have lesser proportion of financial experts relative to firms that do not have such deficiencies

H1c: The number of meetings held by audit committees of firms that report internal control deficiencies differ from the number of meetings held by firms that do not report internal control weaknesses

Auditor Hypotheses:

H2a: Auditor size of firms that report internal control deficiencies is not different from auditor size of firms that do not report such deficiencies

H2b: Big 4 firms as reported individually do not report more internal control deficiencies than they do in aggregate

H2c: Auditor changes are higher for firms that report internal control deficiencies than for firms that do not report such deficiencies

H2d: Industry-specialist auditor companies report less internal control deficiencies than the general population.

Control variables
Restatements

Firms that have had restatements in the past are more likely to need to look very closely at their internal controls to identify any potential weaknesses that might need remediation. Also a restatement could signify an undetected material weakness.

Other controls:

Doyle et al. (2007) and Ashbaugh-Skaife et al. (2007) and Krishnan et al. (2007) all note that several firm characteristics as being determinants of reporting internal control deficiencies. As a result of their findings we need to control for the following factors as ‘control variables’ in our analysis:

**Profitability:** Companies that are more profitable have more money to spend on developing and maintaining internal controls to monitor the business activity in their respective organization and are less likely to have such deficiencies.

**Complexity:** Firms that operate in multiple countries or have multiple product lines are inherently more complex and therefore are more likely to have more issues regarding the effectiveness of their internal control system versus more simple companies.

**Growth:** Firms that are growing very quickly are more likely to have more pressure put on their system of internal controls and therefore be more prone to deficiencies. This growth can occur either from organic sources or as a result of an acquisition. More growth usually results in increases in assets including inventory where applicable, accounts receivable and as a result there exists more control risks.

**Organizational changes:** Just like occurs with higher growth organizational change such as a restructuring puts additional pressure on the internal control environment and these companies are more likely to report internal control deficiencies.

**Market cap:** We expect to find fewer internal control weaknesses in larger firms after controlling for complexity.
Methodology/Data Collection:

The sample will be based on the publication *Compliance Week*. *Compliance Week* scans all regulatory filings with the SEC and reports on a monthly basis firms disclosing internal control issues in any of the filings. Our sample will include the time periods between January 1, 2007 and December 31, 2009. In addition to the firms that reported internal control issues, we also need to have control firms that did not report any such deficiencies, we will do this by matching the two-digit SIC codes of those listed in *Compliance Week* and also look at their relative size (as measured by total assets). The results of the analysis will be done using logistic regression analysis to test the seven hypotheses.

Validation:

Results from the logistic regression analysis will be evaluated relative to the hypotheses and prior research conclusions of the Krishnan et al. (2007) and Doyle et al. (2007) studies.

Selected Bibliography:


Blue Ribbon Committee (BRC) (1999), *Report and Recommendations of the Blue Ribbon Committee*


*Improving the Effectiveness of Corporate Audit Committees*, Printed by NYSE and NASD.


Public Company Accounting Oversight Board (PCAOB) (2004), ‘*Auditing Standard No. 2—An Audit of Internal Control over Financial Reporting Performed in Conjunction with an Audit of Financial Statements*’.


