PCAOB Inspection Reports and Perceived Audit Quality

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PCAOB Inspection Reports and Perceived Audit Quality

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INTRODUCTION

The Sarbanes-Oxley act of 2002 (SOX) created the Public Company Accounting Advisory Board (PCAOB), which “oversees the audits of public companies and SEC-registered brokers and dealers in order to protect investors and further the public interest” (PCAOB, 2020). One of the provisions included in SOX replaced the previous self-regulated peer-review program with an inspection process controlled by the agency. The revised process aimed to protect the interests of investors and improve auditor credibility (Robertson, 2010). As part of this process, inspection staff review an audit firm’s quality control system and evaluate audit procedures performed on a sample of engagements (Abbot et al. 2016). Inspections are performed annually for large firms (>100 clients) and triennially for smaller audit firms (<100 clients). The PCAOB inspects registered firms to assess their level of compliance with “the Sarbanes-Oxley Act, the rules of the Board, the rules of the SEC, and professional standards in connection with the firm’s performance of audits” (PCAOB, 2020).

The outcome of the inspection process is a publicly available report. Part I of the report summarizes audit deficiencies identified through the inspection process. This includes deficiencies of such significance that it appeared the firm did not have enough evidence to support its opinion on the financial statements of ICFR (Guide to Reading the PCAOB…). Part II provides observations related to the audit firm’s quality control systems. Quality control criticisms can be related to independence, personal management, client acceptance, engagement performance, and monitoring. (“Inspection Procedures). Quality control criticisms are revealed in the public report only if the firm fails to address the criticisms to the Board’s satisfaction within 12 months of the issuance of the original report (“Inspection Procedures”).

2
The PCAOB affirms that the purpose of the inspection process is “to accurately assess, drive improvement in, and communicate audit quality” (PCAOB, 2020) They warn against extrapolating results to draw large conclusions on the quality of audit firms. Despite this warning, prior research shows in the following section that there is a significant market response to the release of inspection reports, suggesting investors may view reports as a significant signal of audit quality. While prior research has examined the market’s reaction to PCAOB inspection reports, these studies were completed prior to changes in the report’s format. The objective of this study is to provide new evidence on whether the redesigned PCAOB inspection reports affect the market’s perception of audit quality. Specifically, I examine whether clients of auditors with a greater number of identified deficiencies suffer more adverse market reactions when an inspection report is released.

**BACKGROUND AND PRIOR RESEARCH**

**PCAOB Inspection Reports**

The inspection report process has undergone multiple revisions, with the most recent occurring in 2018. Beginning in 2018 the PCAOB developed a new inspection report intended to meet the needs of their stakeholders more effectively. Per the PCAOB, this new report improves readability for investors and other stakeholders, uses data tools to improve accessibility, and reduces the use of technical language (PCOAB, 2018). It is divided into five parts: introduction, overview of historical data, inspection observations, quality control observations, and the firm’s response to the draft inspection report (PCAOB, 2018). The introduction section offers investors and other readers a high-level overview of firm’s compliance with PCAOB requirements. The overview of historical data sections previously included one year of data for annually inspected
firms but was updated to include three years. This increases comparability and recognizes temporal changes in scope and process, which increases understandability. The inspection observations section is divided into two sub-sections, Part I.A and Part I.B. Part I.A. provides a summary of audits inspected and discusses those that were found to have unsupported opinions. This discussion includes a description of the deficiency and an assessment of the relative significance or nature of the accounts/disclosures affected. Part I.A provides a breakdown of deficiencies by category, for example, “revenue recognition” or “related-party relationship transactions.” This ensures that the most relevant information is displayed first. (“PCAOB posts Guide to Reading the PCAOB’s New Inspection Report.”, (2018)). Part I. B. identifies other instances of non-compliance that may not have caused insufficient information for an unqualified opinion, but nevertheless violated PCAOB rules and standards. This new addition to the report looks to increase transparency, thereby increasing investor confidence and improving auditor credibility.

The next section of the inspection report summarizes observations related to the audit firm’s quality control systems. These observations are generally negative and relate to weaknesses in the firm’s systems. For each observation, prior to the issuance of the report, firms are given the opportunity to respond to these concerns within a 12-month period after the draft report is issued, but if no action is taken, the deficiency is issued publicly. The final section of the report is the Appendix, which can include a written statement from the firm in response to the inspection report if they choose to provide one.

**PCAOB Inspection Reports as a Measure of Audit Quality**

The primary purpose of an audit is to provide an independent verification that the financial statements of a company are, in all material respects, in accordance with GAAP. In addition to
providing assurance, a high-quality audit increases the integrity of funded programs, identifies possible non-compliance issues, reduces the risk of future non-compliance, and increases goodwill among taxpayers, donors, and other key stakeholders (AICPA, 2018). A high-quality audit can reduce agency costs and information asymmetry which supports credibility for managers in the eyes of shareholders. It can also improve earnings quality and provide more useful and reliable information to capital markets (Huang and Kang, 2015). Conversely, the consequences of a low-quality audit can include restatements, litigation, and going-concern opinions that negatively impact investors (Huang and Kang, 2015). Because of these positive and negative effects, audit quality is a primary determinant of auditor selection and is meaningful to investors and stakeholders.

PCAOB inspection reports have the potential to be used as a measure of audit quality (Aobdia, 2019). Both audit professionals and investors, “associate fewer identified audit deficiencies with higher audit quality” (Christensen 2016, pg. 4). This view is held by most of each group; “75.3 percent of auditors and 65.4 percent of investors associate fewer inspection findings by the PCAOB with higher audit quality” (Christensen 2016, pg. 29). In addition, PCAOB inspection reports change investor’s perceptions of audit quality (Offermanns 2011). The size-adjusted stock returns of clients audited by inspected firms exhibit abnormal variances during the period around the release date of the inspection report, suggesting that investors use the reports to make decisions. Suggesting investors’ perceptions might be accurate, Gunny and Zhang (2013) find that PCAOB inspection reports that reported significant deficiencies were indicative of lower audit quality, reflected in a greater number of restatements and higher levels of abnormal current accruals. Robertson, Stefeniak, and Houston (2014) find PCAOB inspection reports, and the
related investor response can ultimately lead to an increased likelihood executive will consider switching auditors.

While there are evidence PCAOB inspection reports are a measure of audit quality used by investors and other parties, not all evidence supports this conclusion. Lennox and Pittman (2010) find the market share of audit firms is insensitive to the issuance of a negative PCAOB inspection report. The study asserts that “if audit clients view PCAOB reports as being informative about differences in audit firm quality … clients would appoint (dismiss) audit firms that receive favorable (unfavorable) reports” (Lennox and Pittman, 2010, pg. 85). The authors suggest the reports lack of informational value may be due to the fact: (1) they do not provide an overall “opinion” on the quality of the firm, and (2) they do not disclose information related to the firm’s quality control system.

Nagy (2014) supports Lennox and Pittman’s conclusion that the lack of public disclosure of quality control criticisms within the PCAOB inspection report results in the lack of informational value to investors and clients. The study suggests PCAOB inspection reports have limited information value because contemporaneous quality control criticisms are not included. DeFond (2010) finds that the PCAOB inspection reports are less informative than pre-SOX Peer Reviews and poses PCAOB inspections are not representative, as they target the riskiest audits for review.

**HYPOTHESIS**

The PCAOB did not implement the inspection process for the sole purpose of providing value-relevant information to to investors and clients; the primary objective is to maintain audit quality. Despite the PCAOB’s intentions, because findings are publicly revealed, investors and
clients may utilize inspection reports as a signal of audit quality. Prior research on the value relevance of PCAOB inspection reports is mixed, and there have been substantial updates to the PCAOB inspection report process and presentation since prior studies were published. Responding to this gap in the extant literature, this study examines the market response to PCAOB inspection reports,

The expectation is the market’s reaction to PCAOB inspection reports will vary with the content of the reports. Specifically, the reaction will be significantly worse when the findings in the inspection report are more negative. This expectation is supported by prior literature. There are prior evidence investors react to the release of the reports (Aobdia, 2019) and perceive more inspection findings as an indication of worse audit quality (Christensen 2016). This leads to the hypothesis, stated in alternative form:

H1: Clients of an auditor with more deficiencies in their PCAOB inspection report will experience a more negative (or less positive) market reaction to the report’s release.

METHODOLOGY

For the 20 largest audit firms in the period from 2010 to 2020, I obtain data from the publicly available inspection reports on the PCAOB’s website. For each inspection report I manually code the report’s content. Information from the report is then matched with client information from Compustat. I then drop clients without auditor information in Audit Analytics and price information on CRSP. This selection methodology yields a sample of 43,307 client firm-report observations. Table 1 presents my sample attrition.
Table 1
Sample Selection

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Observations in Compustat for the period 2010 - 2020</td>
<td>123,181</td>
</tr>
<tr>
<td>Less:</td>
<td></td>
</tr>
<tr>
<td>Companies not matched with PCAOB inspected auditor</td>
<td>(43,449)</td>
</tr>
<tr>
<td>Companies without necessary CRSP</td>
<td>(36,425)</td>
</tr>
<tr>
<td>Final Sample</td>
<td>43,307</td>
</tr>
</tbody>
</table>

Note: PCAOB inspection data was not available because either the auditor did not have a unique identifier in Compustat, or the auditor was not one of the top 20 largest auditors of public companies.

To examine the hypothesis, I define the variable CAR as the average of firms’ value weighted cumulative abnormal returns over a 5-day period (t-2 through t+2) surrounding the inspection report release date. I then define DEF_PCT by taking the total # of deficient audits identified in an inspection report and dividing by the total # of audits reviewed. To test the hypotheses, I examine whether CAR varies between clients of auditors with a high deficiency percentage and clients of auditors with a low deficiency percentage. The binary variable MED_DEF_PCT is coded 1 if a client engages an auditor with a deficiency percentage (DEF_PCT) greater than the median value, and 0 otherwise. The binary variable Q4_DEF_PCT is coded 1 if a client engages an auditor with a deficiency percentage (DEF_PCT) in the upper quartile, and 0 otherwise.

RESULTS

Descriptive Statistics

Table 2 presents descriptive statistics for the sample. The average firm engages an auditor that had deficiencies identified for approximately 34 percent of inspected engagements.
The mean value of CAR is zero, suggesting the average firm does not experience an abnormal market reaction to the release of their auditor’s inspection report.

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>Mean</th>
<th>Median</th>
<th>Q1</th>
<th>Q3</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEF_PCT</td>
<td>43,307</td>
<td>0.34</td>
<td>0.33</td>
<td>0.15</td>
<td>0.24</td>
<td>0.43</td>
</tr>
<tr>
<td>CAR</td>
<td>43,307</td>
<td>0.00</td>
<td>0.00</td>
<td>0.06</td>
<td>-0.02</td>
<td>0.02</td>
</tr>
</tbody>
</table>

Table 2 presents descriptive statistics for the sample comprising 43,307 firm-year observations. All variable definitions are provided in Appendix A.

Cumulative Abnormal Returns

The first hypothesis suggests the value of CAR will be significantly lower for firms that engage an auditor with more deficiencies in their PCAOB inspection report. To test the hypothesis, I conduct a t-test to examine differences between clients of auditors with a deficiency percentage above the median value (MED_DEF_PCT = 1) and clients of auditors with a deficiency percentage below the median value (MED_DEF_PCT = 0). Results, presented in Panel A of Table 3, show firms the engaged auditors with a lower deficiency percentage (MED_DEF_PCT = 0), experienced average abnormal returns of 0.0066 during the 5-day period surrounding the release of the PCAOB inspection report. For firms that engaged auditors with a greater deficiency percentage (MED_DEF_PCT = 1), the mean value of CAR is .0018. Critically, the difference between the two reactions is significant (p < 0.01). Consistent with H1, this suggests firms that engage an auditor with a greater deficiency percentage experience lower cumulative abnormal returns around the report’s release.

Panel B of Table 3 compares the mean value of CAR for clients that engage auditors into upper quartile of DEF_PCT (Q4_DEF_PCT = 1) against those in the lower three quartiles (Q4_DEF_PCT = 0). For firms in the upper quartile, the mean value of CAR is .0005 and for firms
in the lower three quartiles, the mean value of CAR is 0.0052. The difference between the two groups is significant (p < 0.01). In both Panel A and Panel B the results support H1; clients of an auditor with more deficiencies in their PCAOB inspection report experience a lower abnormal return around the report’s release.

### Table 3
Tests of Differences

<table>
<thead>
<tr>
<th>Panel A: Median Split</th>
<th>FULL SAMPLE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Obs.</td>
<td>Mean CAR</td>
<td></td>
</tr>
<tr>
<td>MED_DEF_PCT=0</td>
<td>19,539</td>
<td>0.0066</td>
</tr>
<tr>
<td>MED_DEF_PCT=1</td>
<td>23,868</td>
<td>0.0018</td>
</tr>
<tr>
<td>Difference</td>
<td>(0.0048)</td>
<td>***</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Panel B: Fourth Quartile Split</th>
<th>FULL SAMPLE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Obs.</td>
<td>Mean CAR</td>
<td></td>
</tr>
<tr>
<td>Q4_DEF_PCT=0</td>
<td>32084</td>
<td>0.0052</td>
</tr>
<tr>
<td>Q4_DEF_PCT=1</td>
<td>11223</td>
<td>0.0005</td>
</tr>
<tr>
<td>Difference</td>
<td>(0.0047)</td>
<td>***</td>
</tr>
</tbody>
</table>

Table 3 presents descriptive statistics for the variable CAR. ***, **, and * indicate statistical significance at the 0.01, 0.05, and 0.10 levels, respectively, using a 2-tailed test. See Appendix A for a detailed description of all variables.

### CONCLUSION

This study examines the market’s reaction to PCAOB inspection reports, and whether this reaction varies with report content. The results show the average client experiences positive abnormal returns are the release of their auditor’s inspection report. This reaction varies, firms that engage an auditor with a higher percentage of deficiencies within their PCAOB inspection reports experience lower cumulative abnormal returns to the report’s release than firms that engage an auditor with a lower percentage of deficiencies within their PCAOB inspection reports. Taken
as a whole, the results suggest the market responds to inspection reports, and the response is informed by the report’s content. This indicates that investors perceive the reports to be a meaningful signal of audit quality.

The results of this study should be of interest to several parties. First, the results add new evidence to a robust stream of literature and therefore should be of interest to academics. While prior research on the information content of PCAOB inspection reports provide mixed results, my study uses a more recent sample and finds inspection reports are perceived to be an indication of audit quality. Second, this study should be of interest to regulators. Regulators have warned against extrapolating results from inspections and drawing large conclusions on the quality of audit firms (PCAOB 2020). My results suggest this warning has not stopped investors from reacting the content of inspection reports. Finally, this study should be of interest to auditors and their clients. The results suggest there are salient consequences to poor PCAOB inspection reports. This should provide auditors motivation to maintain high audit quality, and client’s motivation to consider PCAOB inspection reports when selecting an auditor.


**PCAOB posts Guide to Reading the PCAOB's New Inspection Report.** Default. (n.d.).

**Why Audit Quality is Important for Auditees?** AICPA. (n.d.).
## Appendix A: Variable Definitions (Alphabetical)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAR</td>
<td>The average of firms’ value weighted cumulative abnormal returns over a 5-day period (t-2 through t+2) surrounding the inspection report release date.</td>
</tr>
<tr>
<td>DEF_PCT</td>
<td>Indicator variable equal to the total # of deficient audits identified in an inspection report divided by the total # of audits reviewed</td>
</tr>
<tr>
<td>MED_DEF_PCT</td>
<td>Binary variable MED_DEF_PCT is coded 1 if a client engages an auditor with a deficiency percentage (DEF_PCT) greater than the median value, and 0 otherwise</td>
</tr>
<tr>
<td>Q4_DEF_PCT</td>
<td>Binary variable Q4_DEF_PCT is coded 1 if a client engages an auditor with a deficiency percentage (DEF_PCT) in the upper quartile, and 0 otherwise</td>
</tr>
</tbody>
</table>