Journal of Accounting and Economics 61 (2016) 313–337

Contents lists available at ScienceDirect

Journal of Accounting and Economics

journal homepage: www.elsevier.com/locate/jae

Does PCAOB inspection access improve audit quality? An examination of foreign firms listed in the United States ☆

Phillip T. Lamoreaux *

W. P. Carey School of Business, Arizona State University, BA 297C PO BOX 873606, Tempe, AZ 85287, United States

A R T I C L E I N F O

Article history:
Received 22 March 2013
Received in revised form
21 January 2016
Accepted 12 February 2016
Available online 22 February 2016

JEL classification:
G18
L51
M49

Keywords:
PCAOB
Audit regulation
Audit quality
Going concern
Internal control weakness

A B S T R A C T

To gain insight into the impact of the Public Company Accounting Oversight Board's (PCAOB) auditor inspection program, I examine the association between the PCAOB's access to inspect auditors of foreign SEC registrants and audit quality. Although the PCAOB is mandated to inspect all auditors of SEC registrants, certain foreign governments prohibit PCAOB inspections of their domestic auditors, providing variation in PCAOB inspection access that is not available when studying a sample of US companies. I find that auditors subject to PCAOB inspection access provide higher quality audits as measured by more going concern opinions, more reported material weaknesses, and less earnings management, relative to auditors not subject to PCAOB inspection access. There is no observable difference between the two sets of auditors prior to the PCAOB inspection regime. The positive effect of PCAOB inspection access on audit quality is observed in jurisdictions with, and without, a local audit regulator. Overall, the results are consistent with PCAOB inspection access being positively associated with audit quality

1. Introduction

The Sarbanes-Oxley Act of 2002 (SOX) mandates the Public Company Accounting Oversight Board (PCAOB) to inspect all foreign and domestic auditors of SEC registrants. The fundamental purpose of the auditor inspection program is to improve audit quality; however, a rigorous analysis of the impact of the inspection program on audit quality is difficult, as all auditors of public companies in the United States are subject to inspection and there is no variation in inspection access for the PCAOB. Further, the US inspection program went into effect with other SOX provisions, making it difficult to isolate the impact of the inspection program using time-series comparisons for US firms. The purpose of this study is to address whether PCAOB inspection access influences auditor's incentives to improve audit quality in a setting that varies the reach of the PCAOB's inspection program.

The threat of a PCAOB inspection provides various ex ante incentives for auditors to improve audit quality. Involuntary regulator inspection of an auditor's work is analogous to a pre-commitment to disclose audit work papers at the discretion

☆ This paper is based on my dissertation at the University of Arizona. I thank my dissertation committee for their guidance: Dan Dhaliwal (chair), William Felix, Lubomir Litov (finance), and Paul Michas. I am thankful for helpful comments and suggestions from Pablo Casas, Dane Christensen, Carol Dee, Katharine Drake, Steve Kaplan, David Kenchington, William Kinney, Clive S. Lennox, Stephen Lusch, Landon Mauler, Michal Matejka, Michael Mowchan, Monica Neamtiu, Nathan Newton, Lori Schefchik, Nemit Shroff, Jayanthi Sunder, Shyam V. Sunder, and workshop participants at the University of Arizona, Arizona State University, Brigham Young University Accounting Research Symposium (2012), and AAA auditing section mid-year meeting (2013). I am especially thankful for helpful comments from Michelle Hanlon (Editor) and Joe Carcello (Reviewer). All errors are my own.

* Tel.: +1 480 965 6617.
E-mail address: Phillip.lamoreaux@asu.edu

http://dx.doi.org/10.1016/j.jacceco.2016.02.001
0165-4101/

of a regulator. Coupled with this pre-commitment, the PCAOB has enforcement authority to levy monetary fines and it can also bar individuals and audit firms from auditing, or participating in audits of, SEC registrants. A negative PCAOB inspection outcome reflects poorly on individual audit partners and employees within their respective audit firms and thus provides further incentive to improve audit quality. Therefore, as the probability of inspection of a specific partner or audit client is unknown ex ante, I predict that inspection access (threat of inspection) influences auditor incentives and, ultimately, audit quality.[1]

Although PCAOB inspections are not designed to review all aspects of an audit, two observable auditor decisions are particularly useful to evaluate in this setting. First, the auditor must evaluate the going concern assumption for the client. Because failure to report a going concern opinion when warranted is an "egregious audit failure" (DeFond and Zhang, 2014, p. 287), I consider a higher propensity to report a going concern opinion as indicative of higher audit quality.

Second, is the auditor's decision to report a material weakness in internal controls over financial reporting. Auditors are required to opine on the effectiveness of internal controls for accelerated filers under SOX Section 404(b). If PCAOB inspection access influences audit quality, then I expect auditors subject to inspection access to be more thorough in their evaluation and testing of internal controls, as well as more likely to report material weaknesses identified in the process. Therefore, if PCAOB inspection access influences ex ante auditor incentives, then I expect that, all else constant, auditors subject to PCAOB inspection access are more likely to report going concern opinions and adverse opinions on internal control quality.[2]

In addition, the PCAOB can refer SEC registrants to the SEC if materially misstated financial statements are identified during inspection of an auditor's work papers.[3] Therefore, PCAOB inspection exposure may not only affect explicit auditor reporting decisions, but also auditor's and management's incentives, as they relate to information in reported financial statements. If materially misstated financial statements represent the most aggressive form of earnings management, then I expect, on average, less earnings management (both within-GAAP and non-GAAP) from client firms whose auditors are subject to PCAOB inspection. I therefore examine the relation between earnings management and inspection access. I expect that inspection access will be negatively associated with earnings management, through both the auditor's incentives to improve audit quality and client management's incentives to reduce regulatory costs.

I also investigate whether clients with exposure to the PCAOB and with a higher level of inspection risk receive higher audit quality. Although the PCAOB's selection criteria for audit work papers is not publicly available, it follows a "risk-weighted" approach. Correspondingly, higher risk audit clients have a higher probability of being selected for inspection. Therefore, I examine the impact of inspection risk on the relation between inspection access and auditor reporting of going concern opinions and material weaknesses.

I use the rich setting of auditors of foreign firms listed in the United States to examine the effect of inspection access on audit quality. All auditors of SEC registrants are supposed to be inspected by the PCAOB. However, certain governments bar the PCAOB from inspecting their domestic auditors, citing sovereignty control.[4] Therefore, I exploit this variation in the PCAOB's right to conduct inspections of foreign auditors as a proxy for the threat of a PCAOB inspection, and I examine its effect on audit quality. Importantly, this variation in inspection access allows a difference-in-differences design with treatment firms being client firm-years in countries that allow inspections after the inspection regime begins. Included in the control group are client firm-years in countries that prohibit inspections and client firm-years before PCAOB inspections began in countries that allow inspections. Documenting the effect of inspection access on foreign auditors is important, as the PCAOB has alleged that poor audit quality may exist in countries that bar inspections and is thus attempting to gain inspection access in those jurisdictions (PCAOB, 2011).

Consistent with my expectations, I find that auditors subject to PCAOB inspection access are more likely to issue going concern opinions and adverse opinions on internal controls after controlling for client, economic, and country characteristics, including the presence of a local audit regulator. I find no difference in going concern reporting prior to the commencement of the PCAOB's foreign inspection program, which started after the passage of the SOX in 2002 and thus mitigates potential confounding effects associated with other SOX provisions. This finding suggests that the difference in an auditor's propensity to issue a going concern opinion is associated with PCAOB inspection access, rather than with underlying country- or firm-level characteristics, or other SOX provisions. These findings are economically meaningful as inspection access increases the probability of a going concern opinion (reported material weakness) by approximately 2.4 (8.4) percentage points above the base rate of 10.3 (7.8) percent in this set of foreign firms. I also find that earnings management, as measured by abnormal accruals, is lower during the PCAOB inspection period for clients of auditors that are subject to inspection, with no difference in abnormal accruals across jurisdictions prior to the commencement of the

[1] I use PCAOB inspection "access" (the right of the US PCAOB to inspect an auditor in a foreign jurisdiction) and auditor "exposure" to potential PCAOB inspection (auditors residing in jurisdictions that allow US PCAOB inspections) interchangeably throughout the paper.

[2] Prior literature frequently uses the auditor's propensity to issue a going concern opinion as an indicator of audit quality (e.g., Carcello and Neal, 2003; DeFond et al., 2002). For a review, see Carson et al. (2013). Less frequently used is the examination of reported material weaknesses (e.g., Rice and Weber, 2012). However, given the PCAOB's focus on reporting of internal controls, the examination of reported material weaknesses is an ideal candidate to examine the effect of inspection access on auditor behavior and ultimately audit quality (PCAOB, 2006; DeFond and Lennox, 2015).

[3] See, for example, the 2011 PCAOB Inspection Report for BDO, USA. It indicates that "when it comes to the Board's attention that an issuer's financial statements appear not to present fairly … the Board's practice is to report that information to the SEC which has jurisdiction to determine proper accounting in issuers' financial statements" (SOX Sections 104 (c), (2)).

[4] The PCAOB required foreign auditors of SEC registrants to register with the PCAOB no later than July, 2004 (PCAOB, 2004a). Countries that have prohibited PCAOB inspections at some point include Belgium, China, Cyprus, Denmark, Finland, France, Germany, Greece, Hong Kong, Hungary, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, Turkey, and the United Kingdom. See PCAOB (2009).