ARTICLE IN PRESS
JID: RACREG [m5G;November 10, 2017;9:25]
Research in Accounting Regulation 000 (2017) 1–12
Contents lists available at ScienceDirect
Research in Accounting Regulation
journal homepage: www.elsevier.com/locate/racreg

Regular paper

Audit quality across non-audit service fee benchmarks: Evidence from material weakness opinions

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ARTICLE INFO

Article history:
Available online xxx

Keywords:
Non-audit fees
Material weakness
Audit quality

ABSTRACT

Regulators have voiced concerns regarding the impact of auditor provided non-audit services (NAS) on auditor independence, and by extension, audit quality. This study considers whether the provision of various levels of (NAS) influences the auditor's propensity to issue material weakness opinions (MWO). The results indicate that audit clients that purchase zero NAS, and clients that purchase NAS less than Sarbanes-Oxley's benchmark of NAS fees less than 5% of total fees, are more likely to receive a MWO than clients with a NAS at higher levels.

1. Introduction

Regulators worldwide continue to question whether auditor-provided non-audit services (NAS) impact audit quailty (i.e. auditor independence). Article 22 of the Directive on Statutory Audit (European Commission (EC), 2006) prohibits auditors from conducting a "statutory audit" in cases where an objective third party would conclude that the audit firm or auditor's independence is compromised, and cites NAS as a potential threat to independence. Sikka (2009) indicates that during the financial crisis of 2008, auditors of distressed banks issued unqualified audit opinions while simultaneously collecting large amounts of NAS fees from these same clients. The EC Green Paper (2010) questioned how during the financial crisis from 2007 to 2009 numerous banks that were financially received clean audit reports for those periods." To "further enhance audit quality," the EC proposed a ban on all auditor provided NAS. In the United States (US), critics of auditor-provided NAS cited accounting frauds such as Enron and WorldCom as evidence that auditor-provided NAS lowers audit quality. In response, Section 201 of the Sarbanes Oxley Act of 2002 (SOX; U.S. House of Reperesentatives, 2002) banned most auditor-provided NAS and Section 202 of SOX required pre-approval of all NAS greater than 5% of total fees in the prior year. More recently, the Public Company Accounting Oversight Board (PCAOB) expressed concerns that certain tax NAS, currently allowable under SOX, are negatively impacting audit quality (Harris, 2014).

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https://doi.org/10.1016/j.racreg.2017.09.001
1052-0457/

In light of the continued concerns regarding the appropriateness of auditor-provided NAS, this study investigates two related research questions. First, do firms with zero NAS have higher audit quality than firms that purchase NAS from their external auditor? Sharma (2014) notes, it is unclear whether zero NAS audit-providers are more independent than auditors who provide NAS to their clients. Given the EC's proposed ban on NAS (EC, 2010 Green Paper) and PCAOB concerns regarding tax NAS currently allowable under SOX (Harris, 2014), this question is relevant. Secondly, do firms that purchase NAS less than materiality benchmarks used in practice have higher audit quality than firms with auditor-provided NAS greater than those benchmarks? Despite the concerns expressed by regulators, the accounting profession has long maintained that NAS provide synergies with audits resulting in knowledge spillovers and efficiencies to the audit function that improve audit quality (Melancon, 2000, p. 26). Sharma (2014) suggests that future research needs to examine the "turning point" at which NAS no longer provide synergies to the audit function. An extensive literature exists on the association between auditor-provided NAS and audit quality. Typically, discretionary accruals, restatements, going concern opinions (GCO), or market based measures (e.g. earnings response coefficients) are used to proxy for audit quality. Fee ratios or total NAS fees paid to the auditor are used to proxy for economic dependence or client importance. In summary, the findings from this literature are unclear (Sharma, 2014, p. 83) and thus the typical proxies noted above are not used.

This study uses material weakness opinions (MWO) to test whether there are differences in audit quality between firms that use a zero NAS audit provider versus those who employ an auditor who provides NAS. Hermanson and Ye (2009) find that firms with high NAS, measured as those firms with NAS greater than the sample median, are less likely to receive a MWO. Rice and Weber (2012) find that firms with higher NAS, measured as total NAS scaled by the square root of lagged assets in the last period of the misstatement, are also less likely to receive a MWO. While this study is related to those two studies, it differs by looking at levels of NAS which allows for an investigate of the turning point at which NAS yield synergies and potentially harm audit quality (Sharma, 2014, p.84). The study uses a sample of 25,252 firm-year observations, of which 9.4% employ a zero NAS audit provider, 19.7% use an auditor who provides NAS fees less than 5% of last year's total fees, and 16.3% use an auditor who provides NAS fees that are between 5% and 10% of prior year's total fees. Next, the study uses indicator variables for zero NAS audit providers, auditors who provide NAS, but those fees are less than 5% of the prior year's total fees, and auditors who provide NAS, but those fees are between 5% and 10% of the prior year's total fees, to test whether there are differences in audit quality across the various subsamples.

The 5% materiality benchmark is used since U.S. House of Reperesentatives, 2002 requires pre-approval of all NAS greater than 5% of prior year's total fees and the Securities Exchange Commission (SEC) Final Rule Release No. 33-8183 (SEC, 2003) maintained this requirement.[1] This study uses 10% as an additional materiality benchmark since the Financial Accounting Standards Board (FASB) typically uses 10% as a materiality benchmark in several of its standards (ASC 280; ASC 715) and is used by some large accounting firms to determine materiality (Eilifsen & Messier, 2015). While the PCAOB requires the pre-approval of certain allowable NAS and audit committees require pre-approval of all NAS (i.e. including those less than 5% of total fees), the materiality benchmarks of 5% and 10% of prior year's total fees are appropriate to determine the turning point at which NAS potentially compromise audit quality.[2]

The results from the main tests provide evidence that zero NAS auditors are associated with higher audit quality, as indicated by greater probability of issuing a MWO. In addition, the results indicate that auditors who provide NAS less than 5% of prior year's total fees, are also more likely to issue a MWO, compared to auditors who provide NAS that are greater than 5% of total fees. In the main tests, governance control variables were excluded since including them resulted in the sample decreasing from 25,252 to 22,341 firm-year observations. The results are robust to including governance controls. As additional sensitivity tests, the NAS indicator variables are measured after excluding audit-related NAS fees from those measures and similar results are obtained. This study also measures high NAS levels using an indicator variable (Hermanson & Ye, 2009), defined as one if NAS fees are greater than the sample median, zero otherwise, and finds similar results. Results using a fee ratio proxy, commonly used in the literature, of total NAS to total fees indicate a significant negative association between the fee ratio proxy and MWO. Finally, abnormal audit fees, a proxy for audit effort, was interacted with the NAS indicator variables. Results indicate that clients with zero NAS audit-providers and those clients who purchased NAS less than 5% of last year's total fees, were more likely to receive a MWO than other clients. The coefficient on abnormal audit fees for clients with NAS greater than 10% of prior year's total fees was negative and significant, suggesting that these clients were less likely to receive a MWO. These findings are consistent with the recent research of Newton, Persellin, Wang, and Wilkens (2016) who found that internal control opinion shopping occurs and this shopping is more likely to occur in competitive audit markets.

This study provides several contributions to the literature. First, although Kinney and Libby (2002) note that the economic bond between the auditor and client is more likely when they receive abnormal NAS and abnormal audit fees, it is still an empirical question whether zero NAS audit-providers are more independent than other auditors (Sharma, 2014, 68). The results of this study provide empirical support that clients that do not purchase any NAS from their auditor are more likely to receive a MWO than clients that purchase some NAS from their auditor. Second, the paper finds that clients whose auditors provide NAS, but those NAS are less than 5% of last year's total fees, are also more likely to receive a MWO. These findings suggest that a ban of all NAS is not warranted and that the SOX materiality benchmark of 5% of total fees was an important regulatory requirement. The findings also suggest that there are knowledge spillovers to auditors who provide NAS within the SOX materiality benchmark of 5% of total fees. Third, the results of this study suggest that there is a turning point at which NAS no longer provide efficiencies with the audit and audit quality. Sharma (2014) calls on researchers to identify the turning point in which there are synergies between NAS and audit. This study suggests that for MWO, the turning point is when auditors provide NAS greater than 5% of the prior year's total fees. Given the findings of Newton et al. (2016), the turning point of 5% of prior year's fees is likely associated with their findings regarding internal control opinion shopping in competitive markets. However, the turning point may differ for other proxies of audit quality such as abnormal accruals, restatements, and going-concern opinions, which could be an avenue for additional research. Finally, Li, Raman, Sun, and Wu (2015) review key regulatory events related to SOX internal control audits, including a PCAOB (2012) report, and note that the PCAOB expressed concerns about the number and significance of audit deficiencies identified in a 2010 inspection of eight annually inspected audit firms. The findings in this study suggest that the potential loss of fees from future NAS could be a factor in the poor internal control audits noted by the PCAOB.

The remainder of this study proceeds as follows. The next section reviews the relevant literature and develops the hypotheses. Section 3 describes the research design and data. Section 4 presents the empirical results, Section 5 the robustness tests, and Section 6 concludes the study.

2. Related literature and hypotheses development

2.1. Literature

Concerns that auditor-provided NAS threaten auditor independence (Firth, 1997; Mautz & Sharaf, 1961; Parkash & Venable, 1993; SEC, 2000) pre-date SOX. In fact, the SEC (2000) proposed banning most auditor provided NAS and stated that when NAS "become large relative to audit fees, auditor independence may be at risk." Although SOX significantly limited the scope of allowable

[1] SEC (2003) Final Rule Release No. 33-8183, in citing SOX Section 202 'Preapproval Requirements, states in part "Consistent with the Sarbanes-Oxley Act, our rules reflect a de minimis exception solely related to the provision of non-audit services for an issuer. This exception waives the pre-approval requirements for non-audit services provided that: (1) all such services do not aggregate to more than five percent of total revenues paid by the audit client to its accountant in the fiscal year when services are provided…".

[2] PCAOB Rules 3524 and 3525 "Audit Committee Pre-Approval of Certain Tax Services and Audit Committee Pre-Approval of Non-Audit Services Related to Internal Control Over Financial Reporting" states "in connection with seeking audit committee pre-approval to perform for an issuer audit client any permissible tax service (non-audit service related to internal control over financial reporting), a registered public accounting firm shall (a) describe, in writing, to the audit committee of the issuer the scope of the service; (b) discuss with the audit committee of the issuer the potential effects of the service on the independence of the firm; and (c) document the substance of its discussion with the audit committee of the issuer". The authors discussed the pre-approval requirements for NAS with a Director of a Big Four Firm and they stated that audit committees that they work with require pre-approval of all allowable NAS.