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For better or worse: A study of auditors' practices under Auditing Standard No. 7

Denise Dickins^{a,*}, Rebecca Fay^a, Brian Daugherty^b^a East Carolina University, Greenville, North Carolina, USA^b University of Wisconsin, Milwaukee, Wisconsin, USA

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ABSTRACT

The PCAOB's Auditing Standard No. 7 (AS No. 7) revised guidance for Engagement Quality Reviews (EQRs). To better understand the impact of resulting changes in practice, if any, that have occurred in the nature, extent, and timing of the EQR process, and the impact of such changes on audit quality, we surveyed practicing audit partners familiar with EQRs. Results indicate that AS No. 7 changed the nature of EQRs by impacting the role and approach of the EQ Reviewer. It impacted the extent of procedures performed by the EQ Reviewer and altered communications between the EQ Reviewer and most engagement team members, but it had little impact on the timing of EQRs. Collectively, results suggest AS No. 7 changed EQRs, but such changes may not have improved audit quality. These findings provide insight to the continuing conclusion of the PCAOB that many EQ Reviewers do not fulfill their role of monitoring audit quality, and are also suggestive of opportunities to improve the EQR process.

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1 Introduction

In the conduct of an audit, an engagement quality review (EQR) conducted by a qualified partner who is considered independent of the audit engagement (engagement quality reviewer – EQ Reviewer) is an important monitoring process intended to enhance audit quality and reduce the likelihood that the auditor will fail to identify a material misstatement in the financial statements. The Public Company Accounting Oversight Board (PCAOB), the regulator of auditors of publicly-traded companies, has referred to EQRs as “a pillar of audit quality” (PCAOB, 2009, 4). We provide an analysis of the impact of a recently-enacted standard aimed at improving the EQR process.

In 2009, the PCAOB issued Auditing Standard No. 7, *Engagement Quality Review for an Audit* (AS No. 7 – required for audits beginning on or after December 15, 2009). Prior guidance for EQRs was contained within quality control

guidance issued by the American Institute of Certified Public Accountants' (AICPA) SEC Practice Section (SECPS), and within an Exposure Draft of the AICPA's Auditing Standards Board that was passed along to the PCAOB when it became the standard-setter for audits of publicly-traded companies (AICPA, 2002).

Prior to the implementation of AS No. 7, findings from inspections conducted by the PCAOB of registered auditors raised concerns about the execution of EQRs (then called second or concurring partner reviews). As noted by one member of the PCAOB, “poorly performed second partner reviews are among the more frequently observed concerns cited in the Board's inspection reports” (Harris, 2009). Issues such as failure of the EQ Reviewer to use due professional care, demonstrate professional skepticism, or to seek evidence supporting or refuting assertions made by management are those that most frequently resulted in PCAOB disciplinary actions and Securities and Exchange Commission (SEC) enforcement actions (Messier, Kozloski, & Kochetova-Kozloski, 2010).

In response, AS No. 7 imposed changes to the nature, extent, and timing of EQRs. As evidenced in the 68 comment

* Corresponding author. Tel.: 561-234-9432.
E-mail address: dickinsd@ecu.edu (D. Dickins).

letters submitted to the PCAOB, practitioners, academics, regulators, and public policy groups anticipated significant changes to EQRs as a result of the implementation of AS No. 7. Many proffered opinions similar to that of the accounting firm, KPMG, that the proposed standard would result in a “fundamental change in nature and scope of an engagement quality review” (KPMG LLP, 2008, 2).

In terms of changes to the nature of the EQR, while prior guidance (for a summary see Epps & Messier, 2007, 170) required that the EQR be qualified in terms of competence and experience, AS No. 7: (1) adds explicit requirements about maintaining objectivity from the engagement team (§6), (2) requires that the EQ Reviewer must not have been affiliated with the engagement in the two-year period preceding his or her assignment as EQ Reviewer, and (3) limits the term of the assignment to five years (§7, 8). Important in terms of the relationship between the lead engagement partner and the EQ Reviewer, while prior guidance required that the EQ Reviewer confirm with the engagement partner that there were no significant unresolved matters prior to issuance of the audit opinion, AS No. 7 requires that the EQ Reviewer satisfy him or herself with respect to the engagement team’s appropriate response to (and documentation of) significant risks (§11a). Further, AS No. 7 requires that the EQ Reviewer approve issuance of the audit opinion.

In terms of extent of the EQR, AS No. 7 is much more explicit concerning the engagement documentation that must be reviewed and evaluated (§10), and in how the EQR process should be documented (§11). Further, prior guidance focused on communications between the EQ Reviewer and the engagement partner. AS No. 7 potentially broadened communications by suggesting that, in the execution of their responsibilities, EQ Reviewers may hold discussions with both the engagement partner and other members of the engagement team (§9).

Finally, in terms of timing of the EQR, while prior guidance was explicit in terms of an EQ Reviewer’s involvement in planning, and many auditing firms’ policies required timely “sign-off” by the EQ Reviewer (Epps & Messier, 2007), AS No. 7 is less explicit, requiring that the EQ Reviewer evaluate significant judgments that relate to planning (§10a), but not specifying when, in terms of the engagement phase, that evaluation should occur.

While logic may dictate that regulatory changes aimed at enhancing audit quality should have positive effects, theory and the results of prior research do not consistently provide convincing evidence in this matter. From a theoretical standpoint, as summarized by Pentland (1993, 619), “for any given rule, one must and can decide when and how to apply it,” which, in turn, gives rise to the need for more rules. Ergo, sociological (Giddens, 1984) and philosophical (Wittgenstein, 1958) reasoning leave open the possibility that attempts to influence auditors’ behaviors through the mere imposition of rules will fail. Malsch and Gendron (2013, 870) describe the response behavior of accountants as “a series of more or less connected experiments in trying to extend their professional jurisdiction through institutional innovation, while seeking to consolidate the traditional foundations of their jurisdictional legitimacy through institutional reproduction.” In other words, while auditors may make adjustments to technically comply with

new regulations, their actions may not have any real substance.

This possibility is enforced by the results of studies investigating the impact of other recently enacted regulations on audit quality. For example, mandatory engagement partner rotation may negatively impact audit quality as a result of structural changes increasing the likelihood of partner relocation and travel (Daugherty, Dickins, Hatfield, & Higgs, 2012). The performance of non-audit services by auditors, *per se*, has no effect on audit quality (Lim, Ding, & Charoenwong, 2013). On the other hand, the PCAOB’s independent inspections of auditors appear to have enhanced audit quality (Carcello, Hollingsworth, & Mastrolia, 2011); as did the increased independence of audit committees (Hoitash & Hoitash, 2009).

Interestingly, recently-summarized results of PCAOB inspections indicate, “...audit deficiencies and the related deficiencies in engagement quality reviews continued to be high” (PCAOB, 2013, 6). Noted criticisms include failure of the EQ Reviewer to identify all significant engagement risks, including those associated with multi-location scopes and use of audit firm affiliates, and failure to verify that all procedures necessary to address audit risk were conducted by the engagement team. The PCAOB (2013) suggests that the root cause of these deficiencies may be attributed to: (1) insufficiency of documentation prepared by the audit engagement team of its procedures and conclusions, (2) inadequacy of time devoted by the EQ Reviewer, (3) improper timing of the EQR, and/or (3) unqualified EQ Reviewers.

In the face of this conflicting evidence, we investigate how changes in the nature, extent, and timing of EQRs required by AS No. 7 are perceived to have impacted audit quality. Although there have been a number of studies that investigate different aspects of the EQR process prior to the issuance of AS No. 7 (Schneider & Messier, 2007, provide a helpful summary), we are unaware of any published studies that specifically address changes in the EQR process since the implementation of AS No. 7, or AS No. 7’s potential impact on audit quality.¹

To answer this question and to provide additional insight about EQRs and alternative potential root causes to the PCAOB’s observed deficiencies, we surveyed audit partners experienced with EQRs about changes in the EQR process resulting from the implementation of AS No. 7.² Results suggest that AS No. 7 changed the role and approach of the EQ Reviewer. Prior to AS No. 7 the role of the EQ Reviewer was more likely to be described by auditors serving as both engagement partners and EQ Reviewers as that of a “team member” than as an “inspector”; and the approach of the EQ Reviewer was more likely to be categorized by these same partners as “consulting” than as “second-guessing.” Although these changes likely signal an

¹ We are, however, aware of an experiment-based study in process that aims at evaluating the *objectivity* of EQRs (Mueller et al., 2014). This study was funded by a grant from the Center for Audit Quality.

² We use this methodology due to the likelihood of confounding events (e.g., macroeconomic events, implementation of other standards) when attempting to evaluate changes in auditing quality comparing pre- and post-AS No. 7 periods.

increase in the EQ Reviewer's objectivity, they may also unintentionally contribute to an "us versus them" attitude, which may adversely impact the sharing of information between the EQ Reviewer and the audit engagement team – a question left to future research.

Participants also report that EQ Reviewers now spend significantly more time documenting the results of their review. While documentation may aid the conduct of PCAOB inspections, it may also detract from the amount of time EQ Reviewers have – from a capacity standpoint – to engage in actual audit quality-enhancing activities such as verifying that all audit procedures judged necessary to address audit risk have been appropriately conducted.

Results further suggest that there has been no change in the timing of key audit issue identification. Issues are still primarily identified during the reporting phase of the audit, although this is considered less than ideal by the study's participants. Not surprisingly, the preliminary phase of the audit is reported as being the ideal time for key audit issue identification, yet AS No. 7 did not prompt increased identification of issues by the EQR during that phase. This finding suggests an alternative root cause to the PCAOB's conclusions.

In addition to adding insight to the continuing conclusion of the PCAOB that many EQRs do not fulfill their role of monitoring audit quality, the study's results contribute to the debate about calls for cost-benefit analyses to reduce the likelihood that proposed standards or rules could do more harm than good, as required by the SEC (required by, among others, the Jumpstart our Business Start-ups Act of 2012, the Paperwork Reduction Act of 1995, and the Regulatory Flexibility Act of 1980, as amended).

The remainder of this paper is organized as follows. The next section provides context for the study's research question. The third section describes the study's methodology. The fourth section summarizes the results, and the final section discusses the study's findings and conclusions.

2 Background

The study's investigation is framed in the context of changes in the nature, extent, and timing of the EQR process since implementation of AS No. 7, as the auditing literature and professional guidance are explicit about the relationship between these aspects of auditing and audit quality (e.g., AU-C Section 200, *Overall Objectives of the Independent Auditor and the Conduct of an Audit in Accordance with Generally Accepted Auditing Standards*; Auditing Standard No. 13 – *The Auditor's Responses to the Risks of Material Misstatement*); and audit standards are explicit in their requirement that firms have policies and procedures covering the nature, extent, and timing of EQRs.³

2.1 Nature of the EQR process

One highly debated aspect of the initial PCAOB proposal on EQR was the intended nature of the procedure. After consultation with its Standing Advisory Group, the PCAOB

indicated a need for a more "robust" EQR process (PCAOB, 2008a, 4). The resulting proposal placed an emphasis on enhancing the independence of the EQ Reviewer:

The engagement quality reviewer would also be required to maintain objectivity with respect to the engagement team and all aspects of the engagement and to perform the review with integrity. The proposed standard would prohibit the reviewer from making decisions on behalf of the engagement team, assuming any responsibilities of the engagement team, and supervising the engagement team. The engagement quality reviewer should be able 'to take a step back' and conduct the review from the perspective of an outsider 'looking in' (PCAOB, 2008a, 10).

While respondents during the comment period generally agreed that a high-quality EQR would enhance audit quality, opinions on the specific provisions of the proposal varied dramatically. A few responders applauded the PCAOB for rethinking the existing "passive review" standards (Silvers, 2008, 1) that allowed concurring partners to approve issuance of an audit report as long as no deficiencies "came to their attention" (AICPA, 2002). One stakeholder described the pre-AS No. 7 standards as "a 'see no evil, hear no evil' exercise" (Silvers, 2008, 2).

In response to public comments, the PCAOB revised guidance on the responsibility of the EQ Reviewer in the 2009 proposal from a standard of "known or should have known" of deficiencies to performing his/her required duties with "due professional care" (PCAOB, 2009, 24). Many interested parties expressed support of the revised wording in the second proposal, but they "respectfully disagreed" with the PCAOB's proposition that the two phrasings described a comparable level of assurance (Ernst & Young (E&Y), 2009, 3). The broad array of constituent interpretations of the PCAOB's initial proposal, combined with the PCAOB's position that the revised wording resulted in a comparable level of culpability, begs the question of how firms interpret the current role of the EQ Reviewer.

Some suggest the nature of the EQR lies on a continuum. At one extreme is the consultative approach "in which the concurring partner [EQ Reviewer] and the engagement partner routinely interact to discuss the major decisions involved in the planning, conduct, and final review of the audit" (Johnstone, Biggs, & Bedard, 1996, citing Jamal, Johnson, & Berryman, 1995). On the other endpoint is the investigative approach in which "the concurring partner [EQ Reviewer] has no input in the planning or conduct of the audit and serves only to 'ensure that auditing standards and SEC requirements have been fulfilled and that the audit report is appropriate in the circumstances' (Johnstone et al., 1996, 80)." These endpoints may be analogous to the concept of building (versus inspecting) quality into the manufacturing process which, based largely on Deming's (1986, 23–24) "14 points for management," has generally been accepted as superior (inferior).

Communication from the PCAOB offers mixed guidance regarding where an EQR in accordance with AS No. 7 is intended to lie on this continuum. At the February 2008 PCAOB open meeting, one board member indicated that "the proposal should not have a radical effect on the basic nature of

³ Such framing is consistent with that used by Epps and Messier (2007) in their comparisons of EQR pre-AS No. 7 practices across auditing firms.

these reviews or on the cost of public company auditing” (PCAOB, 2008b, 2), suggesting that the pre-implementation standard of consulting would continue as the norm. In contrast, a second board member opined, “a thoughtful engagement quality reviewer – who after all has access to the same information we do as part of our inspections – could have found and focused the firm on these deficiencies [those identified by inspectors] before we inspected the firm, implying that the objective is to supplement or overlap with an inspection process...” (PCAOB, 2008c, 1).

KPMG voiced its opposition to the latter position, stating “we do not believe the objective of an engagement quality review should be the same as the objective of internal or external inspections. Inspections have distinct but different purposes and are generally conducted by teams of people, with fewer constraints on timing” (KPMG LLP, 2008, 2). Indeed, Jamal et al. (1995) report that the SEC has also “interpreted the role of a concurring partner as being [an inspector], independent and *almost adversarial* (emphasis added) with respect to the engagement partner” (Jamal et al., 1995, 6).

Discussions with several practicing audit partners in leadership roles within their firms (all members of the eight largest U.S. accounting firms) during development of the study’s survey are confirmatory of the above commentary. In particular, some practitioners describe their role as an EQ Reviewer akin to that of an inspector, as opposed to an engagement team member. They (and reportedly, their firms’ policies) require them to adopt a role viewed as being somewhat adversarial – seeking out engagement team errors, as opposed to working together to arrive at the “right” answers.

In their study of practices prior to implementation of AS No. 7, Emby and Favere-Marchesi (2010 – data collected prior to October 2009, 215) concluded that the EQR process is a “... collegial, non-adversarial process, primarily focused on the objective of resolving difficult and complex client accounting issues. The ultimate resolution of the issue giving rise to the interaction may be a reflection of the suggestions of the reviewing partner or the engagement partner; frequently it is a new and synergistic solution.” Consistent with this conclusion, recent anecdotal reports gathered from partners in connection with developing the survey describe that prior to AS No. 7, “concurring” or “second” partners worked more closely with the engagement team to build-in audit quality in real time – “getting it right the first time vs. second-guessing, or inspecting-in quality.”

Extant literature suggests the nature of the EQR may impact auditor objectivity and audit quality. To the extent that consultations are viewed as adversarial, allowing the EQ Reviewer to adopt and maintain a greater professional skepticism, threats to objectivity such as an escalation of commitment bias (Greitemeyer, Schulz-Hardt, & Frey, 2009) may be reduced. Increased objectivity would be expected to enhance audit quality (DeAngelo, 1981). On the other hand, Epps and Messier (2007) suggest a consultative approach to the EQR improves audit quality.

2.2 Extent of the EQR process

Debate surrounding the development of AS No. 7 addressed the extent of procedures to be conducted by the EQ

Reviewer. A majority of respondents believed the 2008 proposal dramatically increased the scope of the EQR. Several protested that the proposed standard was too stringent or perhaps even “untenable” (Illinois CPA Society, 2008, 2); they believed the PCAOB’s effort to extend EQR procedures and enhance independence of the EQ Reviewer would result in duplication of effort and an excessive cost burden. The EQ Reviewer would be required to re-perform a variety of procedures as they were held to a new standard of culpability for deficiencies that were known or “should have been known” (PCAOB, 2008a, 16). Indeed, Rittenberg (2008, 3) described the objective of the proposed standard:

To require an independent, competent audit and accounting skeptic to evaluate the major decisions made by the engagement team, i.e. to exercise independent judgment as to whether the engagement team reached the correct solutions, as well as gathered appropriate evidence. In essence, this would be a ‘super engagement partner’ (at least one more independent level above the engagement partner).

The PCAOB addressed public concerns in the 2009 proposal, stating that the intention was to “strengthen the existing requirements for an EQR and lead to a more meaningful EQR” (PCAOB, 2009, 4), but it should not “amount to a re-audit” (PCAOB, 2009, 3) as interpreted by many readers of the initial proposal. Irrespective of intention, increasing EQR procedures likely reduces the risk that material errors in the financial statements will go undetected, *ergo*, audit quality increases.

The discourse on EQR practices also included consideration of the extent of communication occurring as part of the EQR. In the initial proposal draft, the PCAOB sought feedback on whether limiting communication between the EQ Reviewer and the engagement partner would enhance objectivity for the audit. While the draft (and adopted standard) explicitly allowed for communication between the EQ Reviewer and the engagement team, it added a strong note of caution, “when participating in such consultations, the engagement quality reviewer should not participate in a manner that would compromise his or her objectivity with regard to the engagement” (PCAOB, 2008a, ¶6).

Our recent discussions with audit partners (conducted during development of the study’s survey) suggest that since the implementation of AS No. 7, EQ Reviewers may actually have fewer conversations with engagement team members. In terms of possible changes in communication practices, while the possibility of close relationships impairing objectivity is a valid consideration (Mueller, Long, & Brandon, 2014), it is equally likely that decreased communication between the EQ Reviewer and various members of the engagement team may reduce audit quality by limiting the amount (and potentially timing) of information available to the EQ Reviewer to fulfill his/her responsibilities.

Prior research suggests audit task outcomes of both hierarchical and peer-to-peer brainstorming discussions are of higher quality than those of individuals’ independent brainstorming (Brazel, Carpenter, & Jenkins, 2010; Carpenter, 2007; Carpenter, Reimers, & Fretwell, 2011; Hoffman & Zimelman, 2009). Further, when two members of the audit team are presented with interrelated cues that indicate fraud

or error when combined (e.g., an accounts receivable confirmation difference which may indicate a cutoff error requiring adjustment, or a payment or merchandise in transit for which no adjustment is required), teams consisting of a senior auditor and staff auditor are more likely to identify misstatements when working together than are teams of two senior auditors as they are better able to share and process the information (Fay, 2013). Hence, we would expect that when consultations are at the broadest level (those among the EQ Reviewer and all engagement team members) audit quality would be highest as the EQ Reviewer is likely to possess a more comprehensive fact set than when communication is restricted to the peer (i.e., engagement partner) level.

Not surprisingly, in light of these prior results, several auditing standards require auditors to hold hierarchical audit engagement team discussions (e.g. AU-C Section 240, *Consideration of Fraud in a Financial Statement Audit*; AU Section 300, *Planning an Audit*; AU-C Section 315, *Understanding the Entity and Its Environment and Assessing the Risks of Material Misstatement*).

2.3 Timing of the EQR process

In their response to the original 2008 PCAOB proposal on EQR, the Illinois CPA Society offered its opinion on the ideal timing of the EQR stating that, “consulting throughout the course of the audit engagement is essential so that the concurring reviewer can be involved at an early stage of the engagement, including the planning stage. We consider it imperative that every attempt be made to prevent issues from arising at the end of an engagement, when pressures to issue the auditor’s report are at their highest” (Illinois CPA Society, 2008, 2).

This position was elaborated upon by Rittenberg, “we need to make sure that in this era of ‘accelerated filings’ and the pressure by the SEC to move the time deadline for audited filings to a quicker date after year-end, whether such a review can be completed before the deadlines to file such reports” (Rittenberg, 2008, 3).

Prior to the implementation of AS No. 7, reports suggest nearly one-half of an EQR’s time was devoted to the planning phase of the audit (Epps & Messier, 2007, 835). In contrast, our current discussions with practicing audit partners (conducted during development of the study’s survey) suggest an EQ Reviewer’s time is more-likely to be spent toward the end of the engagement on perceived less value-added tasks such as documentation. This suggests EQ Reviewers may therefore be unable to proactively suggest the execution of more effective (or efficient) auditing procedures to address and reduce audit risks.

In addition to the practical implications of possible changes in the timing of the EQR, the psychology literature is replete with evidence that the timing of specific audit tasks may impact audit quality. The results of several studies indicate that once an individual has committed to a position, he/she may fall victim to a number of psychological biases (e.g., anchoring and adjustment – Tversky & Kahneman, 1981; motivated reasoning – Kunda, 1990; escalation of commitment – Brody & Kaplan, 1996). In the case of audit engagement partners, early or premature

conclusions about the adequacy of clients’ reserve estimates, going concern evaluations, etc. may bias the nature, extent, and quality of the related evidence gathered, as well as the manner in which that evidence is combined and documented (Ditto & Lopez, 1992; Lundgren & Prislun, 1998; Ricchiute, 1999). For example, if, due to prior experience, an audit partner incorrectly expects liabilities established to cover a client’s warranty claims are low risk, (s)he may not require extensive audit procedures and, ergo, may fail to detect a change in the client’s policies that result in a material under-accrual.

Schneider, Church, and Ramsay (2003) provide evidence that EQ Reviewer involvement in the planning stage of the audit may help mitigate these biases. On the other hand, Epps and Messier (2007, 174) warn “the issue of concurring partner involvement in planning could raise an issue of objectivity”; and Jonas, Schulz-Hardt, Frey, and Thelen (2001) suggest that if EQRs are conducted in the final phase of an audit after conclusions have already been made and documented by the audit engagement team, the EQ Reviewer may fall victim to confirmatory biases.

3 Methodology

To address the study’s research questions, we developed an on-line survey that took into consideration the concepts, concerns, and terminology expressed by (1) the PCAOB during deliberations of AS No. 7, (2) respondents to the proposed standard, (3) extant literature on EQRs, and (4) discussions conducted during the planning stage of our study with four practicing audit partners in leadership roles within their firms (all members of the eight largest U.S. accounting firms). The resulting survey was pilot tested and debriefed with 15 audit partners experienced with pre- and post-AS No. 7 implementation EQR processes. Minor clarifying and formatting changes were made to the survey based on results of the pilot test. A copy of the survey is included as Appendix.

Potential participants were recruited from several sources including practicing audit partners known to the study’s authors, and a mailing list obtained from a state society of certified public accountants. To reduce the likelihood of selection bias, potential participants were recruited from firms representing a variety of geographic locations and size (i.e., Big 4 and tier-two firms) throughout the U.S. A total of 31 audit partners completed the survey.⁴ On average, completion of the survey took 15.6 minutes.

⁴ Although our data capture did not enable response tracking, based on the date of completion, we believe four participants originated from the mailer that directed recipients to a website, and 27 were practicing partners known by the authors. A total of 32 practicing partners known to the authors were sent emails with a link to the instrument requesting their participation (84 percent response rate). The email stated that the purpose of the study was to “solicit your views about changes in the Engagement Quality Review process since the implementation of AS No. 7.” The 32 partners were affiliated with Big 4 (n = 20), Other International (n = 6), and Regional/Local (n = 6) accounting firms, located in ten different states. As such, we believe the participants’ views reported in the study are broadly representative of most EQR partners.

Table 1

Demographic data of participating audit partners (n = 31).

	Number (percentage)			
	Big 4	Other International	National	Other
Description of audit firm	19 (61.3)	4 (12.9)	–	6 (19.3)
Years of audit experience	–	5 (16.1)	26 (83.9)	–
Years with current audit firm	13 (41.9)	4 (12.9)	14 (45.2)	–
Years of experience as an audit engagement partner	–	4 (12.9)	7 (22.6)	20 (64.5)
Years of experience as an EQ Reviewer	–	4 (12.9)	7 (22.6)	20 (64.5)
Number of engagements as Engagement Partner	–	19 (58.1)	4 (12.9)	9 (29.0)
Of these, how many were for publicly-traded companies?	7 (22.6)	22 (71.0)	1 (3.2)	1 (3.2)
Number of engagements as EQ Reviewer	–	17 (54.8)	12 (38.7)	2 (6.5)
Of these, how many were for publicly-traded companies?	10 (32.3)	17 (54.8)	2 (6.5)	2 (6.5)
Percentage of time allocated to role as Engagement Partner	4 (12.9)	2 (6.5)	9 (29.0)	16 (51.6)
Percentage of time allocated to role as EQ Reviewer	19 (61.3)	12 (38.7)	–	–
Gender	Female 6 (19.4)	Male 25 (80.6)	–	–

4 Results

4.1 Demographics of the participants

Table 1 provides demographic data of the participating audit partners.

Of our participants, 61.3 percent are employed at Big 4 accounting firms, 83.9 percent have more than 20 years of auditing experience, and 64.5 percent have more than ten years of both audit engagement partner and EQ Reviewer experience. The on-line survey was structured such that participants reporting no EQ Reviewer experience were unable to proceed any further (n = 2).

Most of the participants serve as the audit engagement partner of between one and five clients (58.1 percent), most of their audits are of publicly-traded companies (77.4 percent). Similarly, the respondents mostly serve as the EQ Reviewer on between one and five clients (54.8 percent), which are also primarily conducted in connection with audits of publicly-traded companies (54.8 percent). Most participants (51.6 percent) report allocating more than 50 percent of their time to their duties as an engagement partner, and ten percent or less to their duties as an EQ Reviewer (61.3 percent). Demographic data do not vary significantly by firm size.

4.2 Nature of the EQR process

The first set of survey questions concerned audit partners' perceptions about whether, and if so, how, the nature of the EQR process has changed since the implementation of AS No. 7. To operationalize the nature of the EQR process, we asked participants about the role, approach, and relationships of the EQ Reviewer. Participants' responses to the first set of questions are summarized in Table 2.

Differences are apparent in participants' views about the nature of the EQR process comparing periods before and after implementation of AS No. 7. In particular, when asked to describe the role of the EQ Reviewer before AS No. 7, partners were significantly more likely to describe

the EQ Reviewer as a "team member" (64.5 percent) than as an "inspector" (22.6 percent) (Chi-square = 14.00, $p < 0.001$). After implementation of AS No. 7, there was no apparent difference in the number of partners describing the EQ Reviewer role as "team member" and "inspector" (45.2 percent and 38.7 percent, respectively, Chi-square = 4.32, $p > 0.10$).

Two participants report that the terminology "team member" was appropriate prior to the implementation of AS No. 7, but afterward, "reviewer" or "objective evaluation of conclusions and documentation" are better descriptors. One wrote that the EQ Reviewer's role changed from that of a "rubber stamp" to that of an "inspector."

Next, considering the approach of the EQR, participants were significantly more likely to choose "consulting" as the descriptor prior to AS No. 7 (61.3 percent) than "second-guessing" (16.1 percent) (Chi-square = 8.17, $p < 0.01$).

Table 2

Differences in the nature of the role, approach, and relationship of the EQ Reviewer before and after AS No. 7 (n = 31).

Percentage of participants selecting descriptor	Since implementation of AS No. 7	Prior to implementation of AS No. 7
Role of the EQ Reviewer:		
Team Member	45.2%	64.5%
Inspector	38.7	22.6
Other	16.1	12.9
Chi-square	4.32	14.00***
Approach of the EQ Reviewer:		
Consulting	38.7	61.3
Second-guessing	29.0	16.1
Other	32.3	22.6
Chi-square	0.43	8.17**
Relationship between EQ Reviewer and Engagement Partner:		
Adversarial	9.7	9.7
Cooperative	77.4	87.1
Other	12.9	3.2
Chi-square	19.20***	14.29***

*, **, *** Significant at $p < 0.05$, $p < 0.01$ or $p < 0.001$, respectively.

Since AS No. 7, perceptions are more evenly split between the descriptors “consulting” (38.7 percent) and “second-guessing” (29.0 percent) (Chi-square = 0.43, $p > 0.10$). Further, significantly more participants were likely to describe the approach as “consulting” in the pre-AS No. 7 period (61.3 percent) than in the post-AS No. 7 period (38.7 percent) (difference of 22.6 percent, $p = 0.05$).

In both periods, a number of participants chose the descriptor “other” and wrote their own descriptors. One participant reported that before AS No. 7, a more appropriate description of the EQ Reviewer’s approach was “concurrence on areas of significant risk and complexity,” and after AS No. 7 was “policing every aspect of the engagement, duplicating the audit partner role.” Another used the terminologies “thoughtful reviewer” and “defensive reviewer” in the before and after periods, respectively.

Lastly, describing the relationship between the EQ Reviewer and engagement partner, both before and after AS No. 7, participants were more likely to choose the term “cooperative” (87.1 percent before and 77.4 percent after) over “adversarial” (Chi-square = 14.29 before, 19.20 after, $p < 0.001$ in both periods). Although participating partners seem unwilling to select the term “adversarial” to describe the relationship, there is evidence that the relationship between the EQ Reviewer and engagement team has changed since the implementation of AS No. 7. Two participants selecting “other” described the pre-AS No. 7 relationship as “cooperative,” and the post-AS No. 7 relationship as “not really adversarial, but challenging” or “frequently tense.” In written commentary, one participant expressed concern over this issue stating, “I do not believe the changes imposed by AS 7 has [sic] made any significant changes to the EQR role, except for creating a more adversarial relationship with the audit team.... the EQR should be an integral part of the team and not an inspector.”

In an effort to better understand whether the participants’ responses were based solely on their own interpretations and perceptions, we asked participants whether their responses were based on their firm’s written guidance. Fewer than half (41.9 percent) responded “Yes,” while the

remaining participants all indicated their responses were based on some form of personal experience.

One final question pertaining to the nature of the EQR process addressed the resolution of key audit issues. Results, presented in Table 3, indicate that AS No. 7 changed how key audit issues are most commonly resolved.

Using a five-point Likert scale (1 = greatly less likely, 2 = slightly less likely, 3 = no change, 4 = slightly more likely, 5 = greatly more likely), participants reported the change in the frequency of issues resolved in the post-AS No. 7 period by “accepting the original position of the engagement partner” (mean = 3.10), “accepting the original position of the EQR” (mean = 3.23), “compromising between the original position of the engagement partner and EQR” (mean = 3.00), and having a “new, synergistic solution” (mean = 3.53).

More specifically, 37 percent of participants reported “no change” for each of the issue resolution descriptions; and 33 percent reported an increase in at least one description (mostly, “new, synergistic solution”), together with a decrease in at least one description (mostly, “compromising between the original position of the engagement partner and EQR”). The remaining 30 percent of participants reported an increase or decrease in one description, without a corresponding decrease or increase in another description. Since we would expect that an increase in one resolution description should be accompanied by a decrease in another, the implication of these remaining responses is that the menu of description choices may have been incomplete.

After AS No. 7, audit issues are more likely to be resolved by either accepting the original position of the EQ Reviewer ($p < 0.01$, measured as difference from “no change,” with 23 percent of participants reporting above the mid-point of the scale) or by development of a new, synergistic solution ($p < 0.01$, measured as difference from “no change,” with 45 percent of participants reporting above the mid-point of the scale). These “issue resolution” changes may or may not have altered audit quality, but they do suggest the possibility of a change in the dynamic between

Table 3
Resolution of key issues during the EQR process ($n = 31$).

How are key issues typically resolved during the EQR process comparing the period since implementation of AS No. 7 to prior to implementation?	Scale: 1 = greatly less likely, 2 = slightly less likely, 3 = no change, 4 = slightly more likely, 5 = greatly more likely		
	Participants responding Number (percentage)	Mean	Difference from mid-point of scale
Accepting the original position of the Engagement Partner	Below mid-point – 3 (10) At mid-point – 22 (70) Above mid-point – 6 (20)	3.10	0.10
Accepting the original position of the EQ Reviewer	Below mid-point – 0 (0) At mid-point – 24 (77) Above mid-point – 7 (23)	3.23	0.23**
Compromising between the original positions of the Engagement Partner and EQ Reviewer	Below mid-point – 6 (19) At mid-point – 20 (65) Above mid-point – 5 (16)	3.00	0.00
New, synergistic solution	Below mid-point – 2 (7) At mid-point – 15 (48) Above mid-point – 14 (45)	3.53	0.53**

** Significant at $p < 0.01$.

engagement partners and EQ Reviewers. Collectively, these results evidence that AS No. 7 changed the nature of EQRs.

4.3 Extent of the EQR process

The second set of survey questions concerned audit partners' perceptions about changes, if any, in the extent of the EQR process. We considered the extent of both EQR procedures and EQR communications.

We first asked partners whether their firms' policies had changed as a result of AS No. 7. Only five (16.1 percent) of the participants responded "No." In response to an open-ended question, the participants described such changes as including: more documentation, more formalized process, expanded review of workpapers by the EQ Reviewer, and reviews of completed work, versus "used as a sounding board" while work is in process.

Participant responses regarding changes in EQR procedures are summarized in Table 4. Significant differences are again apparent in the participants' views regarding the extent of activities in the EQR process as evidenced by comparison of mean scores before and after the implementation of AS No. 7.

In particular, participants reported significant differences in the extent of reviews of workpapers ($p < 0.001$), high-risk audit areas ($p < 0.001$), and lower-risk areas ($p < 0.01$) by the EQ Reviewer in the post-AS No. 7 period, compared to the pre-AS No. 7 period. Participants also reported a significant increase in the extent of documentation

of the EQR ($p < 0.001$). These results suggest that total time spent performing EQRs likely increased.

Although not indicative of the general perceptions of the participants, frustration was evident in several participants' comments. For example, one participant commented, "An important responsibility of the EQR partner is to ensure that there was not a material failure in the audit, which is best concluded based on a review of the audit plan, asking probing questions around areas of significant audit risk and review of complex accounting/auditing topics. All of the requirements to review detailed workpapers, particularly around ICFR [internal control over financial reporting], is [sic] only a compliance (policing) exercise to ensure that the engagement team is doing what they are supposed to be doing. This has very marginal benefit for the significant cost."

Participants next used a five-point Likert scale (anchored by 1 = very harmful, 5 = very helpful, and 3 = neutral) to assess the effects of EQR firm policy changes implemented after AS No. 7 (not tabulated). The mean of participants' scores was 3.22, which is significantly different from the mid-point of the range ($p < 0.01$) and suggests that overall, participants viewed policy changes implemented as a result of AS No. 7 as beneficial.

Table 5 reports changes in the extent of communications undertaken by the EQ Reviewer.

Using a four-point scale (1 = none, 2 = infrequent, 3 = occasional, 4 = frequent), participants were asked to describe the typical level of communication between EQ Reviewers and the engagement partner, engagement

Table 4

Differences in the extent of EQR procedures before and after AS No. 7 (n = 31).

Scale: 1 = none, 2 = insignificant, 3 = moderate, 4 = significant	Since implementation of AS No. 7	Prior to implementation of AS No. 7	Between periods difference
What is the extent of the EQR in each of the following?			
Identification of key audit/accounting issues	2.90	2.93	-0.03
Resolution of key audit/accounting issues	3.37	3.40	-0.03
Review of workpapers	3.03	2.53	0.50***
Review of high-risk audit areas	3.63	3.10	0.53***
Review of lower-risk audit areas	1.77	1.47	0.30**
Documentation of the EQ Review	3.10	2.30	0.80***

*, **, *** Significant at $p < 0.05$, $p < 0.01$ or $p < 0.001$, respectively.

Table 5

Differences in extent of communications with the EQ Reviewer before and after AS No. 7 (n = 31).

Scale: 1 = none, 2 = infrequent, 3 = occasional, 4 = frequent	Since implementation of AS No. 7	Prior to implementation of AS No. 7	Difference between periods	"Ideal" level of communication	Post-AS No. 7 compared to "ideal"	Pre-AS No. 7 compared to "ideal"
How would you describe the typical level of communication between the EQ Reviewer and the following members of the audit team?						
Engagement partner	3.53	3.20	0.33**	3.57	-0.04	-0.37***
Engagement manager	3.50	3.27	0.23*	3.57	-0.07	-0.30**
Other engagement team members	2.33	2.13	0.20*	2.73	-0.40***	-0.60***
Engagement issue specialists (e.g., Accounting Groups, IT Specialists, Industry Specialists)	2.23	1.83	0.40***	2.43	-0.20	-0.60***
Engagement risk partners (e.g., Practice Directors, Office Managing Partners)	2.33	2.10	0.23*	2.53	-0.20	-0.43***

*, **, *** Significant at $p < 0.05$, $p < 0.01$, or $p < 0.001$, respectively.

manager, other engagement team members, engagement issue specialists, and engagement risk partners before and after AS No. 7, as well as the ideal level for each channel of communication.

In every case, communications are greater post-AS No. 7 than pre-AS No. 7 (p -values ranging from <0.05 to <0.001); and the most significant change in communication is that with engagement issue specialists such as accounting groups, technology specialists, and industry specialists. Before AS No. 7, on average, these communications were described as less than infrequent (mean = 1.83), while after AS No. 7, communications are more than infrequent (mean = 2.23, difference of 0.40, $p < 0.001$).

Comparing the “ideal” level of communications to pre-AS No. 7 communications, in each case, the level of actual communication was considered significantly less than ideal (p -values ranging from <0.01 to <0.001). In contrast, post-AS No. 7, in only one category were communications considered significantly less than ideal – those between EQ Reviewers and other engagement team members (mean of 2.33 post versus 2.73 ideal, difference of 0.40, $p < 0.001$). This suggests that, for the most part, AS No. 7 significantly improved communications between EQ Reviewers and engagement team members.

Participants were also asked to compare the percentage of total EQR time typically spent in communication with the audit engagement team before and after AS No. 7 (not tabulated). Using a five-point Likert scale (anchored by 1 = less than five percent, and 5 = more than 50 percent), before AS No. 7, participants reported an average of 2.33, and after reported an average of 2.87, a significant difference ($p < 0.01$), reinforcing the finding that communications have increased.

4.4 Timing of the EQR process

Audit partners' perceptions about changes in timing of the EQR process are the focus of the third set of survey questions. Participant responses, as summarized in Table 6, suggest the impact of AS No. 7 on EQR timing pertains to work performed during the planning and testing phases of the audit.

AS No. 7 significantly increased the EQ Reviewer's level of involvement in the planning and testing phases (increase of 0.46, $p < 0.01$ and increase of 0.47, $p < 0.001$, respectively). The amount of involvement in the reporting phase is unchanged comparing the pre- and post-AS No. 7 periods ($p > 0.10$).

Before AS No. 7, in both the planning and testing phases, the EQ Reviewer's involvement was considered significantly less than ideal ($p < 0.001$ and $p < 0.01$); but after AS No. 7, although there are no significant differences comparing the actual and ideal levels of involvement in the planning and reporting phases, involvement in the testing phase is viewed as significantly more than is needed ($p < 0.05$).

Comparing the level of EQ Reviewer involvement in the reporting phase of the audit to that of the planning and testing phases, data in both periods reflect significant differences. Using a four-point scale (1 = none, 2 = insignificant, 3 = moderate, 4 = significant), the EQ Reviewer's mean involvement score during the reporting phase of the audit in the pre-AS No. 7 period averages 3.63, compared to 2.67 in the planning phase (difference of 0.96, $p < 0.001$) and 2.40 in the testing phase (difference of 1.23, $p < 0.001$). Post-AS No. 7, EQ Reviewer involvement period averages 3.70 in the reporting phase, compared to 3.13 in the planning phase (difference of 0.57, $p < 0.001$) and 2.87 in the testing phase (difference of 0.83, $p < 0.001$).

Importantly, changes in the nature, extent, and timing of EQ Reviewer involvement do not seem to have changed the timing of when key issues are identified. Using a three-point scale (1 = infrequently, 2 = sometimes, 3 = frequently), issues are more commonly identified during the reporting phase than in either the planning phase or testing phase (comparisons in both periods, $p < 0.001$); and in both the pre- and post-AS No. 7 periods, the phase during which key issues are identified is viewed as significantly different than ideal (p -values ranging from <0.01 to <0.001).

The only notable change after implementation of AS No. 7 is the likelihood of identifying issues during the planning phase has increased (difference of 0.27, $p < 0.05$). Not surprisingly, participants report that key issues ideally be

Table 6

Differences in timing of the EQR before and after AS No. 7 ($n = 31$).

	Since implementation of AS No. 7	Prior to implementation of AS No. 7	Difference between periods	“Ideal”	Post-AS No. 7 compared to “ideal”	Pre-AS No. 7 compared to “ideal”
What is the level of involvement for an EQ Reviewer during an audit? Scale: 1 = none, 2 = insignificant, 3 = moderate, 4 = significant						
Planning phase	3.13	2.67	0.46**	3.23	-0.10	-0.56***
Testing phase	2.87	2.40	0.47***	2.70	0.17*	-0.30**
Reporting phase	3.70	3.63	0.07	3.60	0.10	0.03
When are key issues identified by the EQ Reviewer? Scale: 1 = infrequently, 2 = sometimes, 3 = frequently						
Planning phase	1.90	1.63	0.27*	2.27	-0.37**	-0.64***
Testing phase	1.53	1.47	0.06	1.83	-0.30**	-0.36**
Reporting phase	2.23	2.30	-0.07	1.73	0.50***	0.57***

* , ** , *** Significant at $p < 0.05$, $p < 0.01$, or $p < 0.001$, respectively.

identified during the planning phase of the audit, mean of 2.27, compared to a mean of 1.83 during the testing phase (difference of 0.44, $p < 0.01$) and a mean of 1.73 during the reporting phase (difference of 0.54, $p < 0.01$).

4.5 Overall impact of AS No. 7

A final set of survey questions concerned audit partners' overall perceptions about the impact of the nature, extent, and timing of the EQR process on audit quality. Questions and participant responses are summarized in Table 7.

Using a seven-point Likert scale (Scale: 1 = very much decreased, 2 = moderately decreased, 3 = slightly decreased, 4 = no change, 5 = slightly increased, 6 = moderately increased, 7 = very much increased), participants were asked their perception of changes in audit effectiveness (mean = 4.77, with 61 percent of participants reporting above the mid-point of the scale), efficiency (mean = 3.03, with 71 percent of participants reporting below the mid-point of the scale), audit objectivity (mean = 4.70, with 45 percent of participants reporting above the mid-point of the scale), audit quality (mean = 4.87, with 64 percent of participants reporting above the mid-point of the scale), and financial reporting quality (mean = 4.63, with 45 percent of participants reporting above the mid-point of the scale). All means were significantly different from the mid-point of the scale, $p < 0.001$.

These reports suggest that in spite of criticisms in changes impacting the nature, timing, and extent of the EQR process, audit partners collectively perceive such changes as an enhancement of overall audit quality. However, they also believe AS No. 7 adversely impacted audit efficiency.

5 Discussion and conclusions

The purpose of this study was to better understand changes in the nature, extent, and timing of the EQR process brought about by the implementation of AS No. 7 and the impact of such changes on audit quality. By doing so, the

study also provides insight about the potential root causes of recently observed PCAOB inspection EQR-related deficiencies.

Results suggest that AS No. 7 changed the role and approach of the EQ Reviewer. Prior to AS No. 7 the role of the EQ Reviewer was more likely to be described as that of a "team member" than as an "inspector"; and the approach of the EQ Reviewer was more likely to be categorized as "consulting" than as "second-guessing." Although these changes likely signal an increase in the EQ Reviewer's objectivity, they may also unintentionally contribute to an "us versus them" attitude, adversely impacting the sharing of information between the EQ Reviewer and audit engagement team. As one partner described in written comments, "...there are times when an EQCR [presumably, EQ Reviewer] is too involved and encroaches on the engagement partner's role and authority. The PCAOB blames an EQCR with an audit deficiency almost equally with an audit partner (which is not fair). As a result, EQCRs sometimes go too far in their review to protect themselves from regulatory criticism."

Notably, post-AS No. 7, audit issues are more likely to be resolved by either accepting the original position of the EQ Reviewer, or by developing a new, synergistic solution. These "issue resolution" changes may or may not have altered audit quality, but they do suggest the possibility of a change in the dynamic between engagement partners and EQ Reviewers.

In terms of changes in the extent of EQRs, nearly all participants reported that their firm's policies had changed as a result of AS No. 7. Comparing pre- and post-AS No. 7 periods, EQ Reviewers review more workpapers and high-risk areas, but they also spend more time reviewing low risk areas and documenting the results of their review. They do not report spending more time on identification and resolution of key accounting issues. Many partners questioned the value of additional documentation requirements with one stating, "EQR documentation requirements are out of control relative to any notable favorable impact on audit quality."

Table 7

Impact of perceived changes in the nature, extent, and timing of the EQR process on audit quality (n = 31).

What has been the impact of the implementation of AS No. 7 on:	Scale: 1 = very much decreased, 2 = moderately decreased, 3 = slightly decreased, 4 = no change, 5 = slightly increased, 6 = moderately increased, 7 = very much increased		
	Participants responding Number (percentage)	Mean	Difference from mid-point of scale
Audit effectiveness	Below mid-point – 2 (6) At mid-point – 10 (33) Above mid-point – 19 (61)	4.77	0.77***
Audit efficiency	Below mid-point – 22 (71) At mid-point – 7 (23) Above mid-point – 2 (6)	3.03	-0.97***
Audit objectivity	Below mid-point – 0 (0) At mid-point – 17 (55) Above mid-point – 14 (45)	4.70	0.70***
Audit quality	Below mid-point – 1 (3) At mid-point – 10 (33) Above mid-point – 20 (64)	4.87	0.87***
Financial reporting quality	Below mid-point – 0 (0) At mid-point – 17 (55) Above mid-point – 14 (45)	4.63	0.63***

*** Significant at $p < 0.001$.

While documentation may aid the conduct of PCAOB inspections, it may also detract from the amount of time EQ Reviewers have – from a capacity standpoint – to engage in actual audit quality-enhancing activities such as verifying that all audit procedures judged necessary to address audit risk have been conducted.

A noted improvement in the extent of EQRs relates to the frequency and breadth of communications. Communications between EQ Reviewers and all engagement personnel, including industry and risk specialists, are greater post-AS No. 7. Before AS No. 7, the extent of communication was viewed as less than ideal, while after, only communications between the EQ Reviewer and below manager-level engagement team members (i.e., seniors and staff) are viewed as less than ideal.

The EQ Reviewer currently engages in a greater amount of communication with the engagement partner and manager than with other members of the engagement team. In the case of team members below the partner and manager, the level of such communications is perceived as less than ideal. As previously discussed, several auditing standards require auditors to hold hierarchical audit engagement team brainstorming discussions. Research has shown this inclusive form of communication promotes communication of information, increases interaction within the audit team, and enhances audit quality. AS No. 7 is silent regarding the participation of EQ Reviewers in these types of engagement team sessions.

Results suggest AS No. 7 had the least impact on timing of EQRs. Both before and after AS No. 7, more EQR time is devoted to the reporting phase than in the planning or testing phase of the audit. AS No. 7 significantly increased the EQ Reviewer's level of involvement in the testing phase, so much so that the level of involvement is now viewed as significantly more than is ideal.

Importantly, changes in the nature, extent, and timing of EQ Reviewer involvement do not seem to have addressed the matter of when key issues are *identified*. Not surprisingly, the planning phase of the audit is reported as being the ideal time for key audit issue identification, but issues are still more commonly identified during the reporting phase. In addition to being problematic for client relationships, late identification may result in insufficient time to fully address issues prior to SEC filing date deadlines. It also negatively impacts audit efficiency and thus may lead to undesirable auditor behaviors such as omitting tests.

In spite of perceptions that too much of the EQ Reviewer's time is now devoted to (1) consideration of low-risk audit areas, (2) the testing phase of the audit, and (3) documenting their review, overall, participants also perceive that, collectively, AS No. 7 changes enhanced audit quality. So we are left with the problem of reconciling this perception with the recent adverse findings of PCAOB inspections. In terms of these reported perceptions, it may be that participants suffer from the common belief that "more is better."

Recall that deficiencies noted in inspections included failure of the EQ Reviewer to identify all significant engagement risks, and failure to verify that all procedures necessary to address audit risk were conducted by the engagement team, which the PCAOB suggested may be attributable to insufficiency of time, and timing, of the EQ Reviewer. We

conclude that the PCAOB is correct, but regulating that EQ Reviewers spend more time during the planning phase of an audit likely will not address the issue.

At some point, and perhaps practice has reached that point, partner capacity becomes an issue. PCAOB guidance that permits EQ Reviewers to reduce the time they devote to lower risk audit areas (e.g. AS No. 7's requirement that the EQ Reviewer examine the engagement team's evaluation of audit firm independence), and reducing the burden of documentation, while emphasizing the importance of time devoted to planning, and ensuring that recommended audit procedures intended to reduce audit risk have been conducted, may not result in perfect EQRs, but will likely have a positive impact on audit quality. As one participant commented, "An important responsibility of the EQR partner is to ensure that there was not a material failure in the audit, which is best concluded based on a review of the audit plan, asking probing questions around areas of significant audit risk and review of complex accounting/auditing topics." Another commented, "Issues are identified most often from discussions with the engagement team and, to a lesser extent, review of work papers."

Commenting on the heavy review obligation a participant wrote, "Our regulators seem to think that the only way to deal with audit quality issues is to layer on another level of review. Currently, we audit our clients' work to ensure that they are doing a good job. Our staff's work is reviewed by our managers, then reviewed by the audit partner, then reviewed by the EQ Reviewer, then reviewed by our internal annual quality review process, then reviewed by our peers (peer review) or the PCAOB. At some point, I hope they recognize that you cannot completely eliminate the risk of an error or a fraud."

In light of the predictions of sociological and philosophical theory and the results of extant research, findings that changes mandated by AS No. 7 may not have had the full effect regulators may have hoped for are not surprising. The concept of audit quality remains a largely undefined concept (Knechel, Krishnan, Pevzner, Shefchik, & Velury, 2013), in spite of a large resource of professional and academic literature; hence, it is unlikely that regulations and organizational arrangements are its sole predictors or enhancers. For example, the PCAOB's recently-issued Release No. 2015-005, *Concept Release on Audit Quality Indicators*, suggests that, among other things, partner and staff workloads and engagement team leverage are indicators of audit quality.

The study's findings provide evidence about systematic changes in the EQR process brought about by the implementation of AS No. 7, and the perceived impact of such changes on one constituent group – auditors who serve as both engagement partners and EQ Reviewers. Left open for future study are the perspectives of other market participants, such as audit committee members, and the actual impact of the changes generated by AS No. 7, beyond the reports of PCAOB inspections. Unfortunately, frequent and largely coincident changes in auditing standards make such investigations difficult, if not impossible, although it may be possible with access to private data to gain some additional insights. For example, analysis of pre- and post-AS No. 7 audit engagement time summaries may help confirm

the study's conclusions about the extent and timing of the EQR process. Surveying other engagement team members and/or clients and audit committees about their perceptions of EQRs may also help triangulate the results of the study.

It is worth noting that two participants indicated use of an EQR assistant post implementation of AS No. 7. While this practice is explicitly allowed in the standard, future research might determine the scope and type of work delegated to an EQR assistant, the nature of his/her qualifications, and the expected impact on audit quality of their involvement in the EQR.

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Appendix: Supplementary material

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