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Showcasing Audit Quality through Voluntary Public Disclosure of Audit Quality Indicators

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Abstract: Public accounting firms continuously invest significant resources into enhancing audit quality. In this paper, we summarize Brown and Popova’s (2019) key findings related to public disclosure of audit quality indicators (AQIs) and discuss important implications for audit practitioners. Specifically, we discuss the current landscape of AQI disclosure from a regulatory and practitioner standpoint, and we provide recommendations for audit practitioners to consider when developing their own framework for AQI disclosure. Finally, we discuss how important stakeholder groups such as individual investors are influenced by AQI disclosures when making significant decisions concerning the audit firm (e.g., making auditor ratification decisions) and the audit client (e.g., making investment changes). The insights provided in our summary inform audit practitioners on how to showcase their audit quality enhancement efforts through voluntary AQI disclosure.
Showcasing Audit Quality through Voluntary Public Disclosure of Audit Quality Indicators

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SUMMARY: Public accounting firms continuously invest significant resources into enhancing audit quality. In this paper, we summarize Brown and Popova’s (2019) key findings related to public disclosure of audit quality indicators (AQIs) and discuss important implications for audit practitioners. Specifically, we discuss the current landscape of AQI disclosure from a regulatory and practitioner standpoint, and we provide recommendations for audit practitioners to consider when developing their own framework for AQI disclosure. Finally, we discuss how important stakeholder groups such as individual investors are influenced by AQI disclosures when making significant decisions concerning the audit firm (e.g., making auditor ratification decisions) and the audit client (e.g., making investment changes). The insights provided in our summary inform audit practitioners on how to showcase their audit quality enhancement efforts through voluntary AQI disclosure.

Keywords: audit quality, audit quality indicators, AQI disclosure, investor judgment
I. INTRODUCTION

Both U.S. and international standard setters have sponsored initiatives focusing on the content and possible uses of audit quality indicators (AQIs), quantitative measures that provide enhanced insight into firm- and engagement-level audit quality (e.g., IAASB 2014; CPAB 2018; PCAOB 2013, 2015, 2020). Auditing firms also invest significant resources in their people, processes, and technology to continuously monitor and improve audit quality. Thus, examining whether public disclosure of these audit quality enhancement efforts is informative to the public in understanding how audit quality is supported is of significant interest to the auditing profession.

A recent study entitled “How Do Investors Respond to Disclosure of Audit Quality Indicators” (Brown and Popova 2019) investigates how public disclosure of AQIs benefits the financial reporting process by fostering transparency between the auditing profession and the public. Using an experimental methodology with individual investors as study participants, Brown and Popova (2019) predict and find that a positive (negative) AQI trend has a positive (negative) emotional impact on investors. In turn, investors increase (decrease) their support for auditor ratification and choose to voluntarily increase (decrease) their investment in the company following a positive (negative) disclosure trend in audit quality.

The study’s implications provide timely information for practitioners and regulators about the public’s desire for and use of publicly disclosed AQIs, their ability to understand the key quality measures disclosed, and the types of disclosures they find most informative. Collectively, the study’s results lend credence to the Center for Audit Quality’s (CAQ) and the Public Company Accounting Oversight Board’s (PCAOB) desire for auditing firms to provide public disclosure of AQI data to improve public confidence in the auditing profession and the capital markets. The current article summarizes the current landscape of AQI disclosure and the implications of the
study’s findings for audit practitioners considering how best to communicate how audit quality is supported and monitored at the firm level.

II. THE CURRENT LANDSCAPE OF AQI DISCLOSURE

The PCAOB published a 2015 concept release seeking public comment on a preliminary set of 28 AQIs with the goal of identifying a potential portfolio of quantitative measures that may provide new insights into evaluating audit quality and determining how high-quality audits are achieved (PCAOB 2015). The initial AQIs identified by the PCAOB were organized around three areas: Audit Professionals (e.g., staffing leverage, experience of audit personnel, the use of specialists, and average hours worked per week), Audit Process (e.g., internal quality review results, PCAOB inspection results, and compliance with independence requirements), and Audit Results (e.g., frequency of financial statement restatements and timely reporting of internal control weaknesses). At present, the goals for the AQI project persist and the PCAOB continues to recognize the determination, development, and communication of indicators of audit quality as a core objective in its strategic plan to drive improvement in the quality of audit services provided (PCAOB 2020).

The CAQ, a public policy organization affiliated with the AICPA, is also a strong advocate for the identification and communication of quantitative AQIs. Unlike the PCAOB’s approach, which includes the possibility of making AQIs at the engagement team and audit firm-level available to the general public, the CAQ’s approach to communicating AQIs initially focused on communication of engagement-specific indicators directly (and solely) with members of a client’s audit committee, with potential disclosure of firm-level AQIs made available to the public (CAQ
Moreover, the CAQ emphasizes that AQI disclosures also include qualitative context to help explain and interpret the quantitative AQI measures.¹

More recently, the CAQ published its Audit Quality Disclosure Framework to assist accounting firms and audit practitioners with voluntary public disclosure of firm-level audit quality reports (CAQ 2019). The CAQ framework builds on its previous efforts to develop and seek different perspectives on AQI disclosure and is organized into three levels of detail: Level 1 – Elements of Audit Quality, Level 2 – Points of Focus, and Level 3 – Example Firm-Level AQIs and Other Qualitative Information. With its AQI framework, the CAQ aims to assist firms with promoting transparency of their efforts to invest in audit quality enhancements in order to foster public trust in the capital markets. Table 1 provides illustrative disclosures of firm-level AQIs currently disclosed by the six largest audit and accounting firms in the U.S., organized by the CAQ’s Level 1 – Elements of Audit Quality. The listing is not all-inclusive but does provide a starting point for audit firms and practitioners interested in developing their own set of AQIs.

Table 1 provides illustrative disclosures of firm-level AQIs currently disclosed by the six largest audit and accounting firms in the U.S., organized by the CAQ’s Level 1 – Elements of Audit Quality. The listing is not all-inclusive but does provide a starting point for audit firms and practitioners interested in developing their own set of AQIs.

III. AQI DISCLOSURE IMPLICATIONS FOR AUDIT PRACTITIONERS

AQI Disclosure Influence on Auditor Ratification Decisions

One critical decision that investors typically make on an annual basis likely impacted by perceptions of audit quality provided through AQI disclosures is deciding whether to support the external audit firm through shareholder ratification. Importantly, both the Securities and Exchange Commission and the PCAOB include discussion of the significance and prevalence of the investor

¹ Like the PCAOB, the CAQ has identified similar engagement-level and firm-level AQIs (CAQ 2014, 2016, 2019), which closely align with the prospective measures published in the PCAOB’s 2015 concept release. Primary differences in their respective approaches are the CAQ’s recommendation for engagement-level AQI disclosure to occur privately between auditors and audit committee members and the CAQ’s additional emphasis on the need to include both quantitative and qualitative factors about the audit process when designing AQI disclosures.
ratification decision in their AQI proposals as justification for public disclosure of AQIs (United States Treasury 2008; PCAOB 2013). Recent accounting research also shows that shareholder ratification decisions convey important information to both the company and to current and potential investors (e.g., Mayhew 2017; Tanyi and Roland 2017). For example, even in the common scenario where an audit committee’s ratification decision is predominately supported by shareholders, research shows that the rate of auditor dismissal still increases as the percentage of votes against the auditor increases (Barua, Raghunandan, and Rama 2017).

In their study, Brown and Popova (2019) show that participants who receive a portfolio of AQIs with a positive trend in audit quality that also contains discussion of the specific enhancement efforts increase their support for audit retention compared to participants who receive either a portfolio of AQIs with a similar but negative trend in audit quality or who do not receive any AQI disclosure.² As illustrated in Figure 1, their findings indicate that by increasing the transparency of their audit quality improvement efforts through AQI disclosure, audit firms can foster trust from the public. In turn, this trust manifests in increased public support for hiring or retaining the audit firm.³

² Brown and Popova (2019) provided three years of AQI data related to the auditing firm of a hypothetical company, MicroTech. Participants were told to assume that they were a current shareholder of MicroTech. In the positive AQI trend condition, the AQI data established a clear trend of enhanced audit quality. In the negative AQI trend condition, the AQI data established a similar trend of diminished audit quality.

³ Brown and Popova (2019) also ran a second experiment which focused on the specific reasons behind investors’ favorable response to an additional AQI discussion when a positive AQI trend is disclosed. They find that in the positive AQI trend condition, participants perceive the AQI discussion as more consistent with and a better explanation of the positive AQI trend. However, participants who receive a negative AQI trend with an additional AQI discussion perceived the discussion to be less informative “soft talk.”
they would like to increase, decrease, or maintain their current investment levels with the hypothetical company described in the case materials.\textsuperscript{4} These results, illustrated in Figure 2, provide further evidence of the substantial impact that AQI disclosure may have for audit firms and the capital markets. Specifically, while holding the company financial information constant, participants who received a positive-trending AQI portfolio chose to voluntarily \textit{increase} their investment in the hypothetical company described in the case materials, while participants who received a negative-trending AQI portfolio chose to voluntarily \textit{decrease} their equity holdings of the company. A follow-up analysis performed by Brown and Popova (2019) indicates that AQI disclosure influences how individuals perceive both the credibility of the auditors’ unqualified audit opinion and, critically, the reliability of the company’s audited financial statements. In turn, these combined perceptions prompt changes to their equity stake in the company.

Combined with the above results for auditor ratification decisions, the findings of Brown and Popova (2019) provide strong incentive and encouragement for audit firms to consider voluntary public disclosure of their audit quality enhancement efforts. Audit firms who continually invest in their people, processes, and technology benefit from the increased transparency provided by AQI disclosure with increased public support for their audit services, as well as an increased desire by shareholders to financially invest in their audit clients. In the next section, we summarize the feedback that the participants provided related to the form and content of AQI disclosure that they found to be most informative.

\textsuperscript{4} To assist with their investment decision, participants were also provided with selected financial information pertaining to MicroTech, the hypothetical company described in the case materials, as well as the current period’s standard unqualified audit report. The financial information did not vary across experimental conditions.
IV. THE AQI DISCLOSURES STAKEHOLDERS FIND MOST IMPORTANT

While voluntary AQI disclosure is beneficial for audit firms who properly invest in continuous audit quality improvements, it is also important to identify the types of AQI disclosures that are most informative to the public. Figure 3 presents the relative importance of each category of AQI proposed by the PCAOB’s 2015 concept release reported by the participants.

Notably, the participants rated AQIs related to the Audit Process and Audit Results as being more important and informative than similar AQIs related to Audit Professionals. This is noteworthy because in their study, the categories of Audit Process and Audit Results reported AQIs at the firm level, while the AQIs related to Audit Professionals were reported at the engagement level.5 Thus, consistent with the recommendations provided by the CAQ and its most recent AQI framework (CAQ 2019), the results from Brown and Popova (2019) support voluntary public disclosure of firm-level AQIs, with possible additional communication of engagement-level AQIs between the auditor and the entity’s audit committee.

Recommendations for Developing AQI Disclosures

Brown and Popova (2019) also provide additional recommendations for audit practitioners to consider when drafting their AQI disclosures. One recommendation is for audit firms to disclose AQIs consistently using comparable AQI data over time, even when the disclosures tell a different story from one year to the next. This recommendation is also championed by the CAQ (CAQ 2019) and stems from a current lack of consistency and comparability across the auditing firms who are already voluntarily providing disclosure of certain quantitative measures surrounding their audit

5 While the AQIs pertaining to Audit Professionals in Brown and Popova (2019) were engagement-level specific, we encourage audit firms and practitioners to develop and disclose similar metrics aggregated at the firm-level (e.g., total staff turnover across the firm, average overtime hours incurred by staff level, average number of training hours performed across staff level, etc).
quality enhancement efforts. For example, Brown and Popova (2019) identified numerous examples of audit firms disclosing identical audit quality measures in a different manner (e.g., reporting voluntary turnover cumulatively across all levels versus disaggregated by level; reporting the number and percentage of audits with significant PCAOB inspection findings versus reporting only a percentage), as well as firms reporting an audit quality measure one year and not continuing to report the measure in subsequent years. This lack of consistency makes it difficult to compare audit quality measures both over time and across auditing firms.

A second recommendation is to include a discussion of each quantitative AQI to provide appropriate context with the disclosure. Providing additional context, such as how the AQI is used and calculated, allows stakeholders to better understand the AQI and how it supports the firm’s audit quality enhancement efforts. Brown and Popova (2019) conclude that providing qualitative context alongside the quantitative measures led to increased support for auditors who demonstrated a positive trend in audit quality through their disclosures.

While a complete discussion of how to identify, collect, and prepare quantitative AQI disclosures is outside the scope of this article, in Figure 4 we provide several links to additional resources that may be of interest to practitioners on how to draft AQI disclosures that provide transparency, consistency, and comparability.

[INSERT FIGURE 4 ABOUT HERE]

V. DISCUSSION

Auditing firms are continuously investing resources in their people, processes, and technology to enhance audit quality. These efforts build public trust and confidence in the US capital markets, but they are often difficult or impossible to observe by the public. Results from Brown and Popova (2019) indicate that AQI disclosure can benefit audit firms through increased
public support for their retention or hiring. The benefits of AQI disclosure also cascade to benefit audit clients through an increased perception of the reliability and credibility of their financial statements. As these voluntary disclosures become more prominent, future research using textual analysis or other archival methods is needed to analyze the nature, content, and tone of these disclosures along with their associated effects on audit quality and financial reporting outcomes.

Given the clear benefits for AQI disclosure, it is not surprising that many large global accounting firms are already choosing to disclose to the public how they are promoting audit quality through voluntary annual transparency or audit quality reports. However, these reports often lack the necessary comparability and consistency to allow readers to easily assess how a firm is supporting audit quality. There are also potential disclosure costs that firms must consider. For example, costs related to capturing the quantitative metrics for each AQI disclosure will likely vary based on a variety of audit firm-specific factors, such as firm size and previous investments in engagement management systems. Fortunately, many of these AQIs are already likely captured and analyzed by firms of all sizes (e.g., internal inspection results, employee turnover, overtime hours, training hours, etc.). It is also possible that the investing public or other interested stakeholders may misinterpret an AQI disclosure, which makes it critical that firms provide the necessary context and discussion to reduce this concern. Finally, current and prospective auditing clients may start using AQI disclosures to compare auditing firms when making their audit firm hiring and retention decisions. However, such comparisons will hopefully encourage all firms to remain invested in audit quality improvement efforts.

Despite the potential challenges and costs involved with providing AQI disclosure, we believe that the majority of auditing firms will benefit from showcasing their audit quality efforts. Thus, we encourage firms of all sizes to consider voluntarily providing public disclosure of
quantitative AQIs through annual transparency or audit quality reports that: (1) are consistent and comparable from year to year, (2) include qualitative discussion to provide appropriate context surrounding the AQI, and (3) are aggregated at the firm-level.
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Figure 1. AQI Disclosure and Participants’ Support for Auditor Ratification

Notes: This figure reports results from Brown and Popova (2019) of participants’ support for auditor ratification, with higher amounts indicating greater support for retaining the audit firm.
Figure 2. AQI Disclosure and Participants’ Voluntary Change in Investment

Notes: This figure reports results from Brown and Popova (2019) of participants’ voluntary change in their equity investment of the company. Results greater than zero (i.e., above the line) indicate a desire to increase their equity investment in the company while results less than zero (i.e., below the line) indicate a desire to decrease their equity investment.
Figure 3. Relative Importance of Each AQI Measure for Determining Audit Quality

Notes: This figure reports results from Brown and Popova (2019) of participants’ assessment of how informative and important each of the three categories of AQIs put forth by the PCAOB’s 2015 Concept Release are to determining audit quality.
**Figure 4. Additional Audit Quality Online Resources**

| Source                                           | Title and Link                                           |
|--------------------------------------------------|----------------------------------------------------------|
| American Institute of Certified Public Accountants (AICPA) | *Enhancing Audit Quality*                                |
| Canadian Public Accountability Board (CPAB)       | *Audit Quality Indicators: Final Report*                  |
| Center for Audit Quality (CAQ)                    | *CAQ Approach to Audit Quality Indicators*                |
| CAQ                                              | *Audit Quality Indicators: The Journey and Path Ahead*    |
| CAQ                                              | *Audit Quality Disclosure Framework*                      |
| Federation of European Accountants                | *Overview of Audit Quality Indicators Initiatives*        |
| International Auditing and Assurance Standards Board (IAASB) | *A Framework for Audit Quality*                          |
| Public Company Accounting Oversight Board (PCAOB) | *Concept Release on Audit Quality Indicators*            |
| PCAOB                                            | *Fact Sheet: Concept Release on Audit Quality Indicators* |
Table 1. **Illustrative AQI Disclosures from the Six Largest Auditing and Accounting Firms**

| CAQ Elements of Audit Quality | Description | Example Disclosures |
|-------------------------------|-------------|---------------------|
| Leadership, Culture, and Firm Governance | The firm’s reporting structure and tone at the top | Firm organizational chart and reporting structure; List of committee(s) and committee members responsible for audit quality oversight; |
| Ethics and Independence | The firm’s compliance processes related to independence and ethical standards | Summary of compliance and noncompliance rates for Audit Services internal inspection results for each of the previous three years; Summary of policies and procedures supporting independence and ethical guidelines; |
| Acceptance and Continuance of Clients and Engagements | The firm’s policies and practices to determine whether to accept or continue a client relationship | Description of client acceptance and continuance process; Description or visualization of assurance client industry concentrations; Chart of annual fee revenues by service line (e.g., percentage of advisory, audit, and tax revenues); |
| Engagement Team Management | The firm’s approach to recruiting, hiring, training, retaining, and promoting qualified personnel | Diversity and inclusion related data points (e.g., percentage of women and racially/ethnically diverse professionals); Number of audit professionals by staff level; Average training hours completed per audit professional; Average annual voluntary staff turnover rate by staff level; Average annual hours worked in excess of 40 hours per week by staff level; |
| Audit Engagement Performance | How the firm is designing and/or deploying tools, technologies, and specialists to improve audit quality | Average specialist hours as a percentage of total engagement hours; Description of recent technology and audit quality initiatives; Percentage of audits using technology tool (with identification of audit tool); |
| Monitoring | The nature and/or extent of internal and external inspections and findings | Number and percentage of financial statement restatements by year as a percentage of issuer audits; Results of PCAOB inspections (e.g., number and percentage of Part I deficiencies); Number of internal inspections of our US audits; |

**Notes:** This table provides example firm-level AQI metrics voluntarily disclosed by the six largest auditing and accounting firms in the U.S. within their annual audit quality reports, organized around the six elements of audit quality identified in the CAQ’s *Audit Quality Disclosure Framework*. The associated audit quality reports were published by BDO (2020), Deloitte (2019), EY (2020), Grant Thornton (2020), KPMG (2020), and PwC (2020).