PCAOB
PUBLIC COMPANY ACCOUNTING OVERSIGHT BOARD

# Firm and Engagement Metrics

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Summary: The Public Company Accounting Oversight Board (PCAOB or the "Board") is adopting amendments to its rules and reporting forms to require the reporting of specified firm-level metrics on new Form FM, *Firm Metrics*, and specified engagement-level metrics on an amended and renamed Form AP, *Audit Participants and Metrics*.

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# I. EXECUTIVE SUMMARY

We are adopting a set of firm- and engagement-level metrics (the "final rules" or "final metrics") that certain registered public accounting firms ("firms" or "audit firms") will be required to publicly report relating to their audit practices and the audits they lead. We believe these metrics will provide valuable additional information, context, and perspective on auditors and audit engagements, which can be used by investors, audit committees, and other stakeholders, and which will further our oversight activities. We believe this will advance investor protection and promote the public interest by enabling stakeholders to make better-informed decisions, promoting auditor accountability, and ultimately enhancing capital allocation and confidence in our capital markets. The new reporting requirements will apply to firms that audit at least one company that is an "accelerated filer" or "large accelerated filer" (as those terms are defined in the U.S. Securities and Exchange Commission ("SEC") rules).[1]

**Lack of Consistent, Comparable Data about Audits and Auditors**

Investors and audit committees cannot easily observe the services performed by auditors. This can limit investors' ability to make informed decisions about investing their capital, ratifying the selection of auditors, and voting for members of the board of directors, including directors who serve on the audit committee, and audit committees' ability to choose among and monitor the performance of auditors. At the same time, there is a lack of incentive for firms, acting on their own or collectively, to provide accurate, standardized, and decision-relevant information about their firms and the engagements they perform. In response to these challenges, the Board has studied ways to measure audit firm and audit engagement performance, primarily with a view to providing information useful to investors in their investment and proxy voting decisions, but also recognizing that metrics could potentially be informative to other stakeholders. In addition, the Board itself would benefit from having additional tools to use in its oversight activities, including its inspections program, standard-setting initiatives, and research activities.

We have observed that many of the firms that issue audit reports for more than 100 issuers annually and audit companies that account for the majority of U.S. public company market capitalization already publicly disclose certain firm-level metrics through audit quality reports, transparency reports, or similar documents. However, these disclosures generally do not contain engagement-level information, which investors have indicated would be the most useful to them, and are inconsistent across firms and year to year, with no common definitions

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[1] *See* Securities Exchange Act of 1934 ("Exchange Act") Rule 12b-2, 17 C.F.R. §240.12b-2.

or calculations that would allow for meaningful comparisons. Moreover, most of the disclosures are voluntary, so firms are free to revise or discontinue such reporting at any time.

In our view, the current voluntary reporting regime cannot provide consistent, comparable information that stakeholders can rely on to inform their decisions over time. And it would appear that firms' attempts at voluntary reporting have not, in fact, satisfactorily addressed investor desire for additional information about audits and auditors. On the contrary, support from investors and investor-related groups for this rulemaking initiative has been consistent throughout its history, even as the practice of firm voluntary reporting has evolved and spread.

**Metrics at Firm and Engagement Level**

The final rules require reporting of metrics at both the firm and the engagement levels. Firm-level metrics relate to aspects of the firm's audit practice (e.g., average experience at a public accounting firm of the firm's partners) and engagement-level metrics relate to individual audit engagements (e.g., experience at a public accounting firm of the engagement partner and the engagement quality reviewer ("EQR") and average experience of certain other engagement team members). We are requiring firm-level metrics because we believe information relevant to the firm will be beneficial in providing context for engagement-level metrics and in evaluating the firm's audit practice and its related system of quality control. We are requiring engagement-level metrics because we believe that information will be useful in gaining a richer understanding of a particular audit and because investors have stressed the importance to them of engagement-level information to assist them in evaluating the performance of the auditor and the audit committee.

Most metrics will be reported at both firm- and engagement-level. However, the final rules require reporting at only the firm level in cases where we believe engagement-level data would not be meaningful or would be disproportionally challenging to collect in relation to the incremental benefit.

**Final Metrics**

We are adopting metrics in the following eight areas:

- Partner and Manager Involvement. Hours worked by senior professionals relative to more junior staff across the firm's large accelerated and accelerated filer engagements and on the specific engagement.

- Workload. For senior professionals who incurred hours on large accelerated or accelerated filer engagements, average weekly hours worked on a quarterly basis,

including time attributable to all engagements, administrative tasks, training, and all other matters.

- Training Hours for Audit Personnel. Average annual training hours for partners, managers, and staff of the firm, combined, across the firm and on the engagement.

- Experience of Audit Personnel. Average number of years worked at a public accounting firm (whether or not PCAOB-registered) by senior professionals across the firm and on the engagement.

- Industry Experience. Average years of career experience of senior professionals in key industries audited by the firm at the firm level and the audited company's primary industry at the engagement level.

- Retention of Audit Personnel (firm-level only). Continuity of senior professionals (through departures, reassignments, etc.) across the firm.

- Allocation of Audit Hours. Percentage of hours incurred prior to and following an issuer's year-end across the firm's large accelerated and accelerated filer engagements and on the specific engagement.

- Restatement History (firm-level only). Restatements of financial statements and management reports on internal control over financial reporting ("ICFR") that were audited by the firm over the past three years.

Firms are permitted, but not required, to accompany the metrics with narrative disclosure to provide additional context.

The final suite of metrics focuses primarily on information about audit personnel. We believe these metrics will provide new insights into how engagements are staffed, including the extent of involvement of senior personnel; auditors' overall workload; retention of personnel across the firm; and levels of training, audit experience, and industry-specific expertise. The final metrics will also provide information about the extent of audit work completed prior to the issuer's year end, an aspect of the audit process that we believe is associated with improved audit outcomes, and about the firm's history of restatements, a key measure of audit outcomes.

This new information will allow users to draw inferences about audits and audit firms that are not possible today. Some may relate to specific metrics. For example, a heavy workload for a particular engagement team relative to the firm average or compared to peer firms may raise questions about the quality of the work performed. Conversely, a relatively high level of industry-specific experience, particularly for an engagement in an industry that benefits from

specific accounting and auditing expertise, would be a positive signal. Other inferences may relate to combinations of metrics. For example, the personnel-related metrics, taken together, give an overall sense of how an engagement is staffed that can be compared to firm averages and to engagements for similar issuers. It is possible that the precise numerical values of metrics may be important in some cases but, in general, we believe the metrics will be more useful to convey a sense of whether a particular engagement or firm appears fairly typical or is an outlier in one or more respects. This should provide a richer context for understanding the work of the auditor than the current environment of almost no publicly available information.

We also believe that gathering data and calculating the final metrics, given the subjects they address, will not be overly costly, time-consuming, or burdensome. Based on our oversight activities, it appears that the largest firms are already tracking data in many of these areas. Many of the metrics are based on data that firms already track or will be required to track for purposes of other PCAOB requirements. For example, Partner and Manager Involvement and Allocation of Audit Hours are based on the same time reporting required for Form AP purposes. Training hours will reflect the same information that firms track to ensure proper licensing of their personnel. Restatement data, to the extent firms are not already tracking it, is required to be tracked under QC 1000. In addition to required data, many firms track the experience of their personnel, as well as industry experience, for use in marketing materials and for inclusion in requests for proposals, and some firms already track staff retention and turnover metrics as part of their human capital management. Firms should be able to generate other data required by the final metrics, such as Workload, from their existing timekeeping systems with minimal additional effort.

**Responding to Commenter Concerns**

After considering commenter input, we have made a number of changes from the proposal. The final rules eliminate four proposed metric areas (Audit Resources—Use of Specialists and Shared Service Centers, Audit Hours and Risk Areas, Quality Performance Ratings and Compensation, and Audit Firms' Internal Monitoring) and add one new metric area (Training Hours for Audit Personnel). In addition, only firm-level reporting will be required for one area (Retention of Audit Personnel) that was proposed to be reported at both the firm and engagement level. We have also made revisions to simplify and clarify some of the other metrics and exempted firms with a small issuer practice from reporting on their industry experience. In addition, we have expanded the optional narrative disclosure from 500 to 1,000 characters and have provided additional direction that the narrative should be concise and focused on the reported metrics, with a view to facilitating the reader's understanding of the metrics. We believe these changes will address commenter concerns about challenges of data collection, potential sensitivity of data, and potential ambiguity of the metrics, and that the final suite of metrics will provide consistent, comparable information on auditors and audit

engagements, giving investors, audit committees, and other stakeholders valuable new context and perspective.

We have considered comments questioning the value of metrics, whether they will be used by investors and other stakeholders or would represent only a "check the box" compliance exercise, and whether they might contribute to information overload or have other negative consequences. Based on the other stakeholder input received, we do not share those views. In comments provided in our rulemaking process and surveys conducted by a firm-related group, investors and investor-related groups have repeatedly indicated that the metrics will be useful. As one investor-related group noted:

> Auditors say they want to be seen or evaluated as something other than a commodity business evaluated based upon price. For this to happen, auditors need to provide investors with information such that they can value the work of the auditor – just as they evaluate and value the business and the work of management.[2]

We also note that similar objections—that the new information would not be used or would be confusing or misleading—were raised by many of the same commenters in connection with our last two rulemakings requiring disclosure of additional information about audits and auditors: Form AP reporting of the name of the engagement partner and information about other firms participating in the audit, and auditor communication of critical audit matters ("CAMs"). In both cases, these commenter concerns appear unsubstantiated. The Form AP data set is now one of the most frequently visited areas of our website.[3] As for CAMs, while academic studies have shown mixed results about the impact of CAMs, in a recent investor survey conducted by a firm-related group, over 90% of the respondents indicated that CAMs play an important role in their investment decision-making.[4] In addition, data aggregators, such as Audit Analytics, compile and make available data on CAMs, which suggests market demand for that information. Our experience therefore suggests that, contrary to concerns about irrelevance and information overload, stakeholders seek out additional information about auditors and audit engagements when it is available.

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[2] Letter from CFA Institute, August 30, 2024, at 17.

[3] In 2023, there were over 333,000 unique searches performed on AuditorSearch and the Form AP data set was downloaded over 2,000 times. Information related to usage statistics can be found on the PCAOB's website (https://pcaobus.org/resources/auditorsearch).

[4] The Center for Audit ("CAQ") Quality Critical Audit Matters Survey (July 2024) at 9.

**Filing Requirements**

As proposed, firm-level reporting is required of every firm that audits at least one "accelerated filer" or "large accelerated filer" under SEC rules during the reporting period. Engagement-level reporting will be required for every audit of an accelerated or large accelerated filer. The thresholds will apply to the audits, and auditors, of companies that account for the majority of U.S. public company market capitalization, and we believe will capture the situations where investment and proxy voting decisions will be most likely to benefit from additional information about the audit and the auditor.

The final rules:

- Require reporting of firm-level metrics annually on a new Form FM, *Firm Metrics,* pursuant to a new Rule 2203C, *Firm Metrics*, for firms that issued an audit report with respect to at least one accelerated filer or large accelerated filer during the reporting period;

- Require reporting of engagement-level metrics for audits of accelerated filers and large accelerated filers on a revised Form AP, renamed "Audit Participants and Metrics"; and

- Allow, but not require, limited narrative disclosures on both Form FM and Form AP to provide context and explanation for the required metrics.

**Background**

The final rules build on other actions we have taken to provide stakeholders with additional information about registered firms and the audits they perform, including information about firms available through our registration and reporting forms, information about auditors and engagements on Form AP, and communication of critical audit matters and auditor tenure in the auditor's report. The Board is concurrently adopting other changes to firm reporting requirements.[5] We believe the final rules will complement these efforts by providing investors, audit committees, and other stakeholders with additional information in a consistent format and compiled with sufficient rigor to assist them in making decisions. For example, the metrics could inform investors' decision-making regarding whether to ratify the audit committee's selection of an auditor or to vote for members of the board of directors, including directors who serve on the audit committee, as well as potentially assisting in audit committee oversight, supporting continuous improvement of firms' quality control systems, and facilitating

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[5] *See Firm Reporting*, PCAOB Rel. No. 2024-013 (Nov. 21, 2024) (adopting amendments to reporting requirements for Form 2, *Annual Report Form*, and Form 3, *Special Reporting Form*).

our own oversight and rulemaking efforts. We further believe that the value of these metrics will likely increase over time as firm reporting practices develop and trends become observable.

As in our proposal, we use the term "firm and engagement metrics" rather than "audit quality indicators" ("AQIs") to describe the metrics we are adopting. We believe this avoids the potential misimpression that any set of metrics can comprehensively measure audit quality and emphasizes our goal of promoting informed decision-making through robust disclosure requirements. Some commenters were critical of that change in terminology, suggesting that it evidenced that we are no longer focused on audit quality. It is simply a clarification. Because some of the most important elements of a high-quality audit, such as application of due care and professional skepticism, cannot be measured and quantified directly, the metrics employ proxies, such as years of experience, auditor workloads, and percentage of audit hours attributable to more senior members of the engagement team, which can only partially capture these concepts. Even though these proxies cannot provide a complete picture of audit quality, we believe they will nevertheless convey important information about auditors and the engagements they lead that stakeholders will find relevant and useful. We believe that consideration of the metrics in combination, together with any additional context a firm may choose to provide, will help users interpret the data, and that the metrics, analyzed across firms and over time, will yield important, currently unavailable information that will assist investors, audit committees, and other stakeholders in their decision-making, oversight, and evaluation related to audits.

We developed the proposal after considering input from numerous sources, including the recommendations of the U.S. Department of Treasury's Advisory Committee on the Auditing Profession ("ACAP"), including the October 6, 2008 *Final Report of the Advisory Committee on the Auditing Profession to the U.S. Department of the Treasury* ("ACAP Final Report"); our *Concept Release on Audit Quality Indicators*, PCAOB Rel. No. 2015-005 (July 1, 2015) ("Concept Release"), and the comments received; the voluntary practices of firms; recommendations from the PCAOB's Investor Advisory Group ("IAG"); and the initiatives of international regulators. We have carefully considered this input and believe that the final amendments strike an appropriate balance between the expected benefits of the new reporting requirements and the associated costs of implementation and compliance.

**Effective Dates**

If approved by the SEC, both firm-level and engagement-level reporting will be required for periods beginning October 1, 2027. We are also adopting a phased implementation period for both firm- and engagement-level reporting, where firms that issue audit reports for more than 100 issuers will begin reporting in the first year that reporting is required and other firms beginning one year later.

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This release provides background on the Board's rulemaking project; discusses the final rules, forms, and other amendments; and includes an economic analysis addressing the need for rulemaking and the anticipated economic impacts of the final rules. The release also includes three appendices. Appendix 1 sets forth Rule 2203C, the Form FM instructions, and conforming amendments; Appendix 2 sets forth amendments to Rule 3211, renamed *Audit Participants and Metrics,* Form AP, and a conforming amendment; and Appendix 3 provides illustrative examples to show how metrics would be calculated based on specific facts and circumstances presented therein.

# II. BACKGROUND

## A. Project History

### 1. Importance and Potential Benefits of Increased Information About Audit Firms and Engagements

With the passage of the Sarbanes-Oxley Act of 2002 ("Sarbanes-Oxley") and the establishment of the PCAOB, Congress acknowledged and re-emphasized the auditor's important gatekeeping role.[6] Reflecting that importance, we believe requiring audit firms to provide additional information about the firm and the engagements it performs will advance investor protection and promote the public interest by enabling investors to make better-informed decisions. As discussed in more detail below, we have also heard from investors and other stakeholders that they believe such information will be beneficial.

Sarbanes-Oxley also mandated new exchange requirements regarding the responsibilities of audit committees of listed companies, including requiring that audit committees be charged with responsibility for the appointment, compensation, and oversight of the auditor.[7] We believe that making information available to audit committees regarding both the specific audit and auditor they oversee and the audits and auditors of their peer companies will assist them in carrying out this statutory mandate.

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6 *See* Section 101(a) of Sarbanes-Oxley, 15 U.S.C. § 7211(a); Senate Report No. 107-205, at 5-6 (July 3, 2002).

7 *See* Section 10A(m)(2) of the Exchange Act, 15 U.S.C. §78j-1(m)(2).

Over the years, the Board has received significant input on the importance and potential benefits to stakeholders of additional information about audits and auditors. We summarize key elements of that input below.

### i. ACAP recommendations

In 2007, the U.S. Treasury constituted the ACAP to consider and develop recommendations relating to the sustainability of the auditing profession.[8] On October 6, 2008, ACAP published a report detailing recommendations intended to enhance the sustainability of a strong and vibrant public company auditing profession.[9] One of the ACAP recommendations was that the PCAOB, in consultation with auditors, investors, public companies, audit committees, boards of directors, academics, and others, "determine the feasibility of developing key indicators of audit quality and effectiveness and requiring auditing firms to publicly disclose those indicators"[10] and, assuming that development and disclosure of indicators of audit quality are feasible, that the PCAOB be required to monitor these indicators.

### ii. 2013 and 2017 PCAOB Investor Advisory Group Recommendations

At its October 2013 IAG Meeting,[11] the IAG working group on AQIs made recommendations for the PCAOB to prescribe informative, forward-looking disclosures and indicators intended to measure the quality of audits and enhance auditor accountability. They emphasized that investors and audit committees generally care more about the quality and credibility of audit work on specific engagements—the companies in which they have invested or were considering investing, or the company on whose board of directors they served—rather than firms' more general efforts to improve quality. Accordingly, in addition to disclosures and metrics to be reported at the firm level, they also recommended disclosures and metrics to be reported at the engagement level.

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8 *See* ACAP Final Report, at IV:1.

9 *See* ACAP's *Fact Sheet: Final Report of the Advisory Committee on the Auditing Profession*, *available at* https://home.treasury.gov/news/press-releases/hp1158#:~:text=The%20U.S.%20Treasury%20Department%20%27s%20Advisory%20Committee%20on,into%20three%20sections%20by%20principal%20areas%20of%20focus.

10 *See* ACAP Final Report, at VIII:14.

11 *See* Oct. 2013 IAG meeting and presentations, Report from the Working Group: Audit Quality Indicators, *available at* IAG Meeting Archive, https://pcaobus.org/news-events/events/event-details/pcaob-investor-advisory-group-meeting_758.

At the October 2017 IAG meeting, an IAG working group discussed three topics: (i) why audit quality and AQIs matter to investors, (ii) the PCAOB's authority and efforts to date to enact AQIs, and (iii) audit quality initiatives in other jurisdictions.[12] The 2017 working group also endorsed the 2013 AQI working group's recommendations.

The recommendations provided by the 2013 and 2017 IAG working groups are reflected in many of the metrics we are adopting today.

### 2. PCAOB Initiatives

This section provides further background and expands on the history of PCAOB activities related to providing additional information about audit firms and audits, including firm and engagement metrics.

#### i. 2015 AQI Concept Release

In July 2015, the PCAOB issued the Concept Release and sought comment on 28 potential indicators. The indicators were organized into three groups:

- Audit professionals – Measures dealing with the availability, competence, and focus of those performing the audit.
- Audit process – Measures related to an audit firm's tone at the top and leadership, incentives, independence, attention to infrastructure, and record of monitoring and remediation.
- Audit results – Financial statements, internal control, going concern, communications between auditors and audit committees, and enforcement and litigation.

The Concept Release discussed (i) the nature of the potential indicators and potential calculations, (ii) the usefulness of the indicators, (iii) suggestions for other indicators, (iv) potential users of the indicators, and (v) the approach to implementation. The PCAOB received 50 comment letters in response to the Concept Release.

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[12] *See* Oct. 2017 IAG meeting and presentation, *available at* IAG Meeting Archive, https://pcaobus.org/news-events/events/event-details/pcaob-investor-advisory-group-meeting_1085.

Most commenters expressed support for the general idea that AQIs may be useful.[13] However, commenter views varied widely. Comments from firms and firm-related groups suggested that no standard group of indicators could advance a person's understanding of audit quality. These commenters suggested that AQIs should be voluntary, should be reported to audit committees through two-way discussions to provide context for the indicators, or should be required only at the firm level. Investors and investor-related groups recommended that indicators should be made public as they could be used to stimulate competition based on quality among audit firms, remedy the deficiency of information about audits, and give shareholders meaningful information to help them in voting on auditor selection. Some commenters suggested that engagement-level metrics are more useful than firm-level metrics. One commenter suggested that promoting competition around an implied variability in audit quality may not always be appropriate and in the public interest because audit quality should be nonnegotiable and a fundamental goal for all audits. Another commenter suggested that it was critical to define what AQIs do and do not represent so that they are used appropriately.

### ii. PCAOB Rulemakings to Increase Audit Transparency: Identification of the Engagement Partner and Other Audit Participants on Form AP and Auditor Communication of Critical Audit Matters

In 2015, the PCAOB adopted rules requiring information on Form AP, *Auditor Reporting of Certain Audit Participants,* regarding the engagement partner and other accounting firms that participate in audits of issuers.[14] The rulemaking was initially in response to the ACAP recommendation that the engagement partner should be required to sign the audit report.[15] As the rulemaking evolved, it also took account of stakeholder input, including IAG recommendations to identify the engagement partner and the firms, other than the firm signing the audit report, that participate in audits.

The Board's intention was to make available information about the engagement partner and other firms that participated in the audit, saying that such information, even if not useful in every instance or meaningful to every investor, would make an overall contribution to the information available to investors in making voting and investment decisions. The Board also asserted that increased transparency should promote increased accountability in the audit process. The Form AP reporting requirements became effective in 2017, and the data gathered via Form AP has many users; the Form AP data set is frequently searched through

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13 *See* Nov. 2015 Standing Advisory Group (SAG) Briefing Paper, *available at* SAG Meeting Archive, https://pcaobus.org/news-events/events/event-details/standing-advisory-group-meeting_910.

14 *See* PCAOB Rule 3211.

15 *See* ACAP Final Report, at VII:19.

AuditorSearch, the PCAOB's online search tool, as well as downloaded by users performing more detailed analyses.[16]

In 2017, the PCAOB adopted AS 3101, *The Auditor's Report on an Audit of Financial Statements When the Auditor Expresses an Unqualified Opinion*, which includes requirements regarding the disclosure of auditor tenure and auditor determination and communication of "critical audit matters."[17] This project was also initiated in response to ACAP's recommendation that the PCAOB undertake a standard-setting initiative to consider improvements to the auditor's standard reporting model.[18] The rulemaking explored potential ways to increase the transparency and relevance of the auditor's report, including by requiring expanded auditor reporting regarding the audit and the company's financial statements.[19] In the adopting release, the Board noted ACAP's statement that the complexity of financial reporting supports improving the content of the auditor's report beyond the then-current pass/fail model to include a more relevant discussion about the audit of the financial statements.

After multiple rounds of Board releases and stakeholder input, the requirements took effect in 2019 and 2020.

### iii. Recent PCAOB Standard-setting and Rulemaking activities

At the November 2022 Standards and Emerging Issues Advisory Group ("SEIAG") and the October 2022 and 2023 IAG meetings, several members continued to urge the Board to take action on firm and engagement metrics. Other members stated that some firms already publish similar metrics through transparency reports and audit quality reports. Some members of the IAG and SEIAG have requested increased information at the firm and engagement levels

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16 *See* Section IV.A.

17 *See* AS 3101.11-.16.

18 *See* ACAP Final Report, at VII:13.

19 *See Concept Release on Possible Revisions to PCAOB Standards Related to Reports on Audited Financial Statements and Related Amendments to PCAOB Standards; Notice of Roundtable* (June 21, 2011), *available at* https://pcaobus.org/news-events/news-releases/news-release-detail/pcaob-issues-concept-release-on-auditor's-reporting-model_337.

through easily accessible and quantified metrics, potentially with accompanying context provided by the auditors.[20]

In response to the Board's request for comment on the draft 2022-2026 Strategic Plan, some commenters encouraged the Board to continue to consider this topic.[21] Additionally, in a January 2023 comment letter on the PCAOB's proposed quality control standard, members of the IAG advocated for "a minimum requirement of eight indicators."[22] These eight indicators were (i) staffing leverage; (ii) partner workload; (iii) manager and staff workload; (iv) audit hours and risk areas; (v) quality ratings and compensation; (vi) audit fees, effort, and client risk; (vii) audit firm's internal quality review results; and (viii) PCAOB inspection results.

### a. QC 1000: Requirements

The Board has adopted a new quality control standard for firms, QC 1000, *A Firm's System of Quality Control* ("QC 1000"),[23] which contains provisions that are relevant to firm reporting of firm- and engagement-level metrics. QC 1000 will become effective in December 2025.

#### (1) Public communication of firm-level or engagement-level information

QC 1000 includes a quality objective that, if a firm communicates firm-level or engagement-level information with respect to the firm's audit practice, firm personnel, or engagements, such as firm or engagement metrics, to external parties, such information is

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[20] *See* Nov. 2022 SEIAG meeting, *available at* https://pcaobus.org/news-events/events/event-details/pcaob-standards-and-emerging-issues-advisory-group-meeting-2022. *See* Oct. 2022 IAG meeting, *available at* https://pcaobus.org/news-events/events/event-details/pcaob-investor-advisory-group-meeting and Oct. 2023 IAG meeting, *available at* https://pcaobus.org/news-events/events/event-details/pcaob-investor-advisory-group-meeting-october-2023.

[21] *See* comments on 2022-2026 Strategic Plan Documents, *available at https://pcaobus.org/about/strategic-plan-budget/comments-on-pcaob-draft-strategic-plan-2022-2026*.

[22] *See A Firm's System of Quality Control and Other Proposed Amendments to PCAOB Standards, Rules, and Forms,* PCAOB Rel. No. 2022-006 (Nov. 18, 2022). The comment letters received in response to the proposal are available on the Board's website in Docket 046. *See* comment letter from members of the IAG, *available at* https://assets.pcaobus.org/pcaob-dev/docs/default-source/rulemaking/docket046/4_iag.pdf?sfvrsn=1941e7c0_4.

[23] *See A Firm's System of Quality Control and Other Amendments to PCAOB Standards, Rules, and Forms*, PCAOB Rel. No. 2024-005 (May 13, 2024) ("QC Adopting Release").

accurate and not misleading and, with respect to any such metrics that are communicated in writing, the communication explains in reasonable detail how the metrics were determined and, if applicable, how the method of determining them changed since the metrics were last communicated.[24] (With respect to metrics reported on Form FM and Form AP, the form itself provides the required explanation.) The final firm and engagement metrics include reporting elements that focus on the firm's responsibility to produce and report information that is accurate and not misleading, for example, an optional narrative to accompany the metrics. This element is discussed further below in Section III.

#### (2) Use of metrics in monitoring the firm's QC system

Under QC 1000, in determining the nature, timing, and extent of QC system-level monitoring activities, the firm is required to take into account any metrics that the firm may use in its QC system.[25] QC 1000 does not require the use of any specific metrics; firms have the ability both to develop metrics on their own and to use any or all of the metrics required to be reported under Rule 2203C and Rule 3211 in their QC system, but that is not required. We believe these metrics would provide information that could be used in the firm's system of quality control. However, not all firms may find all metrics useful in operating or monitoring their QC system, and we are not mandating their use in connection with monitoring a firm's QC system at this time.

### b. Firm Reporting

Concurrently with this rulemaking, the Board is adopting certain updates to its annual and special reporting requirements to facilitate the disclosure of more complete, standardized, and timely information regarding audit firms. Among other new requirements, the updates will (i) require firms to disclose additional information on Form 2 about their fees, leadership and governance structure, and network arrangements; (ii) require, in connection with QC 1000, a one-time update to the statement on a firm's quality control policies and procedures on a new Form QCPP; and (iii) expand the scope of special reporting to include events that pose a material risk, or represent a material change, to the firm's organization, operations, liquidity or financial resources, in such a manner that it will affect the provision of audit services, as well as new cybersecurity reporting requirements.[26]

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24 QC 1000.53e.

25 QC 1000.65c.

26 *See* PCAOB Rel. No. 2024-013.

### c. Proposed Firm and Engagement Metrics

In April 2024, we proposed amendments to the PCAOB's rules and reporting forms to require the reporting of specified firm-level metrics on new Form FM, *Firm Metrics*, and specified engagement-level metrics on an amended and renamed Form AP, *Audit Participants and Metrics*. In our proposal, we proposed a set of firm-level and engagement-level metrics across 11 areas to be publicly reported for the firms that serve as lead auditor for at least one accelerated filer or large accelerated filer.

We received over 45 comment letters on the proposal.[27] Commenters included investor-related groups, firms, firm-related groups, academics, and others.

Some commenters expressed concerns about the speed of rulemaking by the Board. Some commenters asked the PCAOB for more than 60 days to respond to the proposal, citing overlapping comment proposal periods, the duration of comment periods, the length and complexity of various proposals, and overlapping SEC 19b-4 filing comment periods. On the other hand, a commenter urged us not to delay this rulemaking because investors need a relatively standardized data set to analyze and compare over time and across companies. We believe that 60 days was a sufficient period for commenting on the proposal. Despite that, we considered comment letters that were submitted after the 60-day period closed. We received robust comments on the proposal, which informed the final metrics or final rules.[28] We discuss the comments throughout this release.

## 3. Overview of Existing Requirements

Under current PCAOB rules and standards, certain information about PCAOB-registered firms is already made available to investors, audit committees, and other stakeholders. The disclosure of firm- and engagement-level metrics would supplement this information. This section discusses the key PCAOB standards and rules that require certain firm- and engagement-level information to be provided to various stakeholders.

#### i. Available information related to firms

PCAOB rules require firms to file Form 2 (Annual Report Form) to report basic information about the firm and its audit practice and Form 3 (Special Reporting Form) after the

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27 The comment letters received on the proposal are available at https://pcaobus.org/about/rules-rulemaking/rulemaking-dockets/docket-041/comment-letters.

28 *See also* Section II.A.2.i for consideration of the Concept Release (including comments received) and Section II.A.1.ii for consideration of PCAOB IAG recommendations.

occurrence of certain events.[29] In addition, the PCAOB makes portions of inspection reports publicly available for firms that are subject to annual or triennial PCAOB inspections.

### a. Form 2 and Form 3

As required by Section 102(d) of Sarbanes-Oxley and PCAOB Rule 2200, each year registered firms must file an annual report with the Board. Under PCAOB rules, firms must do so by filing Form 2. The annual reporting period runs from April 1 to March 31, and the due date for filing is June 30.[30] In addition to basic identifying information about the firm,[31] firms report on Form 2 general information about their audit practices and other business relationships. Information required to be provided on Form 2 includes:

- Whether the firm issued audit reports for issuers, brokers, or dealers or played a substantial role in issuer or broker-dealer audits;[32]
- Percentage of total fees billed to issuers for audit services, other accounting services, tax services, and non-audit services;[33]
- For each issuer or broker-dealer for which the firm issued an audit report, the issuer's or broker-dealer's name, its Central Index Key (CIK) number and Central Registration Depository (CRD) number (if any), and the date of the audit report, as

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29 PCAOB Rule 2200, *Annual Report*, PCAOB Rule 2201, *Time for Filing of Annual Report*; PCAOB Rule 2203, *Special Reports*; Instructions to Form 2, *available at* https://pcaobus.org/about/rules-rulemaking/rules/form_2; Instructions to Form 3, *available at* https://pcaobus.org/about/rules-rulemaking/rules/form_3. Information reported on Forms 2 and 3 is publicly available unless a firm requests confidential treatment.

30 PCAOB Rule 2201; General Instructions 3-4 to Form 2 (registered public accounting firm that has its application for registration approved by the Board in the period between and including April 1 and June 30 of any year not required to file an annual report in that year).

31 Instructions to Form 2, Item 1.1.

32 *Id.*, Item 3.1. This release uses the terms "issuer," "broker," and "dealer" as those terms are defined under Sections 2(a)(7) and 110(3)-(4) of Sarbanes-Oxley. 15 U.S.C. § 7201(a)(7), 7220(3)-(4). *See also* paragraphs (b)(iii), (d)(iii), and (i)(iii) of PCAOB Rule 1001, *Definitions of Terms Employed in Rules*. Entities that are brokers or dealers or both are sometimes referred to as "broker-dealers."

33 Instructions to Form 2, Item 3.2.

well as the total number of firm personnel who exercised authority to sign the firm's name to an audit report for an issuer or broker-dealer during the reporting period;[34]

- Physical address (and, if different, mailing address) of each firm office;[35]
- Whether the firm has any memberships, affiliations, or similar arrangements involving certain activities related to audit or accounting services (including use of name in connection with audit services, marketing of audit services, and employment or lease of personnel to perform audit services), and the entities with which the firm has those relationships;[36]
- Total number of accountants, certified public accountants, and personnel;[37]
- Relationships with certain individuals and entities with disciplinary or other histories (if not previously identified);[38] and
- Acquisitions of another public accounting firm or a substantial portion of another firm's personnel.[39]

In addition to annual reporting on Form 2, firms are required to file Form 3 within 30 days after the occurrence of certain events, such as when the firm's legal name has changed while otherwise remaining the same legal entity, the firm has withdrawn an audit report on the financial statements of an issuer or has resigned, declined to stand for re-appointment, or been dismissed from an audit engagement as principal auditor, and the issuer has failed to comply with applicable Form 8-K reporting requirements for such events.[40]

### b. Firm inspection reports

Sarbanes-Oxley authorizes the PCAOB to inspect firms for the purpose of assessing compliance with certain laws, rules, and professional standards in connection with a firm's

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34 *Id.*, Items 4.1, 4.3.

35 *Id.*, Item 5.1.

36 *Id.*, Item 5.2.

37 *Id.*, Item 6.1.

38 *Id.*, Items 7.1, 7.2.

39 *Id.*, Item 8.1.

40 General Instruction 3 to Form 3; Instructions to Form 3, Items 2.17, 2.1, 2.1-C, 3.1, 3.2.

audit work for issuers, brokers, and dealers. Firms that issue audit reports for more than 100 issuers per year are inspected annually. Firms that issue 100 or fewer audit reports per year for issuers are generally inspected at least once every three years. The Board also inspects firms that play a substantial role in audits of issuers. Many firms registered with the Board perform no audit work for issuers or broker-dealers,[41] or only participate in audits below the level of a substantial role, and the Board has not historically inspected those firms. The PCAOB provides each inspected firm with a report summarizing any deficiencies identified through the inspections process. Portions of these inspection reports are publicly available on the PCAOB's website.[42] Recently the PCAOB introduced enhanced search tools that enable investors and others to better access and understand data from PCAOB inspection reports.[43]

### ii. Available information related to issuer engagements

#### a. Auditor's communications with audit committees

Investors and other financial statement users are the beneficiaries of the audit. Audit committees protect the interests of investors by assisting the board of directors in fulfilling its responsibility to oversee the integrity of the company's accounting and financial reporting processes, including the audit of the company's financial statements—and in carrying out that duty, they also benefit other financial statement users. To support the audit committee in this crucial role, PCAOB standards and rules and SEC rules require auditors to provide certain firm- and engagement-level information to audit committees.[44] AS 1301, *Communications with Audit*

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41 *See* QC Adopting Release at 54.

42 *See* https://pcaobus.org/oversight/inspections for inspection reports, basics of inspections, and inspection procedures. Sarbanes-Oxley provides that no portions of an inspection report that deal with criticisms of or potential defects in the quality control systems of the firm shall be made public if those criticisms or defects are addressed by the firm, to the satisfaction of the Board, no later than 12 months after the issuance of the inspection report. *See* Sarbanes-Oxley Section 104(g)(2). Full (expanded) inspection reports are publicly available on the PCAOB's website when a firm fails to satisfactorily remediate within 12 months.

43 *See* https://pcaobus.org/news-events/news-releases/news-release-detail/pcaob-launches-new-online-tools-to-help-users-find-and-compare-inspection-report-data for a summary of the enhancements, including six new search filters, including Part I.A deficiency rate, to help users analyze and compare more than 3,700 inspection reports.

44 *See Auditing Standard No. 16 – Communications with Audit Committees; Related Amendments to PCAOB Standards; and Transitional Amendments to AU Sec. 380*, PCAOB Rel. No. 2012-004 (Aug. 15, 2012), at 2, *available at* https://assets.pcaobus.org/pcaob-dev/docs/default-source/rulemaking/docket030/release_2012-004.pdf?sfvrsn=7872effb_0.

*Committees*, requires various communications to facilitate the audit committee's financial reporting oversight.[45] Among other things, AS 1301 requires the auditor to communicate: (i) significant risks;[46] (ii) critical accounting policies and practices, critical accounting estimates, and significant unusual transactions;[47] (iii) the auditor's evaluation of the quality of the company's financial reporting;[48] and (iv) other matters that are significant to the oversight of the company's financial reporting process.[49] In addition, other PCAOB standards and rules and SEC rules independently require certain audit committee communications.[50]

### b. Auditor's public communications of certain information

AS 3101 and Rule 3211 require firms to publicly disclose certain engagement-specific information in the auditor's report and on Form AP. In addition to specifying the requirements for an unqualified opinion on the financial statements, AS 3101 requires the auditor's report to describe (i) critical audit matters, which inform investors and other financial statement users of matters arising from the audit that required especially challenging, subjective, or complex auditor judgment; and (ii) how the auditor addressed those matters. AS 3101 further requires the auditor's report to include a statement disclosing the year in which the auditor began serving consecutively as the company's auditor. Other standards require additional information to be included in the auditor's report, including AS 2415, *Consideration of an Entity's Ability to Continue as a Going Concern*, which requires an explanatory paragraph when the auditor concludes that there is substantial doubt about the entity's ability to continue as a going concern for a reasonable period of time.[51]

Rule 3211 requires auditors to file Form AP, which, among other things, provides information to investors and other financial statement users about the engagement partner and other accounting firms participating in the audit of issuers. Disclosures on Form AP provide

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45 *Id.* ("Communications with the audit committee provide auditors with a forum separate from management to discuss matters about the audit and the company's financial reporting process.").

46 *See* AS 1301.09.

47 *See* AS 1301.12.

48 *See* AS 1301.13.

49 *See* AS 1301.24.

50 *See* Appendix B of AS 1301 (listing other PCAOB standards and rules requiring audit committee communications); *see also* Regulation S-X Rule 2-07, 17 C.F.R. § 210.2-07; PCAOB Rule 3526, *Communication with Audit Committees Concerning Independence*.

51 *See* AS 2415.12.

increased transparency about certain audit participants. The key provisions include annual disclosures of (a) the name of the engagement partner and (b) the name and extent of participation of other accounting firms in the audit.[52]

The PCAOB makes the Form AP data set available on AuditorSearch, by which users can conduct live searches or download the entire data set in a searchable, machine-readable format.[53] Using this data, a user can determine, for example, the changes in engagement partner for any given issuer or obtain a list of all issuers for which an engagement partner is responsible. After identifying an engagement partner, a user can then compile information from other sources, including information about whether the partner is associated with restatements of financial statements, has been subject to public disciplinary proceedings, or has experience as an engagement partner for issuers of a particular size or in a particular industry. Similarly, starting from the Form AP data set, users may perform further research on the other accounting firms that participate in an audit, such as whether those firms are registered with the PCAOB, whether they have any publicly available disciplinary history, whether they have been inspected, and, if so, the results of those inspections.

### 4. Voluntary Firm Reporting

Since the Concept Release, many of the audit firms that issue audit reports for more than 100 issuers and audit the majority of the market capitalization for issuers have been publicly disclosing certain firm-level information discussed in the Concept Release through their audit quality reports, transparency reports, or other published reports. A firm-related group has published a framework to assist its members in these efforts."[54] Many firms may also be

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[52] *See* Instructions to Form AP. Form AP requires different disclosures regarding other accounting firms that participate in an audit depending on their level of participation. For other accounting firms with individually 5% or greater participation in the audit, the Form AP filer must disclose the legal name of the other accounting firm, the city and state (or, if outside the United States, the city and country) of that firm's headquarters, and the percentage of total audit hours (either as a single number or within a range provided on the form) attributable to each other accounting firm. For other accounting firms with individually less than 5% participation, the filer must disclose the total number of such other accounting firms and the aggregate percentage (either as a single number or within a range provided on the form) of total audit hours for all such firms.

[53] *See* AuditorSearch, *available at* https://pcaobus.org/resources/auditorsearch.

[54] CAQ, *Audit Quality Disclosure Framework (Update)* (June 2023). The framework provides that metrics "may provide those overseeing the audit and other stakeholders with information and additional transparency into the firm's systems and processes that impact audit quality. However, the

developing and monitoring certain firm and engagement metrics to be used internally by the firm. In 2023, the same firm-related group published a summary analysis of the most recent audit quality reports issued by the eight firms represented on the group's governing board.[55] The report indicated that firms were reporting similar firm-level quantitative metrics related to several areas, including audit firm inspections; training; use of auditor's specialists; audit report reissuances and financial statement restatements; measures of experience, such as tenure with the firm; and personnel turnover. The report further noted that some firms disclosed qualitative as well as quantitative information, including information relating to audit methodology and execution, people and firm culture, quality management and inspections, and technology and innovation.

We have observed the firms that report firm-level metrics generally do not report engagement-level metrics.[56] Where firm-level metrics are reported, the firms report different metrics, calculated in different ways, and using different definitions, thereby preventing users from making comparisons across firms.

One commenter on the Concept Release stated that many firms are using the 28 AQIs identified in the Concept Release at some level to (i) manage the firm and (ii) manage the quality of audits at the office level and at the engagement level. Another commenter specifically indicated that its audit committee reviewed the engagement-level AQIs identified in the Concept Release that were provided by their auditor.

One commenter on the proposal asserted that the voluntary reporting firms already do through transparency and audit quality reports includes firm-level metrics, as well as

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CAQ believes that a combination of metrics – taken as a whole and supplemented with robust discussion – may provide those overseeing the audit and other stakeholders with information and additional transparency into the firm's systems and processes that impact audit quality." Id. at 4.

[55] *See* CAQ *Audit Quality Reports Analysis: A Year in Review* (Mar. 2023), *available at* https://www.thecaq.org/aqr-analysis-yir ("CAQ Report"). The eight firms on the CAQ's governing board are BDO USA, LLP, Crowe LLP, Deloitte & Touche LLP, Ernst & Young LLP, Grant Thornton LLP, KPMG LLP, PricewaterhouseCoopers LLP, and RSM US LLP.

[56] In connection with the Nov. 2022 SEIAG meeting, the Board staff researched various reports issued during the prior three years by the top 20 accounting firms (by 2022 revenue) and identified nine firms that disclosed firm-level metrics. *See* Firm and Engagement Performance Metrics Briefing Paper and Related Attachments from Nov. 2022 SEIAG meeting, *available at* https://pcaobus.org/news-events/events/event-details/pcaob-standards-and-emerging-issues-advisory-group-meeting-2022. For each firm-level metric reported by those nine firms, the staff included examples of how firms calculated the metric as well as the number of firms reporting that metric.

explanations of how they are calculated, including changes in the calculation that could affect comparability, as well as context necessary for understanding the metrics, and would be preferable to the mandatory metrics we proposed. On the other hand, an investor-related group presented an analysis of firm transparency and audit quality reports, finding that the measures used in transparency reports and audit quality reports by different firms are not consistent or comparable across firms in their computations, presentation and inclusion, and are not provided at the engagement level, which the commenter believes is the level at which they would be most useful. This commenter stated that having both firm- and engagement-level metrics enhances the metrics' usefulness because it provides broader context for understanding at both levels.

## B. Actions in Other Jurisdictions

Some jurisdictions outside the United States have moved forward with mandatory or voluntary initiatives related to the monitoring and disclosure of metrics. In May 2022, Accountancy Europe published a factsheet about recent related initiatives in Europe and elsewhere.[57] The Accountancy Europe Report described initiatives conducted in 10 countries (including the United Kingdom (U.K.), South Africa and Canada) by various organizations, including audit oversight bodies (including the U.K.'s Financial Reporting Council (FRC), Portugal's Securities Market Commission (CMVM), South Africa's Independent Regulatory Board for Auditors (IRBA), and the Canadian Public Accountability Board (CPAB)), [58] professional organizations,[59] a group of independent experts,[60] and the CAQ. Additionally, the FRC in the U.K. issued a consultation document and a feedback statement in 2022 on publishing AQIs for the largest U.K. audit firms,[61] the IRBA in South Africa requested firms auditing listed companies

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[57] *See* Accountancy Europe, *Factsheet, Audit Quality Indicators – A Global Overview of Initiatives* (May 2022), *available at* https://www.accountancyeurope.eu/wp-content/uploads/220401-Factsheet-Audit-Quality-Indicators.pdf ("Accountancy Europe Report").

[58] *Id.* Other oversight bodies in the Accountancy Europe Report include the Federal Audit Oversight Authority (FAOA) in Switzerland and the Accounting and Corporate Regulatory Authority (ACRA) in Singapore.

[59] *Id.* Professional organizations in the Accountancy Europe Report include the Institute of Public Auditors (IDW), Germany and The Institute of Chartered Accountants (ICAI), India.

[60] *Id.* Quartermasters, Netherlands.

[61] *See* FRC, *Consultation Document: Firm-level Audit Quality Indicators* (June 2022), *available at* https://media.frc.org.uk/documents/FRC_AQI_Consultation.pdf. *See* FRC, *Feedback Statement: Firm-level Audit Quality Indicators Consultation* (Dec. 2022), *available at* https://www.frc.org.uk/

to submit AQI-related information to the IRBA,[62] and the CPAB launched an exploratory pilot project to solicit feedback on AQIs' usefulness in support of broader national and international discussions.[63] The primary users of the metrics from these initiatives were audit committees, oversight bodies, and professional organizations. Although many of the metrics in these initiatives were nonpublic, public reporting was encouraged or anticipated in the future for half of the initiatives.[64] The Accountancy Europe Report suggested that several factors should be considered when selecting, evaluating, and reporting metrics and recommended that a combination of metrics would provide "profound insight into audit quality."

In January 2023, Accountancy Europe published a position paper.[65] The position paper defined key concepts related to audit quality, presented considerations for developing AQIs, and explained what, in its view, can and cannot be achieved by reporting such indicators (for example, the paper pointed out that all metrics have limitations, that metrics are not a proxy for financial reporting quality, and that user expectations should be managed to make them aware that metrics do not provide definitive results). The paper stated as part of its conclusion that "[AQIs] should not be considered as an end in themselves but could be a useful tool to drive audit quality" and reiterated that a combination of metrics would provide insight into audit quality.

Some commenters noted that initiatives in other jurisdictions do not currently require public disclosure. Others suggested that the requirements we proposed were more onerous than other jurisdictions and may cause reporting of different calculations for similar metrics in different jurisdictions. One commenter provided examples in other jurisdictions including

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getattachment/afbf3bc4-cf15-468a-85da-afb8e5af222a/Feedback-Statement_-2022.pdf ("FRC Feedback Statement").

62 *See* IRBA *2021 Survey Report Audit Quality Indicators, available at* https://www.irba.co.za/upload/IRBA%20AQI%20Report%202021.pdf and IRBA *2022 Survey Report Audit Quality Indicators, available at* https://www.irba.co.za/upload/2022%20AQI%20Report.pdf.

63 *See* CPAB *Audit Quality Indicators Final Report*, *available at* https://cpab-ccrc.ca/docs/default-source/thought-leadership-publications/2018-aqi-final-report-en.pdf?sfvrsn=5af68dba_12&sfvrsn=5af68dba_12 ("CPAB Final Report"). *See also* CPAB *Audit Quality Indicators: How to put them to work, available at https://cpab-ccrc.ca/docs/default-source/thought-leadership-publications/2019-aqi-put-to-work-en.pdf?sfvrsn=246de787_10.*

64 *See* Accountancy Europe Report (public reporting encouraged or anticipated by ACRA, CAQ, FRC, IDW, and Quartermasters).

65 *See* Accountancy Europe, *Position Paper, Key Factors to Develop and Use Audit Quality Indicators* (Jan. 2023)*, available at* https://accountancyeurope.eu/wp-content/uploads/221206-AQIs-Position-Paper_FINAL.pdf.

providing optional guidance, allowing engagement-level metrics to be shared confidentially with audited entities, and allowing for voluntary adoption. Another commenter expressed its belief that we are attempting to justify individual metrics based on certain jurisdictions' use but have not fully considered the context in how they are being used or the process that has been undertaken in those jurisdictions. An additional commenter stated that the comparability problem between jurisdictions could be solved by allowing firms to voluntarily disclose the metrics as defined. One commenter expressed the hope that audit regulators globally will seek to align requirements relating to the reporting of metrics.

While other jurisdictions have not historically required public reporting, the U.K. FRC has announced that it will begin to require public reporting in 2025.[66]

We have considered the actions taken in other jurisdictions in developing the final metrics. While substantially all the final metrics are the same as, or similar to, metrics used in some other jurisdictions, we acknowledge that no other jurisdiction has embraced either the full set of metrics or the public reporting requirements we are adopting. However, our objective in understanding actions in other jurisdictions was not to conform to what they have done but rather to consider those actions in the context of our own rulemaking, which is discussed further in Section III.A.1. We believe our approach to evaluating and determining which metrics should be disclosed is appropriate in light of our statutory investor protection mission.

# III. DISCUSSION OF THE FINAL RULES

## A. Overview

As noted above, we have considered ways to measure audit firm and audit performance, primarily with a view to providing information that investors can use in making decisions regarding their investments, such as ratifying the selection of the auditor and voting for members of the board of directors, including directors who serve on the audit committee. We also believe that firm and engagement metrics will benefit other stakeholders. For audit committees, metrics will provide additional context, including consistent comparative information that is not currently available, that can be used when deciding whether to select or retain a firm and when overseeing the auditor's performance. For audit firms, metrics will provide standardized information about themselves and their peers that can be used in

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66 *See* https://www.frc.org.uk/consultations/aqis-consultation. In June 2025, the FRC is requiring firms that audit 20 or more "public interest entities" to publicly report ten firm-level metrics across five areas. These areas include (i) Performance monitoring and remediation, (ii) Quality monitoring, (iii) Resource planning and people management, (iv) Information and communication, and (v) Governance and leadership.

designing, implementing, monitoring, and remediating their systems of quality control. The Board will also benefit from having additional tools to use in its inspections program and standard-setting initiatives.

This rulemaking addresses the need for information by requiring consistent, comparable disclosures that we believe will provide insight into aspects of the firm and the engagement team conducting the audit, including information relating to workloads, retention, allocation of audit hours, experience, and restatements.

### 1. Purpose of the Metrics

Investors and other stakeholders lack information that is available to company management. The federal securities laws seek to reduce this information asymmetry through various disclosure, internal control, and other requirements, including requirements for public companies to prepare and disclose financial statements accompanied by audit reports issued by an independent public accounting firm. Investors and other stakeholders also lack information available to the auditor and cannot observe the auditor's work or other aspects of a public company audit. Instead, they must rely on the audit committee, which is charged with overseeing the external auditor, and on other available public information, such as the reputation of the firm issuing the audit report or the name of the engagement partner. These difficulties in evaluating the audit and the auditor may lead to reduced accountability for auditors and an inefficient allocation of audit effort. Such allocations allow audit risk to remain insufficiently evaluated, ultimately risking suboptimal investment decisions, hampering the efficient functioning of the audit profession, and negatively affecting the capital markets.[67] Furthermore, while the audit committee has more information regarding the specific auditor it oversees, it lacks insight into other audit engagements and other firms; such comparable information would assist the audit committee in more effectively selecting and monitoring the auditor.

Investors and other stakeholders may seek to reduce these information disparities by gathering additional information about the firm responsible for the audit and the relevant audit engagement. As discussed above, the PCAOB has previously sought to facilitate those efforts through rules and standards requiring the disclosure of such information. From its inception, the Board's registration and reporting program has yielded important information about

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[67] There is a long stream of research regarding the effects that information asymmetry about product features, such as quality, and disclosure have on markets. *See, e.g.*, George A. Akerlof, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*, 84 The Quarterly Journal of Economics 488 passim (1970); and Robert E. Verrecchia, *Essays on Disclosure*, 32 Journal of Accounting and Economics 97 (2001).

registered firms. Annual updates on Form 2 include information such as the issuers audited by the firm, a breakdown of fees charged to issuers, and network affiliations, and current reporting on Form 3 discloses significant events such as the withdrawal of an audit report and certain legal actions involving the firm or its professionals. We are concurrently adopting amendments to both of those reporting forms to mandate the disclosure of standardized and timely information by firms.[68] Firms are required to disclose on Form AP the name of the engagement partner and certain audit participants.[69] The Board also made the auditor's report more relevant and informative by, among other things, requiring communication of critical audit matters and the tenure of the auditor.[70] The Board intends the firm and engagement metrics to complement these other initiatives and to add to the mix of information available to investors and other stakeholders when evaluating the auditor and the audit.[71]

Our oversight activities have revealed that there are identifiable performance differences across firms and among engagement teams within the same firm, including variations among firms belonging to global networks. We consider such differences when performing regulatory functions. For example, the Division of Registration and Inspections uses, among other factors, information about the firm and the engagement to identify audit engagements for risk-based selections in our inspections program.

Mandating public disclosure of firm- and engagement-level metrics will provide investors, audit committees, and other stakeholders with comparable information that is not currently available and will otherwise be difficult or impossible to obtain. These stakeholders will be able to learn about both specific engagements and specific firms and have a basis to compare them to other engagements and other firms. The firms themselves could also benefit from access to information about their peers, both in gaining new perspective on how their practices compare and in potentially gaining new opportunities for competition based on markers that users come to associate with quality. Required disclosures will facilitate development of standardized data for consistent comparison and analysis over time, which we believe will be more valuable than the ad hoc, individualized disclosures that some firms have made on a voluntary basis. Mandatory public disclosure will also ensure that the information will be accessible to all stakeholders, so that any decision-useful information can be readily

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68 *See* PCAOB Rel. No. 2024-013.

69 *See* PCAOB Rule 3211.

70 *See* AS 3101.10.b, .11-.16.

71 In addition to disclosures on Form AP and in the audit report, the Board previously required information on periodic and special reports to be publicly available. *See Rules on Periodic Reporting by Registered Public Accounting Firms*, PCAOB Rel. No. 2008-004 (June 10, 2008), 28-32.

evaluated. We believe this information will enable investors, audit committees, and other stakeholders to make better-informed decisions.[72]

We believe the metrics will also assist the PCAOB in a variety of ways. Metrics will help to inform our inspection activities, including in the selection of firms, engagements, and focus areas for review. For example, the final metrics could refine the selection models used to aid in predicting negative audit outcomes, enhancing our risk-based inspections. They could also enrich the discussions we have with audit committee chairs as part of our inspections process. Metrics may also inform future standard-setting activities by helping us to identify areas where regulatory action is needed and suggesting potential approaches. In addition, we expect metrics to enhance the PCAOB's ability to produce impactful research and to provide valuable information sources for the public, including academic research, helping to create new insights into the audit.

We discuss the potential benefits of the final metrics in greater detail in Section IV.C.1.

### 2. Public Reporting of Metrics

Many commenters on the proposal addressed the fundamental question of whether there was value in mandating a set of publicly reported metrics, expressing conflicting views. Investors and investor-related groups were generally supportive. Many other commenters, primarily firms and firm-related groups, criticized the proposal. These commenters either supported public reporting of some firm-level metrics but not others while generally opposing any public reporting of engagement-level metrics, or opposed all public reporting of metrics at both the firm and engagement levels.

Among the commenters that supported the metrics proposal, several stressed the benefits of increased transparency for key stakeholders and the public overall. Several commenters generally agreed with the PCAOB's rationale for the metrics, including increasing competition among audit firms, including on the basis of audit quality; promoting auditor accountability, which will lead to greater audit quality; and providing investors with decision-

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[72] Under Section 102 of Sarbanes-Oxley, the Board may require registered public accounting firms to submit periodic and special reports containing financial or other information as is "necessary or appropriate in the public interest or for the protection of investors." 15 U.S.C. § 7212(d). Section 103 of Sarbanes-Oxley tasks the Board with adopting quality control and other standards to be used by registered firms "in the preparation and issuance of audit reports...as may be necessary or appropriate in the public interest or for the protection of investors." 15 U.S.C. § 7213(a)(1). *See also* 15 U.S.C. §§ 7211(a), (c)(5), 7213(a)(2)(B). We believe the proposed metrics would further the public interest and would protect investors in accordance with these provisions.

useful comparable information that will assist them in making decisions about audit-related matters (e.g., ratifying the appointment of the auditor or voting for reelection of Board members that serve on the audit committee). Two of these commenters asserted that investors currently lack information to make an independent and informed decision regarding ratification of the appointment of the auditor and to hold audit committee members to account in the performance of their duties. In that context, one of these commenters pointed out that most failures to ratify the appointment of the auditor occur after a financial reporting failure, and argued that metrics would provide information allowing investors to make an ex ante, rather than ex post, evaluation of the auditor's work.

Two commenters particularly favored engagement-level metrics. One said it would enable the compilation of engagement-level data for all public company audit engagements within a specific office to compare data for competing offices within the same geographic area. In this commenter's view, metrics such as workload would provide great value to prospective employees and would improve the talent pipeline issue because firms' workload need to be competitive in the eyes of prospective employees. Another argued that engagement-level metrics are most useful to investors, using firm-level metrics to provide context. This commenter also emphasized the importance of firm-level metrics, which will provide context in evaluating engagement-level metrics and a firm's audit practice and its related system of quality control.

Several commenters said that the benefits of metrics would likely evolve over time, for example, as users are able to aggregate multiple data points, make comparisons, and observe trends. We agree, and believe that analyzing the metrics over time, across engagements and across firms, in the context of known good practices and indicators of audit failure, will enable the PCAOB, as well as academics and users of the metrics, to gain a new perspective on the audit and potentially deeper insights into some of the drivers of audit quality.

Many larger firms generally supported certain firm-level metrics. These commenters generally agreed that firm-level reporting could provide stakeholders with relevant information through consistent disclosure by all firms required to report. While some of the commenters raised concerns about the usefulness, comparability, and risk of misinterpretation of certain firm-level metrics; the risk that standardization of metrics limits their adaptability to change in the business and auditing environment; and more generally concerns that the costs may outweigh the benefits, commenters agreed that the proposed firm-level metrics are generally consistent with voluntary disclosures that some firms are already making in firm transparency and audit quality reports. We discuss the comments made with regard to particular metrics in Section III.B.3 below.

However, firms and firm-related groups generally opposed engagement-level metrics. Some questioned whether investors would use the metrics. Others expressed concern that

publicly available metrics could contribute to information overload. Many said that it would not be possible to provide sufficient context to enable users to understand the metrics, even with the firm-level metrics or narrative disclosures. Some commenters asserted that, because the underlying circumstances of engagement-level metrics are not homogeneous and users would not have necessary context, engagement-level metrics would not be comparable.[73] Others focused on the significance of qualitative factors such as professional judgment and the duty to exercise due care, including professional skepticism, saying that metrics were inappropriately "one size fits all" or not decision-useful because they do not capture these key concepts.

Many commenters expressed concern that users would not find metrics meaningful and may even misunderstand them and reach inappropriate conclusions. Absent providing substantial context and understanding how stakeholders would use the metrics, in one commenter's view, investors may make capital allocation decisions based on a misinterpretation of a metric, resulting in a new element of volatility in the capital markets. Two commenters raised a concern that the proposal does not provide a tie between assessing audit quality and the proposed metrics. Some commenters went on to say that providing metrics in isolation without context and effective two-way communication would have very minimal, or even negative, impact on audit quality. Another commenter stated that most of the data points required as part of the proposal are currently available to the PCAOB.

One commenter expressed concern that overemphasis on metrics could lead firms to focus on consistency of the metrics to avoid the implication of weak auditing or other potential misinterpretations, which in the commenter's view could lead to commoditization of the audit and reduce incentives to innovate the audit approach. On the other hand, several other commenters argued that metrics would support more robust competition based on quality, making the audit less of a commodity.

Some commenters said that the metrics seemed particularly focused on larger firms or would be especially burdensome for smaller firms. We believe the final metrics call for data that will be relevant to and obtainable by firms regardless of size. We discuss potential differential cost impacts in Section IV.C.2.

Some commenters questioned whether public reporting of metrics would undermine the authority of the audit committee. For example, one expressed concern that there would be

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[73] Commenters listed various types of contexts that in their view would be necessary for proper understanding of the engagement-level metrics, including variations across firms (e.g., differences in operations, structures, methodologies, and resources), the unique circumstances of each engagement (e.g., differences in risk areas, team compositions, and timelines), and the unique circumstances of each issuer (e.g., differences in policies and resources).

public pressure on the audit committee to appoint auditors whose metrics were perceived to be within some acceptable range, even if the committee was satisfied with the work of the current auditor. Another commenter asserted that it is not investors' responsibility to oversee the auditor, and raised a concern that public reporting of metrics could undermine confidence in audit committees and the PCAOB, both of which have responsibilities for direct oversight of audits and audit firms and have the context to properly understand these metrics. However, an investor-related group specifically disagreed with this reasoning and asserted that this rulemaking exhibits commitment to faithfully executing the PCAOB's responsibilities and working to improve audit quality and trust in the audit market.

Several commenters opposed both firm- and engagement-level metrics. One asserted that the proposal did not provide sufficient evidence that public disclosure of the proposed metrics will have any meaningful impact on the quality of audit services. Another commenter said that the metrics were not grounded in or intended to have any nexus with audit quality, focusing instead on auditor accountability, and on that basis went beyond the PCAOB's remit. The commenter asserted that the proposed metrics would overload audit committees and investors with a large set of complex data that was not sought, needed, meaningful, or obviously usable by them, suggesting that the current voluntary approach should be maintained instead. Another expressed concern that public disclosure of the information specified in the proposals could do more harm than good, particularly in relation to an increase in litigation and reputational risk and potentially furthering the talent crisis in the profession. That commenter particularly questioned the potential value of metrics for audit committees, saying that they already have access to most of the information that would be mandated and that annual reporting would be unhelpful since evaluation of the auditor is a continuous process. One commenter who advocated delay and further study before we take further action on the metrics expressed skepticism that metrics would influence shareholder votes on ratification of the appointment of the auditor or benefit most investors, because metrics are only indirectly related to audit quality and there would not be sufficient incentive for users to engage with them.

Most of the commenters who objected to public reporting of metrics recommended alternatives, including mandatory or voluntary communication with the audit committee, particularly for engagement-level metrics. Many commenters asserted that the audit committee is the appropriate party to whom engagement-level metrics should be communicated, because the audit committee has the statutory responsibility to appoint, compensate, and replace the external auditor and is sufficiently informed to understand the context of the company, the audit, and the auditor. Commenters said that audit committees could engage in dialog with the auditor, enabling them to understand the metrics in the context of the specific audit, promoting accountability in the performance of the audit on behalf of investors. Another commenter asserted that providing information to, and allowing the

assessment by, audit committees would be more likely to provide greater benefits to investors and the capital markets than public reporting, while minimizing unintended consequences (such as users reaching inappropriate conclusions), and would be consistent with the PCAOB's objective to improve audit quality. Another commenter, who questioned the value of metrics for most investors, said metrics had the potential to be quite useful for audit committees, who could use their direct access to the auditor to gain valuable context and would have the opportunity, using metrics, to communicate more about the audit process in their audit committee report. On the other hand, an investor-related group pointed out that audit committees are reliant on communications from the auditor regarding the company's audit issues and the quality of the audit; their principal tool is inquiry, not observation, which, in audit parlance, is the weakest form of audit evidence.

Many commenters that objected to publicly available metrics like the ones we proposed advocated a non-prescriptive, principles-based approach, whereby auditors and audit committees would discuss potential metrics and the audit committee would determine which metrics and other information it finds meaningful and when it wants to receive and evaluate them. This approach, the commenters said, would encourage more tailored metrics that could be appropriately discussed in context and could change over time, adapting to changes in the audit environment, regulation, technology and audit processes, and the information needs of audit committees and investors and would prioritize relevance rather than consistency. Some commenters specifically recommended amending AS 1301 to mandate such a discussion (for example, initially in connection with audit planning and later as part of reporting on audit results). However, one investor-related group disagreed with this principles-based approach, asserting that it would not promote comparability or accountability because a set of principles would inevitably result in qualitative rather than quantitative disclosure and the information would not be comparable between firms and engagements and over time. This commenter asserted that the standardized metrics we proposed would be more useful to investors.

This commenter also provided analysis of audit quality reports published by the Big 4 firms, observing that elements of the proposed firm-level metrics are already presented in those reports under a principles-based approach whereby each firm has developed its own metrics.[74] The commenter noted that some of these metrics are qualitative, some are quantitative, some use different definitions, and some unfavorable metrics or facts may be excluded. This commenter also asserted that because metrics voluntarily published by firms are self-defined and principles-based and are only at the firm level and not at the engagement

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[74] This commenter provided several examples of inconsistencies in reporting metrics. For example, it stated while all Big 4 firms provide data on turnover or attrition, they are defined and calculated in different ways and any comparison among the firms is stymied.

level, they are largely unused by the investment community; they are regarded as marketing materials rather than investor information. This commenter emphasized that investors need more standardized information contextualized at the engagement level to the company they are investing in and that are anchored to the firm-level standardized information.

Several commenters noted that it would be possible for audit committees to provide additional public disclosure via the audit committee report in the issuer's proxy statement,[75] which investors could consider in deciding whether to ratify the audit committee's selection of auditor and whether to vote for the board members who serve on the audit committee. Some of these suggested that the SEC could take action instead of, or along with, the PCAOB. Two argued that expanded audit committee disclosure would result in more relevant and decision-useful information for investors than the proposed metrics or would be a more direct way to address the information asymmetry than through this rulemaking. The other suggested that the SEC, together with the New York Stock Exchange and Nasdaq, should require inclusion of the metrics in the proxy statement to provide context for existing fee disclosures and to make investors aware of the metrics without having to search for them separately.

One firm suggested that the PCAOB gather the information underlying the metrics via inspection. However, this would defeat our objective of enhancing transparency to enable better informed decision-making by our stakeholders.

Another firm expressed concern that engagement-level metrics may not be useful because they will become available only once a year, with a delay of up to 35 days after the audit is completed until Form AP is filed. However, an investor-related group disagreed with this argument indicating that the financial results for companies are delivered with the same, or a more significant delay, to investors and usefulness of the information is not simply its immediate discrete disclosure but the trends in the information within and between companies over time.

In addition, commenters raised general concerns about metrics requirements, including

- the risk that publishing metrics would involve releasing confidential or nonpublic information, which may violate confidentiality obligations imposed by the American

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[75] *See* Schedule 14A*. Information required in proxy statement,* 17 C.F.R. §240.14a-101. If action is to be taken at a shareholders meeting with respect to the election of directors, Item 7 of Schedule 14A requires the proxy statement to contain a report of the audit committee as specified in Item 407 of Regulation S-K, 17 C.F.R. § 229.407.

Institute of CPAs ("AICPA") Code of Professional Conduct or conflict with non-US laws and regulations;

- diverting the attention of the engagement team and firm resources away from performing quality audits;
- lessening competition by releasing competitively sensitive information and reducing the number of registered public accounting firms, particularly in foreign jurisdictions, that would be available to play a substantial role in a large multinational group audit;
- being burdensome and costly to compile data for each individual engagement;
- becoming a "check the box" or compliance exercise that may not improve audit quality or provide meaningful transparency to stakeholders; and
- implying that audit committees have a legal duty to consider metrics even though the PCAOB has no authority over audit committees.

We are adopting requirements for firms to provide both firm- and engagement-level metrics, with changes from our proposal as described in further detail below. We continue to believe that public reporting of a mandated set of firm- and engagement-level metrics will provide stakeholders with comparable information that is not currently available, would otherwise be difficult or impossible to obtain, and will position them to make better-informed decisions. Further, we believe that required public disclosures will facilitate development of standardized data for consistent comparison and analysis over time, which will be more valuable than the ad hoc, individualized disclosures that some firms have made on a voluntary basis or the information that could be provided by individual firms to audit committees or investors without any basis for cross-firm comparisons. We believe the new data points, when analyzed together with the audited financial statements, critical audit matters, auditor tenure, and other information about the firm and the engagement on Form 2 and Form AP, will provide more information about the audit and, therefore, the reliability of the auditor's report.

We have considered comments questioning the value of metrics, whether they will be used by investors and other stakeholders or would represent only a "check the box" compliance exercise, and whether they might contribute to information overload or have other negative consequences. Based on comments received from investors and other data provided, among other factors, we do not share those concerns. Investors and investor-related groups have commented throughout the course of this rulemaking that the metrics will be useful. A firm-related group commented that, in a recent investor survey it conducted, almost all of the metrics we proposed were regarded as "extremely helpful" by between 30% and 50% of

participating investors. (The commenter did not indicate whether the survey allowed positive responses other than "extremely helpful"—for example, "helpful" or "somewhat helpful"—and, if so, what the results were inclusive of those responses.) By contrast, we understand—including from one commenter that argues that the voluntary approach should be maintained—that voluntarily provided metrics have not proven useful to investors. We believe that the value of voluntary metrics is undermined by a lack of the consistency and comparability, as well as enhanced credibility, that can be achieved through common definitions and calculations and required reporting.

We also note that similar objections—that the new information would not be used or would be confusing or misleading—were raised by many of the same commenters in connection with our last two rulemakings requiring disclosure of additional information about audits and auditors: Form AP reporting of the name of the engagement partner and information about other firms participating in the audit, and auditor communication of critical audit matters. In both cases, these commenter concerns appear unsubstantiated. The Form AP data set is now one of the most frequently visited areas of our website.[76] Indeed, in an investor survey conducted by one commenter, 79% of respondents indicated that they often or very often navigate to AuditorSearch, the search tool for Form AP data on the PCAOB website. As for CAMs, in a recent investor survey conducted by the same commenter, over 90% of the respondents indicated that CAMs play an important role in their investment decision-making.[77] In addition, data aggregators, such as Audit Analytics, compile and make available data on CAMs, which suggests market demand for that information. Our experience suggests that, contrary to concerns about irrelevance and information overload, stakeholders seek out additional information about auditors and audit engagements when it is available.

In lieu of public reporting, we considered the alternative of encouraging or mandating communication of engagement-level metrics to the audit committee, as many commenters suggested. However, such an approach would not achieve our goals of increasing the information about audit engagements and audit firms available to investors and other stakeholders, and fostering comparability of data through mandated reporting based on common definitions and specified calculations. We also believe that a non-prescriptive, principles-based approach, whereby firms would potentially develop and discuss different metrics for different audit committees, drawn from different data and based on different definitions and calculations and changing over time, could itself create significant costs and

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[76] In 2023, there were over 333,000 unique searches performed on AuditorSearch and the Form AP data set was downloaded over 2,000 times. Information related to usage statistics can be found on the PCAOB's website (https://pcaobus.org/resources/auditorsearch).

[77] The Center for Audit Quality Critical Audit Matters Survey (July 2024) at 9.

challenges for firms without necessarily contributing to the audit committee's ability to understand the audit it oversees in a broader context.

Of course, under our final requirements auditors and audit committees will be free to discuss performance metrics—whether the metrics required under our rules or additional or alternative metrics they develop themselves—through the kinds of discussions the commenters recommend. We are not requiring that auditors make metrics-specific communications at this time. However, where matters addressed by the metrics are the subject of an otherwise required communication, discussion of the metrics may be a useful part of the communication.

We appreciate that the audit committee is charged by statute with responsibility for oversight of the auditor, and we cannot, and do not purport to, impose any obligations on audit committees or imply that audit committees have any specific duties in relation to metrics. We assume that audit committees will fulfill their responsibilities as they see fit; whether that entails, for example, discussion of metrics with auditors or proxy statement disclosure regarding their consideration of metrics will be for them to determine.

But we also note that investors—including many investors that are themselves fiduciaries for others—have their own investment and voting decisions that they are called upon to make, like decisions about electing members of the board of directors, including those who serve on the audit committee, and ratifying the appointment of the auditor. And in the current environment, they have extremely limited access to information about the auditor's work—work that, after all, is undertaken for their benefit. By requiring public reporting of metrics, we are not suggesting that investors will have the ability or the responsibility to oversee the work of the auditor. However, they will have the opportunity to gain new perspective to inform their decision-making. We agree with a commenter that, far from undermining investor trust, this new transparency should enhance that trust by helping investors better understand the audit and the audit committee's oversight of it.

We have determined to go forward with published metrics so that investors and other stakeholders will have direct access to the metrics and so that comparative data can be accumulated that will allow comparisons to be made across different firms and different engagements. As discussed below in "Comparability," we believe we have addressed many of the challenges associated with potential lack of comparability by narrowing the metrics to a group that we believe will send relatively clear, comprehensible signals that users will be able to interpret when taken together with the other information about the issuer and the auditor that is available to them. In our view, public reporting is the most practical way for comparative data to be created and disseminated. While two commenters suggested that audit committees could obtain comparative data when they consider changing auditors, our understanding is that is a relatively infrequent occurrence, and in any case is not a route available to other stakeholders.

We also believe that gathering data and calculating the final metrics, given the subjects they address, will not be overly time-consuming or burdensome, and will not entail disclosure of confidential or otherwise protected information (see Section III.C.6).

Regarding the concerns of possibly disclosing confidential information and competition lessening effect due to public reporting of metrics, see Section III.C.6 below for further discussion. See Section IV.C.3 for further discussion of unintended consequences, including attention diversion, litigation and reputation risks, competition lessening effect, and audit labor market impacts. See Section IV.C.2. for further discussion of costs.

### 3. Legal Authority

Some commenters questioned our statutory authority to require all or some of the proposed firm and engagement metrics. In addition, one commenter stated that the statement in the proposal that "this [rulemaking] would advance investor protection and promote the public interest by enabling stakeholders to make better informed decisions, promoting auditor accountability and ultimately enhancing capital allocation and confidence in our capital markets" is beyond our rulemaking authority. Other commenters questioned our authority with respect to specific aspects of the rulemaking. Two commenters questioned how the requirements could extend beyond the accounting firms' issuer and broker-dealer audit practices. One of these commenters stated that it believes including non-issuer information could be misleading to stakeholders who may mistake such disclosures as being within the PCAOB's purview and that including the non-issuer portion of a firm's audit practice appears contradictory to the Board's pursuit of clarity through proposed PCAOB Rule 2400, *Proposals Regarding False or Misleading Statements Concerning PCAOB Registration and Oversight and Constructive Requests to Withdraw from Registration*. This commenter suggested that if the Board intends to make clear what lies within and outside its purview through proposed PCAOB Rule 2400, the rulemaking related to firm- and engagement-level metrics should reflect similar principles.[78] Another commenter suggested that several new requirements seem to require public production of information that is confidential or otherwise outside of or unnecessary for the Board's oversight function.

In accordance with Sarbanes-Oxley, the PCAOB is endowed with regulatory powers designed to ensure transparency, uphold high professional standards, and protect investors in the auditing process. This discussion outlines the statutory basis for this rulemaking as outlined in Sections 101, 102, and 103 of Sarbanes-Oxley. In particular, here and throughout the release, we discuss how the final rules will increase transparency regarding audit practices, increase the

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[78] To date, the Board has not adopted proposed PCAOB Rule 2400.

comparability and accessibility of information available to investors and others, and enhance investors' ability to efficiently and effectively make investment and voting decisions, in line with the Board's statutory mandate.

Section 102 of Sarbanes-Oxley mandates that each registered firm must submit an annual report to the Board. Beyond this, Section 102 grants to the Board the authority to require more frequent and detailed reporting, empowering the Board to require registered firms to report "such additional information as the Board or the Commission may specify."[79] This authority must be exercised through PCAOB rulemaking that deems the information "necessary or appropriate in the public interest or for the protection of investors."[80] This statutory language supports the Board's authority to adapt its reporting requirements to the evolving needs of audit oversight, thereby enhancing investor protection and public confidence in the financial markets.

The metrics adopted in this release are important for increasing transparency regarding the practices of registered firms, particularly in their audits of issuers. By mandating the disclosure of this information, the PCAOB will enable investors and other market participants to have a clearer and more comprehensive view of the operational practices of the registered firms that audit issuers. This enhanced transparency will allow investors and other market participants to make more informed decisions, contributing to the integrity and reliability of financial reporting and audit practices.

Additionally, Section 103 of Sarbanes-Oxley grants the Board authority to establish auditing standards and quality control standards "to be used by registered public accounting firms in the preparation and issuance of audit reports," as "may be necessary or appropriate in the public interest or for the protection of investors."[81] Although the information we require from registered firms does not appear directly within audit reports, it is comfortably within the ambit of our rulemaking mandate under Section 103—especially given the flexibility inherent in the statutory language.[82] In brief, this mandate involves establishing the procedures and

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79 15 U.S.C. § 7212(d).

80 15 U.S.C. § 7212(b)(2)(H).

81 15 U.S.C. § 7213(a)(1).

82 *See Loper Bright Enters v. Raimondo*, 144 S. Ct. 2244, 2263 (2024) (the term "appropriate" "leaves agencies with flexibility" (citation and quotation marks omitted)); *Kisor v. Wilkie*, 588 U.S. 558,

practices of registered firms that promote the quality and accuracy audit reports, which extends to overseeing how firms report their operational conduct.

In alignment with Section 103 of Sarbanes-Oxley, the PCAOB views the rule, form, and associated amendments requiring the metrics as fundamental auditing and quality control standards at their core. The information required by the metrics relates to practices of the firm that directly bear on the conduct of audits and ultimately the quality and accuracy of audit reports. By mandating the submission of this information to the PCAOB, we provide deeper transparency into the auditing practices that support issuer audits. The information required by the metrics will also support our oversight and enhance the reliability of audit performance.[83]

Finally, we note that Section 101 of Sarbanes-Oxley provides ancillary authority that supports the Board's primary powers in Sections 102 and 103.[84] This provision enables the PCAOB to develop standards that protect investors and serve the public interest.

Some firms and firm-related groups questioned our statutory authority to require the reporting of the proposed metrics on the basis that the Board's rulemaking authority should

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632 (2019) (Kavanaugh, J., concurring in the judgment) (the word "appropriate" "afford[s] agencies broad policy discretion"); *Metrophones Telecommc'ns, Inc. v. Global Crossing Telecommc'ns, Inc.*, 423 F.3d 1056, 1068 (9th Cir. 2005) ("Given the reach of the [FCC's] rulemaking authority under § 201(b)"—which granted to the FCC the "broad power to enact such 'rules and regulations as may be necessary in the public interest to carry out the provisions of this Act'"—"it would be strange to hold that Congress narrowly limited the Commission's power to deem a practice 'unjust or unreasonable.'"); *Brown v. Azar*, 497 F. Supp. 3d 1270, 1281 (N.D. Ga. 2020) ("[W]hen an agency is authorized to 'prescribe such rules and regulations as may be necessary in the public interest to carry out the provisions of the Act,' Congress' intent to give an agency broad power is clear."), *appeal dismissed as moot*, 20 F.4th 1385 (11th Cir. 2021) (mem.).

83 *See, e.g.*, Mark DeFond and Jieying Zhang, *A Review of Archival Auditing Research*, 58 Journal of Accounting and Economics 275, (2014) (asserting that audit quality improves financial reporting quality by increasing the credibility of the financial reports).

84 For example, Section 101(c)(5) empowers the Board to perform additional duties or functions that are "necessary or appropriate to promote high professional standards among, and improve the quality of audit services offered by," registered firms and their associated persons. 15 U.S.C. § 7211(c)(5). This provision empowers the PCAOB to implement measures that enhance the integrity and efficacy of the auditing profession. In addition, Section 101(g)(1) provides rulemaking authority to the Board, specifying that the Board's rules, subject to the approval of the Commission, are to "provide for the operation and administration of the Board, the exercise of its authority, and the performance of its responsibilities under" Sarbanes-Oxley. 15 U.S.C. § 7211(g)(1).

correspond directly with the type of information outlined in Sarbanes-Oxley Section 102(b)(2) for the contents of registration applications. However, this interpretation significantly misreads the reporting provisions of Sarbanes-Oxley. Sections 102(b)(2)(H) and 102(d) clearly grant to the Board broad authority to require additional information in periodic reports that it finds necessary or appropriate to serve the public interest or protect investors.

Section 102(b)(2) generally details baseline requirements for reported information, and Section 102(b)(2)(H) primarily details requirements for any additional information the Board requires, providing that additional information in reports must be deemed "necessary or appropriate in the public interest." It is incorrect to construe those provisions as imposing a rigid limitation that restricts the content of reports exclusively to the types of information specified in Section 102(b)(2)(A)-(G) for initial registration applications. Indeed, Section 102(b)(2)(H) expressly contemplates the provision of "other information" the Board may require through rulemaking. This provision shows that Congress intended to provide the Board authority to require additional information beyond that enumerated in Section 102(b).[85] By referencing this provision, Section 102(d) applies this broader authority to periodic reports that the Board finds necessary or appropriate to serve the public interest or protect investors. This release has outlined how the disclosures mandated by the metrics will enhance transparency and bolster the PCAOB's oversight capabilities. Such enhancements are designed to ultimately improve audit quality. For example, as discussed more completely in Section IV, the final metrics will enhance (i) audit committees' ability to efficiently and effectively monitor and select auditors as well as (ii) investors' ability to efficiently and effectively make decisions about ratifying the appointment of their auditors and allocating capital. In addition, as an important indirect benefit, the final rules could further spur competition to the benefit of investors. Thus, the final rules align with the overarching objectives of Sarbanes-Oxley, and therefore are appropriate exercises of the Board's authority under Section 102.

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[85] *See Navajo Nation v. Dalley*, 896 F.3d 1196, 1212-13 (10th Cir. 2018) ("Congress expressed its scope in broad terms, to encompass 'any other subjects that are directly related to the operation of gaming activities.' But the key word here is 'other.' ... And applying the ordinary and everyday meaning of the word 'other' ... , it becomes patent that Congress did not intend for that clause to address the 'subjects' covered in the preceding clauses of subsection (C)[.]" (citation omitted)); *see also, e.g.*, *Madison v. Virginia*, 474 F.3d 118, 133 (4th Cir. 2006) ("other Federal statute prohibiting discrimination" is a "catch-all provision"); *Meehan v. Atl. Mut. Ins. Co.*, 2008 WL 268805, at *7 (E.D.N.Y. Jan. 30, 2008) ("The term 'other policies' now accomplishes the task of including all governmental activity and becomes a catch-all phrase including all other policies not already implied[.]" (citations and quotation marks omitted)).

In response to the concerns raised by firm commenters regarding our use of Sarbanes-Oxley's relevant "necessary and appropriate" clauses, it is important to clarify that we have not claimed any implicitly delegated authority beyond the regulatory parameters established by Congress. The use of the Section 101, 102, and 103 authorities in this rulemaking is firmly grounded within the explicit mandates provided by Sarbanes-Oxley, and is consistent with the statutory limitations and directives outlined in those provisions. Our application of these authorities has been specifically aimed at enhancing the transparency and quality of audits of issuers and broker-dealers, which directly aligns with our core mission to protect investors and the public interest. We have utilized the tools provided by Sarbanes-Oxley to carry out the responsibilities entrusted to us.

Other commenters raised concerns about our authority to include metrics extending beyond a registered firm's issuer and broker-dealer audit practice. One of these commenters asserted that including non-issuer information could be misleading to stakeholders who may mistake such disclosures as being within the PCAOB's regulatory purview. We disagree with these comments. The metrics we are requiring are designed to provide information that directly relates to firms' audits of issuers, and will be important for such matters as assessing auditor performance and resource allocation as it relates to issuer audits. For instance, in the Workload metric, firms are required to report not only the hours worked dedicated to issuer engagements but the entire workload of the personnel involved. This includes hours spent on non-issuer engagements, training, practice development, staff development, or other firm activities. A narrower focus, which only accounts for hours worked on issuer engagements, could provide an incomplete picture. It would fail to reflect the true extent of the auditor's commitments and how these may impact their capacity and focus on tasks in issuer audit work. Without this comprehensive view, investors and other stakeholders would lack important information to assess the potential risks over overcommitment on audit quality and auditor performance in audits of issuers. By requiring firms to report certain narrowly tailored information regarding their audit engagements and audit practices, we are not seeking to extend our purview to regulate those aspects of the firm's operations. Rather, in line with our statutory authority, we are enhancing the transparency and the depth of information available to investors and other stakeholders concerning firms' audits of issuers.

### 4. Summary of the Metrics

We are adopting a set of firm-level and engagement-level metrics across eight areas. Firm-level metrics will provide a basis for drawing comparisons between firms as well as a baseline for evaluating engagement-level metrics. Engagement-level metrics will elicit more granular information and will enable comparisons over time and across engagements both within the firm and across other firms.

Firm-level metrics will be disclosed on a new Form FM, *Firm Metrics,* and engagement-level metrics will be disclosed on a revised and renamed Form AP, together with the other engagement-specific information currently required (the name of the engagement partner and information regarding other firms participating in the audit).

Most of the metrics we are adopting will be presented at both the firm and the engagement level. However, two metrics will be reported only at the firm level, because we believe aggregated data will be most meaningful or appropriate.

The metrics are:

- Partner and Manager Involvement. Hours worked by senior professionals relative to more junior staff across the firm's large accelerated and accelerated filer engagements and on the specific engagement.

- Workload. For senior professionals who incurred hours on large accelerated or accelerated filer engagements, average weekly hours worked on a quarterly basis, including time attributable to all engagements, administrative tasks, training, and all other matters.

- Training Hours for Audit Personnel. Average annual training hours for partners, managers, and staff of the firm, combined, across the firm and on the engagement.

- Experience of Audit Personnel. Average number of years worked at a public accounting firm (whether or not PCAOB-registered) by senior professionals across the firm and on the engagement.

- Industry Experience. Average years of career experience of senior professionals in key industries audited by the firm at the firm level and the audited company's primary industry at the engagement level.

- Retention of Audit Personnel (firm-level only). Continuity of senior professionals (through departures, reassignments, etc.) across the firm.

- Allocation of Audit Hours. Percentage of hours incurred prior to and following an issuer's year end across the firm's large accelerated and accelerated filer engagements and on the specific engagement.

- Restatement History (firm-level only). Restatements of financial statements and management reports on ICFR that were audited by the firm over the past three years.

**Figure 1. Firm and Engagement Metrics Reporting**

| Firm and Engagement Metrics Reporting | Firm-Level | Engagement-Level |
|---|---|---|
| Partner and Manager Involvement | ✓ | ✓ |
| Workload | ✓ | ✓ |
| Training Hours for Audit Personnel | ✓ | ✓ |
| Experience of Audit Personnel | ✓ | ✓ |
| Industry Experience | ✓ | ✓ |
| Retention of Audit Personnel | ✓ | X |
| Allocation of Audit Hours | ✓ | ✓ |
| Restatement History | ✓ | X |

The final suite of metrics focuses primarily on information about audit personnel. We believe these metrics will provide new insights into how engagements are staffed, including the extent of involvement of senior personnel; auditors' overall workload; retention of personnel across the firm; and levels of training, audit experience, and industry-specific expertise. The final metrics will also provide information about the extent of audit work completed prior to the issuer's year end, an aspect of the audit process that we believe is associated with improved audit outcomes, and about the firm's history of restatements, a key measure of audit outcomes.

This new information will allow users to draw inferences about audits and audit firms that are not possible today. Some may relate to specific metrics. For example, a heavy workload for a particular engagement team relative to the firm average or compared to peer firms may raise questions about the quality of the work performed. Conversely, a relatively high level of industry-specific experience, particularly for an engagement in an industry requiring specific accounting and auditing expertise, would be a positive signal. Other inferences may relate to combinations of metrics. For example, the personnel-related metrics, taken together, give an overall sense of how an engagement is staffed that can be compared to firm averages and to engagements for similar issuers. It is possible that the precise numerical values of metrics may be important in some cases, but in general we believe the metrics will be more useful to convey a sense of whether a particular engagement or firm appears fairly typical or is an outlier in one

or more respects. This should provide a richer context for understanding the work of the auditor than the current environment of almost no publicly available information.

Based on our oversight activities, it appears that the largest firms are already tracking data in many of these areas,[86] and we believe that all firms should be able to capture the data required by the metrics without undue burden. Many of the metrics are based on data that firms already track or will be required to track for purposes of other PCAOB requirements. For example, Partner and Manager Involvement and Allocation of Audit Hours are based on the same "total audit hours" that firms are already required to track for Form AP reporting. Training hours will reflect the same information that firms track to ensure proper licensing of their personnel. Restatement data, to the extent firms are not already tracking it, is required to be tracked under QC 1000.[87] In addition to required data, many firms track the experience of their personnel, as well as industry experience, for use in marketing materials and for inclusion in requests for proposals, and some firms already track staff retention and turnover metrics as part of their human capital management. Firms should be able to generate other data required by the final metrics, such as Workload, from their existing timekeeping systems with minimal additional effort.

In Section III.B below, we provide a detailed discussion of key terms and concepts used in the metrics, as well as a description of each final metric and its calculations.

### 5. Comparability

Developing comparable data regarding firms and engagements has been one of our key objectives throughout this rulemaking. As noted previously, the information currently provided in firm transparency reports is not based on common definitions or methods of calculation, which prevents users from being able to make comparisons across firms or over time. We believe that an important benefit of mandatory reporting will be the ability of investors and other stakeholders to compare the metrics, within the same firm over time, among firms, and among engagements.

The basic approach of our final rules—a required set of metrics, derived from specified calculations incorporating consistently defined terms and concepts—is designed to generate comparable data with respect to firms and engagements that are subject to the reporting requirements. One investor-related group agreed that standardized and contextualized metrics will provide investors with a consistent data set for analysis over time and for comparison

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86 This point is discussed more fully in Section IV.A below.

87 *See* QC 1000.64g, Note to QC 1000.67e.

between companies and firms and a set of standardized data is more valuable than the ad hoc individual measures that some firms have made on a voluntary basis.

In some cases, considering the importance of scalability, we have also designed the proposed metrics as percentages (e.g., relative to total audit hours) or averages where we believe that will provide more comparability across firms and engagements than methods based on absolute amounts.

Several firms and firm-related groups expressed skepticism about whether the metrics could generate comparable data because of inherent differences across firms and engagements, either with regard to any metrics or engagement-level metrics specifically. For example, one commenter said that differences between firms and among engagements will create heterogeneity in the underlying data, so that cross-sectional differences and changes over time will be unclear and challenging to interpret, and will cause confusion. Another commenter emphasized the importance of comparability between larger and smaller firms so that investors and audit committees can interpret them appropriately.

Two commenters stated that if context, including qualitative aspects of data, is necessary to understand the metrics, that would suggest that the data are not comparable, which could mean that the metrics are not decision-useful and are at risk of misinterpretation. One commenter expressed the opposite concern, that metrics would become homogenized over time due to peer comparisons, making them considerably less useful to investors.

One commenter asserted that our choices in defining terms and specifying calculations undermine the comparability of the metrics—for example, because some metrics include issuers other than accelerated or large accelerated filers, our proposed industry classification taxonomy differs from the one used by the SEC, and our proposed period for measuring restatements differs from the period used by a commonly-used data provider. We address those issues below in the discussion of the final metrics.

With regard to firm-level metrics, several commenters expressed concern that some or all of the metrics would not be comparable across firms. They cited factors such as the size of the firm (including the number of issuer and non-issuer engagements), specialization of the firm's audit practice, strategies, priorities, investments, organizational structure and quality control system of the firm, and size of the issuer (which affects, among other things, whether an integrated audit is required).

Several commenters expressed particular concern about comparability between U.S. and non-U.S. firms because non-U.S. firms tend to have structural, jurisdictional, and cultural aspects that differ from U.S. firms. In addition, non-U.S. firms may have a relatively smaller issuer audit practice, which could skew metrics that are based on the entire practice because

there may be significant differences between issuer audits and the rest of the firm's audit practice, and could increase the volatility of metrics based on the issuer practice because of its small size. One of these commenters also criticized the application of metrics to non-U.S. firms because they would not capture the qualitative benefits of being a part of a global network (e.g., use of consistent policies and procedures that drive use of training, technology, consultation and other centrally available support across the network). Another commenter also noted that some non-U.S. firms may publicly report firm-level metrics on similar topics, such as workload, using different calculation methods under PCAOB and local reporting requirements, which would be costly for these firms and potentially confusing to the users.

Many commenters expressed concern that engagement-level metrics are inherently incomparable. Commenters suggested a number of factors that could affect the comparability of engagement-level metrics, some relating to the firm (e.g., the firm's organizational structure, IT systems, resources, and audit methodologies), some to the individual audit engagement (e.g., selected audit approaches including substantive analytical procedures or test of details, audit findings including internal control deficiencies, use of technology, first year or recuring engagement, and risk of material misstatement), and some to the issuer (e.g., business structure (including the extent of centralization or decentralization and number of business units), complexity of the organizational structure and IT infrastructures, number of significant unusual transactions, and business and industry risks affecting the issuer). In addition, one commenter noted that there are significant developments (e.g., in delivery models, technology, and professional rules and standards) that affect the way audits are performed each year.

We solicited comment on whether comparability could be enhanced by further segmenting firm-level reporting (for example, on the basis of the size of the firm or the size of the issuer) or engagement-level reporting (for example, on the basis of industry sector, region, or whether it is a first-year audit). One commenter stated that all stakeholders would benefit from a consistent calculation methodology and comparable presentation format of firm-level reporting. Several commenters indicated that more disaggregated data for engagement- or office-level reporting could be useful, though one acknowledged that this benefit would need to be weighed with the cost of requiring this data. Other commenters cited challenges associated with providing subsets of information, including that firm and issuer sizes change over time and that smaller firms' metrics could disclose individual client information. One of these asserted, however that the reported data could be disaggregated and compared without additional data fields being collected.

We determined not to collect additional data fields or require additional segmentation of the metrics at this time because of the potential cost and complexity it would add to the process of compiling and reporting the metrics. Stakeholders that want to perform more detailed analysis (for example, segmenting data based on size of the issuer, size of the firm,

region, or industry sector) will be able to do so using information that is already publicly available in combination with the metrics.

We understand that firms differ from each other in the number and types of audits they perform and in their resources, such as the number, experience, and degree of specialization of their people as well as their access to technological resources and resources provided by networks. We also understand that engagements differ based on factors such as the size of the engagement, the industry of the company, the risks related to the company and the audit, whether it is a new engagement for the firm or the engagement partner.

However, we do not believe that such differences make useful, comparable metrics impossible. As one commenter noted, investors are experienced in using a wide array of performance metrics, such as non-GAAP measures and key performance indicators, and are able to analyze them despite a lack of perfect comparability between companies or over time. Indeed, the commenter argued that, due to the nature of the audit process and audit firms, the proposed firm and engagement metrics have a greater propensity for comparability than many companies whose financial results investors already analyze.

We believe we have also addressed many of the challenges associated with potential lack of comparability by narrowing the metrics to a group that should send relatively clear, comprehensible signals in a variety of different contexts. Metrics on workload, training hours, experience in public accounting, retention of personnel, and restatement history should send a clear signal, regardless of the circumstances of the firm and the engagement. Metrics on partner and management involvement and allocation of audit hours may be more influenced by those circumstances. For example, unusually high involvement by senior professionals could signal an especially complex audit or one that encountered unexpected problems; a relatively low percentage of audit hours incurred before year end could signal a poorly planned audit or simply that, due to the nature and scope of a company's business, it was unnecessary or impractical to perform many audit procedures prior to year end. We have limited the scope of the Partner and Manager Involvement, Workload, and Allocation of Audit Hours metrics to large accelerated filer and accelerated filer engagements to enhance the comparability of the underlying data. The metric on relevant industry experience may also be influenced by the circumstances of the firm and the engagement, in that industry experience may be more important in some industries than others. However, we believe users will be able to interpret this metric when taken together with the other information about the issuer and the auditor that is available to them. Common definitions and consistent methodology will also contribute to comparability. Taken together, the metrics should enable users to make both broad comparisons across the full population of reporting firms and accelerated filer and large accelerated filer audits, and more targeted comparisons across smaller subgroups of similar firms and engagements, and will be a very significant improvement over the information that is

currently available—ad hoc reporting by the largest firms at the firm level, and essentially no information at the engagement level.

Of course, any additional context that firms believe is necessary for proper understanding can be provided as narrative disclosure. While narrative disclosure will not make the metrics comparable, it will balance the comparability of standardized metrics disclosure with the ability to provide further context if needed. For example, a firm could provide an explanation for why a metric changed significantly from what was reported in the prior year.

### 6. Time Period Covered by the Metrics

Firm-level metrics are reported as of September 30, generally covering the period from October 1 of the previous year through September 30.[88] Specific commenter feedback regarding the reporting period is discussed in detail below in Section III.C.2. Firms are required to file Form FM on or before November 30, 61 days after the end of the reporting period, also discussed below in Section III.C.2.

Related to the Training Hours for Audit Personnel metric, we understand that many firms already have defined periods or cycles that may not align with the final reporting date (e.g., for which the firm tracks training data in order to comply with state continuing professional education ("CPE") reporting requirements). Therefore, the firm is permitted to use its already-established training calendar cycle for calculation and reporting of this metric, provided that the cycle covers a 12-month period (which is expected to be consistently applied). We do not believe that the data will be especially sensitive related to any particular 12-month period. We believe allowing firms flexibility to use their internally established dates for this metric is appropriate and still provides the comparability discussed above since all firms would be reporting this metric based on a 12-month period.

For engagement-level metrics, which will be reported on Form AP, the data and information underlying the reported metrics will generally be based on the most recent period's audit. However, some engagement-level metrics relate to information about personnel on the engagement, such as Experience of Audit Personnel, and these metrics will reflect information that may not be directly related to the most recent period's audit. Specific commenter feedback regarding the reporting period and filing date of Form AP is discussed in detail below in Section III.C.3.

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[88] For two of the metric areas we proposed, Quality Performance Ratings and Compensation and Audit Firms' Internal Monitoring, firms would have reported based on their own internally established cycles. Neither of these is included in the metrics we are adopting today.

The time period covered by each metric is discussed in more detail in Section III.B.3.

### 7. Rounding and Use of Estimates

Many of the metrics involve the calculation of a numerical value that may result in very small fractional parts. Consistent with the proposal, firms are required to report metrics that are rounded to the nearest whole number, except where additional decimal places (no more than two) are needed to properly interpret the result or to enable comparison to prior periods.

In calculating the firm- and engagement-level metrics, actual amounts should be used, if available. However, if actual amounts are unavailable, firms are permitted to use a reasonable method to estimate the components of a calculation. This approach is consistent with existing Form AP, which allows firms to use a reasonable method to estimate certain information required in the calculation of total audit hours.[89] Firms are also required to document in their files the method(s) used to estimate amounts when actual amounts are unavailable.

Commenters generally agreed with the proposed approaches, with one commenter agreeing that rounding and estimation should be permitted for all metrics. Other commenters stated that rounding and estimation will be especially important for metrics related to the reporting of hours, with two of these pointing to the subjectivity involved with the proposed metrics that would require allocation of hours to specific audit areas.[90] One commenter stated that the PCAOB should not restrict the number of decimal places. However, we believe that limiting reporting to hundredths will allow for the presentation of an appropriate level of detail while ensuring comparability of presentation and avoiding the technical issues that could arise with unlimited digits.

### 8. Optional Narrative Disclosure

In order to give firms the ability to provide any context they thought necessary for an appropriate understanding of the reported metrics, we proposed that firms would be permitted, but not required, to provide a brief narrative disclosure (no more than 500 characters per metric) to accompany any, or all, of the firm-level and engagement-level metrics reported on Form FM or Form AP. While some commenters agreed with the proposal to provide firms with the ability to include an optional narrative to accompany the metrics, one commenter explicitly agreed with the proposed 500-character limit, one commenter asserted

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89 *See* Instructions to Part IV of Form AP as currently in effect. Under the amendments to Form AP adopted today, this appears in General Instruction 9, as amended.

90 The proposed Audit Hours and Risk Areas metric is not included in the metrics we are adopting today, as discussed further below in Section III.E.1.ii.

that the 500-character limit greatly limits the context that could be provided, and one commenter suggested revising the character limit to no more than 1,000 characters. Two commenters suggested increasing the character limit beyond 500 characters without suggesting an upper limit. Approximately half of the commenters suggested that there should be no character limit imposed on the optional narrative. A firm-related organization also suggested that the narrative be mandatory and not optional, while a firm suggested that the utility of metrics would be diminished without potentially extensive accompanying narrative.

One commenter suggested that firms can also provide a link in the narrative to their transparency reports and audit quality reports if they wish to provide further context to the metrics. One commenter stated that there should be guidelines such as the narratives being factual, directly relevant to the metric, and free from promotional or marketing language. Another commenter stated that it would provide the following narrative in Form FM, potentially with respect to every firm metric:

> We do not believe any one metric or even a combination of metrics is necessarily indicative of audit quality, nor is it useful or productive to speculate on the questions reviewers of this information may have on each metric for every audit. We further discuss this metric in our Audit Quality Report, along with the measures we believe are better indications of our audit quality.[91]

Taking into consideration commenter feedback, we are retaining the option to provide narrative disclosure with each metric but expanding the character limit to 1,000 characters. We believe this character limit strikes the right balance between allowing firms the ability to provide any contextual information they believe is necessary to interpret the results of a particular metric while also managing the length of the forms and keeping them to a manageable size.[92]

In addition, in an effort to assist firms in making the optional narrative disclosures as helpful and substantive as possible, to help remind firms of their responsibility under QC 1000 to produce and report information that is accurate and not misleading, and to reduce the possibility that users will find the narrative confusing or in conflict with the required metrics, the following provision has been added as a general instruction to Form FM and a note to Part

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91 *See* Letter from PricewaterhouseCoopers LLP (June 7, 2024) at Appendix A3.

92 Nothing in PCAOB rules and forms, including Form FM and Form AP, provides for incorporation by reference of external documents or other materials.

VI of Form AP to provide additional direction to those firms electing to provide an optional narrative for any metric:

> "When the Firm elects to provide a brief narrative to accompany any of the Items in [the part of the form in which metrics are reported], language should be concise and focused on the reported metrics, with a view to facilitating the reader's understanding of the metrics."

## B. Firm and Engagement Metrics

### 1. General Comments

Investors and investor-group commenters were broadly supportive of the proposed metrics, saying that the metric areas would provide investors with decision-useful information about audit firms and audits. However, they expressed mixed views on certain specific metric areas. These commenters also suggested additional metric areas, including investments in both training audit professionals and in technology, and further details related to PCAOB inspection results (e.g., Part I.A deficiencies). We have addressed these comments in the discussion of each metric area below. On the topic of implementation of the proposed metrics, one commenter requested analytical tools and research showing how investors might use metrics. The information disclosed on Form FM will be available in a searchable database on the Board's website, similar to the Form AP database, and will provide users of the information the ability to perform comparisons across engagements.

Firms and firm-related groups were broadly supportive of some of the proposed firm-level metrics. However, they generally opposed public reporting of engagement-level metrics, asserting that no amount of context around engagement-level metrics would provide an appropriate basis for public reporting. These commenters suggested that the audit committee, being deeply familiar with the company, the audit, and the independent auditor, is the only party equipped to appropriately interpret the metrics. Instead of public reporting, they suggested several alternatives, including adding a requirement for communication to the audit committee under AS 1301; expanding SEC requirements for audit committee disclosures; encouraging voluntary reporting; issuing PCAOB Spotlights, practice alerts, or guidance; and performing further outreach before adopting any requirements. We discuss these in greater detail in Section III.A.2 above. One commenter suggested that the PCAOB take a proactive role in educating all users as to the proper use of reported metrics, including the need for them to be interpreted in context and making users aware of potential dangers and drawbacks associated with a mere comparison of isolated metrics between firms.

We discuss the forms and how the data can be accessed in more detail below in Sections III.C.2 and III.C.3.

Commenters generally expressed concern that proposed metrics were not all calculated from the same data sources. Some metrics were calculated on the basis of all audit engagements, others on the basis of issuer engagements, and engagement-level metrics on the basis of large accelerated and accelerated filer engagements. Some commenters suggested that calculating firm-level metrics based solely on total audit hours on large accelerated and accelerated filer engagements may result in more comparable data among firms. We discuss this in greater detail in Section III.B.3 below.

Other commenters recommended that the PCAOB establish criteria for determining which metric areas warrant public disclosure, so as to build in flexibility over time and minimize the risk of misinterpretation. The following criteria were among those suggested by these commenters:

- Is the metric's relation with audit quality unambiguous?
- Can the metric be appropriately interpreted on its own, without additional context (e.g., client mix or complexity – size, industry, international operations; firm's audit approach; etc.)?
- If disclosure of the metric results in behavioral change in audit firms, does research suggest the change will improve audit quality or, at least, not adversely impact audit quality?
- Will the metric require firms to develop systems, processes, and procedures that they do not already have and at a reasonable cost?
- Will the metric impose ongoing administrative burdens on engagement teams that result in a reallocation of effort away from audit quality enhancing activities?
- Will the metrics align with measures used in the system of quality control to manage the audit practice?
- Will the metrics meet the information needs of the users?
- Will the disclosure of metrics not result in the communication of proprietary information?

In responding to commenters and articulating the rationale for adopting the firm- and engagement-level metrics in Section III.B.3, we have considered the views of commenters, including these suggested evaluation criteria. We believe some of the suggested criteria would

impose an unworkable framework that is inconsistent with our regulatory objectives. For example, we do not think it is necessarily practicable to establish an "unambiguous" relationship to audit quality, as suggested, for any individual metric, nor would such an exercise be consistent with the intended uses of the metrics, which envisions their being considered as part of the total mix of information available to stakeholders. Moreover, we believe that imposing rigid criteria for each proposed metric imposes too high a burden and is not conducive to effective regulation. It does not permit us to account for facts and circumstances unique to individual metrics and their potential uses, nor does it account for the holistic manner in which we intend for the metrics to be used or developing information about the utility of the metrics over time.

A number of commenters recommended that the PCAOB engage in additional stakeholder outreach, sponsor pilot programs, or otherwise engage in further study and research before finalizing the metrics requirements, or even withdraw the proposal. Based on the lengthy project history described in Section II, which includes repeated input over time from our advisory groups, multiple rounds of public notice and comment, study of relevant academic literature, study of voluntary firm disclosures, and consideration of actions taken in other jurisdictions, we do not believe further study is necessary or that our investor protection mission would be served by delaying adoption of the final rules. However, we will monitor and determine if further implementation resources or support is appropriate for users of these metrics.

### 2. Key Terms and Concepts

As described below, we developed certain key terms and concepts that were used in calculating the proposed metrics. Where practical and relevant, these key terms and concepts align with existing definitions in PCAOB standards and rules. In other cases, we have developed new definitions and new descriptions of terms specifically for use in the metrics, which are not intended to inform the interpretation of other rules, standards, or forms of the PCAOB. We provided the key terms and concepts along with formulas for calculating each metric to drive consistency among firms and engagement teams.

One investor-related group said that the units of account (e.g., hours, years of experience) or measurement used within the proposed metrics are sufficiently standardized and adaptable by firms as they are commonly used within audit practice or defined within the existing standards.

Some commenters raised concerns about the definitions and descriptions of the population used for various metrics or about not having a defined set of terms applicable to all standards and rules. Other commenters questioned whether the PCAOB had provided sufficient guidance to address potential variations in the interpretation and application of terminology

used in the metrics or asserted that not having sufficient guidance would add complexity and challenges in calculating the metrics and understanding them or result in inconsistent reporting of metrics or lack of comparability across audit firms and audits engagements. Two of these commenters recommended that the PCAOB create a glossary of defined terms to support consistent use of terms throughout the standards and rules or conduct additional study to evaluate the defined terms in the proposal against terms already defined in other PCAOB standards and rules. Another commenter raised a concern that defining terms and specifying computations for each metric undermines their comparability.

Some firms offered examples of areas where they suggested that clarification would be needed, which we discuss below in the context of the relevant metrics. In general, however, we continue to believe that the use of defined terms is critical to driving consistent calculation of the metrics.

Other firms questioned why different metrics are based on different underlying data (for example, total audit hours vs. total hours worked or engagement team vs. core engagement team). In general, our choice of the data on which to base a metric is tailored to the intended objective of the metric, and also takes into account the practicality and potential costs associated with gathering data and calculating the metrics. We do not believe that metrics based on a single data set would be as clear or as informative.

We address specific concerns raised in the discussion of each metric in Section III.B.3 below. We have clarified certain terms and concepts used or revised the descriptions of proposed terms and concepts after consideration of the specific comments received.

#### i. Populations Covered by the Metrics

##### a. Partners and managers (used in all metric areas except for Allocation of Audit Hours and Restatement History); staff (used in Training Hours for Audit Personnel)

While some of the functional roles played by individuals involved in an audit are otherwise defined and used in our standards (e.g., engagement partner[93] and EQR),[94] we

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[93] *See* paragraph .A1 of AS 1201, *Supervision of the Audit Engagement* ("the member of the engagement team with primary responsibility for the audit").

[94] *See* AS 1220, *Engagement Quality Review*, for a description of the engagement quality reviewer's role.

proposed to clarify following additional functional roles referred to in the metrics to ensure consistent reporting by firms.

*Partners* – Partners or persons in an equivalent position (e.g., shareholders, members, or other principals) who participate in audits;[95]

*Managers* – Accountants or other professional staff commonly referred to as managers or senior managers (or persons in an equivalent position) who participate in audits; and

*Staff* – Accountants or other professional staff who participate in audits and are not partners or managers.

Some engagement-level metrics differentiate between engagement partner and the other partners who participate in the audit. We believe the differences between the responsibilities borne by engagement partner and those of other participating partners justify presenting data for the two categories separately in those metrics. For firm-level metrics, "engagement partners" include all partners who served as the engagement partner on any audit the firm performed of an accelerated filer or large accelerated filer. Partners that are included in the metrics as an engagement partner are not included as an "other partner," even if they served in a non-engagement partner role in other audits (in other words, partners are only counted once within any metric).

We are adopting the definitions of partners, managers, and staff as proposed, with clarifications discussed below.

We solicited comment on whether the proposed definitions of partners, managers, and staff are clear and appropriate. Two commenters agreed that the proposed definitions for partners, managers, and staff are clear and appropriate, one saying that linking the definitions used in the metrics to existing definitions would help in preventing multiple definitions throughout the auditing standards. However, some commenters expressed concern that titles and roles are not consistent across firms or most firms have roles which do not clearly or obviously reconcile to the roles listed. One of these commenters also raised a concern about continuing emphasis on the engagement staffing model that currently exists, on the basis that artificial intelligence and other tools could affect the staffing of audit engagements in the future. This commenter recommended including "contractors" engaged by firms in the

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[95] As noted in the proposing release, we believe this is consistent with the use of the term "partner" in our auditing standards. Although we do not usually state expressly that partners are limited to those who participate in audits, as a practical matter our auditing standards apply only in those circumstances.

definition and clarifying whether the definitions are meant to be descriptions of the roles rather than legal interpretations of the roles. Another commenter recommended aligning the definitions of partners, managers and staff with the definition of engagement team, by using the phrase "who perform audit procedures" instead of "who participate in audits" to avoid inclusion of personnel who may participate in audits in an administrative or project management function, but who do not perform audit procedures. Another commenter expressed concern that audit effort associated with roles typically referred to as "national office" and "professional practice development," especially for managers through partners, would be excluded from the definitions and calculations of the metrics.

For the definition of partners, one commenter questioned whether the definition is intended to have any alignment with ownership interests in a firm and requested clarification as to how a leadership level role such as a managing director would be classified because, in the commenter's view, that role does not appear to meet the definition of either a partner or a manager.

For the definition of managers, the same commenter requested clarification on whether the manager title is based on the person's general title in the firm because, for example, in certain cases an experienced supervisor may serve a manager capacity on a less complex engagement. Another commenter suggested adding a specific number of years of audit experience to the definition of managers because of the risk that firms could inflate percentage of audit hours incurred by managers by changing the titles of more junior professionals to increase the number of managers.

We are adopting the definitions of partners, managers, and staff as proposed. Because there are differing legal structures and titles among firms, we are providing foundational definitions so that each firm can allocate its professionals in three levels: partners, managers, and staff. We believe that the vast majority of firms have these three levels and that, although staffing models may change over time, these levels are likely to be retained for the foreseeable future. We also believe that other job titles, such as managing director, can be fit into the appropriate category based on the level of responsibility assigned to them. For example, in a firm where managing directors are given similar responsibilities as the firm's principals (for example, signing authority on audit engagements), they would be treated as partners under our definition; otherwise, they would align with managers. Similarly, professionals in a firm that does not use the title "manager" would be reported as managers if they are assigned the duties that are typically carried out by managers and senior managers at firms that do use those titles. Professionals who work under the firm's direction and control and function as the firm's employees, such as secondees and contractors, may or may not have these titles but would be reported based on their level of responsibility and decision-making authority. In all cases, the determination would be made based on the responsibilities, decision-making authority, and scope of duties of the person. If necessary, firms could utilize the optional narrative disclosure

to describe how the firm aligned their categories of professionals with partners, managers, or staff levels.

We considered adding a specified minimum number of years of audit experience in the definition of manager but determined not to. Some managers qualify for promotion with fewer years of audit experience due to other relevant education or experience. We were concerned that building a minimum number of years of audit experience into the definition would result in people with the responsibilities and title of manager being required to be reported as staff, making the metrics less meaningful while increasing the administrative burden associated with reporting.

We did not use the phrase "who performed audit procedures" in the definitions of partners, managers, and staff because use of this term would exclude professionals who do not perform audit procedures—for example, partners who only conduct engagement quality reviews[96] or national office personnel in connection with certain types of consultations that are not audit procedures.

Because the definitions of managers and staff are limited to "accountants or other professional staff," administrative personnel are not included.

In our proposal, we generally did not specify how to account for promotions within the reporting period from one level to another (e.g., from manager to partner),[97] although we noted that firms would be expected to be consistent in their approach across metrics. The only commenter to address this issue supported the flexibility proposed with respect to the treatment of promotions. Consistent with the proposal, the final rules do not impose any prescriptive requirements regarding the reporting of professionals whose job title or responsibilities change during the reporting period. However, we believe that treating such transitions inconsistently, whether within a metric or across metrics, would be misleading and we expect firms to report such changes in a consistent way.

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[96] Engagement quality review is not considered the performance of an audit procedure. *See* AS 1220.07 (EQR should not make decisions on behalf of the engagement team or assume any of the responsibilities of the engagement team).

[97] Note, however, that the Retention of Audit Personnel metric treats promotions as if they had occurred at the beginning of the year. *See* note to Item 4.6 of Form FM.

### (1) Participate in audits (used in the terms partners, managers, and staff)

"Participate in audits" is a broad concept that would include the work of all professionals (partners, managers, and staff) that are involved in the firm's audits, including tax personnel, information technology ("IT") personnel, and employed specialists.

We proposed the phrase "participate in audits" rather than referring to the activities of individuals assigned to a specific business line, such as the firm's audit practice, because some firms do not assign individuals to specific business lines. However, we solicited comment on whether the relevant population would be partners, managers, and staff of the firm's audit practice, if the firm assigns its professionals to specific business lines.

Some commenters agreed with the phrase "participate in audits" as used in the proposal. One of these commenters suggested that, because firms have different structures, attempting to separate members of the engagement team based on a firm's structure could lead to less comparability across metrics. One firm stated that it assigns individuals to specific business lines, and collecting data based on that assigned business line would be more practical to implement versus the proposal's requirement to include all individuals participating in audits.

Some other commenters stated that firm-level metrics should look only to the firm's audit practice because (i) the inclusion of other service lines in the metrics would impair comparability between firms due to the varying size and scope of non-assurance practices and (ii) the work of tax professionals and consultants would not improve the usefulness of these metrics for the purposes outlined in the proposal. Another commenter requested clarification on how to account for individuals who move between audit support roles and engagement-facing functions.

The final definitions of "partners," "managers," and "staff" include the phrase, "who participate in audits," as proposed. Because some firms do not assign partners and other professionals to a specific business line, we believe this approach is the best way to drive consistent reporting by firms with different organizational structures.

In the proposal, we clarified that members of the engagement team who participate in audits would include every partner and manager who worked on any aspect of the audit, even if their involvement was extremely limited. We proposed not to provide a participation threshold, such as a minimum number of hours, because we believe, based on the objectives of these metrics, that the metrics should capture all partners, managers, and staff who participate in audits in any capacity. However, we solicited comment on whether the concept should include a participation threshold.

One commenter agreed there was no need to create a minimum threshold for participation on the basis that it would increase the complexity and cost of calculating the metrics without a corresponding benefit. Another commenter recommended establishing a minimum threshold for participation because exclusion of professionals with certain firm roles (e.g., firm leadership, national office, or specialist line of service individuals with limited participation during the year in any specific engagement) would not reduce the reliability of the metric. This commenter further recommended creating a minimum threshold for purposes of firm-level metrics, such as individuals who spent more than 10% of their time participating on audit engagements, and engagement-level metrics (e.g., similar to the concept of core engagement team). This commenter and another commenter recommended the additional threshold as optional for firms to use due to cost-benefit considerations, particularly for smaller firms, and should only be considered if additional thresholds allow for simpler aggregation or preparation of the data.

We are not adopting additional thresholds to be used for firm-level or engagement-level metrics, except for the concept of core engagement team used in certain engagement-level metrics discussed below. The objectives of the five metrics that use "partners, managers, and staff of the firm" are to understand the firm's professionals who participate in audits in totality, and we believe imposing a threshold on what counts as participation would defeat that objective.

### (2) Partners, managers, and staff "of the firm" or "the firm's" partners, managers, and staff (used in Workload, Training Hours for Audit Personnel, Experience of Audit Personnel, Industry Experience, and Retention of Audit Personnel)

Because firm-level metrics provide information about the firm, in calculating some firm-level metrics, we proposed to include partners, managers, and staff "of the firm" (or "the firm's" partners, managers, and staff), which refers to individuals participating in audits who work for the firm or work under the firm's direction and control and function as the firm's employees (e.g., secondees and contractors), regardless of whether the audits are performed under PCAOB standards or other auditing standards.[98] We believe including individuals in the firm-level metrics who participate on any firm audit is appropriate because these metrics would provide information about the firm and not about specific engagements (for example, in the area of firm-level industry experience, which would be relevant across a firm's entire audit practice). We have added a new section to Part III, Terminology in Form FM to clarify the meaning of these phrases. We also clarified that participation in audits means any involvement

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[98] This should be interpreted consistently with "firm personnel," as defined in QC 1000.A5.

(including, for example, consultation on specific matters), and thus may include individuals outside the engagement team, such as national office personnel.

### b. Engagement team (used in Partner and Manager Involvement)

We proposed to provide information about partners and managers on the engagement team, a term defined in AS 2101, *Audit Planning*.[99] We believe it is appropriate to provide metrics related specifically to the engagement team because this would provide investors and other stakeholders with relevant information related to the audit as a whole, who perform audit procedures on the audit or assist in planning or supervising the audit.

One commenter suggested clarifying whether "engagement team" for purposes of this rule includes internal specialists. Another commenter stated that the proposal appeared to provide an alternative definition of partners and managers on the engagement team compared to AS 2101, which is aligned to other PCAOB standards, and recommended providing clarity as to the treatment of specialists. Another commenter expressed concern that the definition of

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[99] The "engagement team" is defined in AS 2101.A3 [as adopted by the Board in *Planning and Supervision of Audits Involving Other Auditors and Dividing Responsibility for the Audit with Another Accounting Firm,* PCAOB Rel. No. 2022-002 (June 21, 2022), to take effect with respect to audits of fiscal years ending on or after December 15, 2024] as follows (footnotes omitted):

.A3 Engagement team –

a. Engagement team includes:

   1. Partners, principals, and shareholders of, and accountants and other professional staff employed or engaged by, the lead auditor or other accounting firms who perform audit procedures on an audit or assist the engagement partner in fulfilling his or her planning or supervisory responsibilities on the audit pursuant to this standard or AS 1201, *Supervision of the Audit Engagement*; and
   2. Specialists who, in connection with the audit, (i) are employed by the lead auditor or an other auditor participating in the audit and (ii) assist that auditor in obtaining or evaluating audit evidence with respect to a relevant assertion of a significant account or disclosure.

b. Engagement team does not include:

   1. The engagement quality reviewer and those assisting the reviewer (to which AS 1220, *Engagement Quality Review*, applies);
   2. Partners, principals, and shareholders of, and other individuals employed or engaged by, another accounting firm in situations in which the lead auditor divides responsibility for the audit with the other firm under AS 1206, *Dividing Responsibility for the Audit with Another Accounting Firm*; or
   3. Engaged specialists.

"engagement team" under AS 2101 could have ramifications for the calculation of engagement-level metrics, but did not provide any indication of what those ramifications might be.

We are adopting the AS 2101 term "engagement team," as proposed. The definition of engagement team in AS 2101 includes specialists who, in connection with the audit, (i) are employed by the lead auditor or an other auditor participating in the audit and (ii) assist that auditor in obtaining or evaluating audit evidence with respect to a relevant assertion of a significant account or disclosure. It excludes engaged specialists.

**Figure 2. Engagement Team Members**

| Examples of Engagement Team Members | Examples of Parties Who are NOT Engagement Team Members |
|---|---|
| • Engagement partner<br>• Personnel from the engagement partner's firm who perform audit procedures on the audit<br>• Personnel of accounting firms and individual accountants outside the engagement partner's firm who perform audit procedures on the audit supervised under AS 1201<br>• A firm professional in the national office or centralized group in the firm (including within the firm's network) | • Auditor-engaged specialists[100]<br>• Engagement quality reviewer and those assisting the reviewer[101]<br>• Service auditors of a third-party service organization[102]<br>• A firm professional who performs a contemporaneous quality control function (e.g., internal inspection or quality control review) but does not perform audit procedures or help plan or supervise the audit work<br>• Individuals employed or engaged by the company being audited, such as a |

100 *See* AS 1210, *Using the Work of an Auditor-Engaged Specialist*.

101 AS 1220 applies to those persons.

102 AS 2601, *Consideration of an Entity's Use of a Service Organization*, sets forth the auditor's responsibilities with respect to using the work of service auditors who issue reports on the controls of a third-party service organization.

| | |
|---|---|
| who performs audit procedures on the audit or assists in planning or supervising the audit | company's internal auditors, a company's specialists, and a company's consultants[103] |

### c. Core engagement team (used in Workload, Training Hours for Audit Personnel, Experience of Audit Personnel, and Industry Experience)

For some engagement-level metrics, we proposed to include information about members of the "core engagement team" rather than the full "engagement team," so as to focus the metrics on the individuals who make the primary decisions regarding planning and performance of the audit and determine the final conclusions supporting the auditor's opinion. With the "core engagement team" concept, we intend to provide more meaningful and focused data by excluding information about certain partners and managers with lesser participation. We also simplify the data collection effort by limiting these metrics to firm personnel.

We proposed that the core engagement team would include the engagement partner and members of the engagement team who are partners or employees of the firm issuing the audit report. In addition, under the proposal, core engagement team would include either a partner (excluding the engagement partner as described above) who worked ten or more hours on the engagement or a manager or staff who worked on the engagement for 40 or more hours or, if less, 2% or more of the total hours.[104]

Figure 3 illustrates how partners, managers, and staff used in the calculation of the metrics, relate to the firm, engagement team, and the core engagement team.

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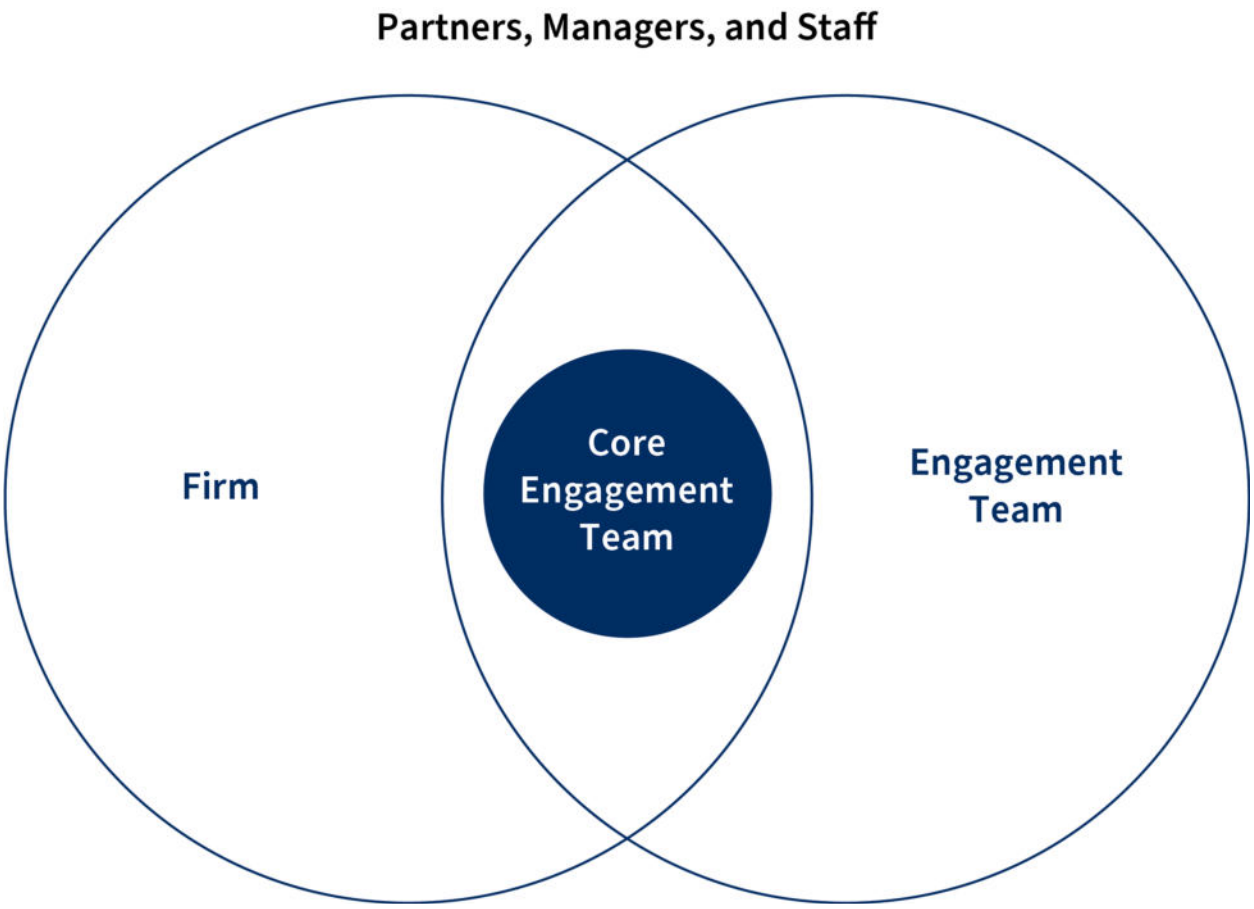
[103] Because of their roles at the company, the work of individuals employed or engaged by the company is not subject to supervision under AS 1201; they are not considered members of the engagement team under the adopted definition. PCAOB standards include requirements regarding the auditor's use of work performed by some of these individuals. *See, e.g.,* AS 1105, *Audit Evidence*, Appendix A; AS 2201, *An Audit of Internal Control Over Financial Reporting That Is Integrated with An Audit of Financial Statements*; AS 2605, *Consideration of the Internal Audit Function*.

[104] *See* Section III.B.2.ii below for the discussion of "total audit hours."

**Figure 3. Relationship Between the Groups of Individuals Included in Metric Calculations**




We solicited comments on whether the proposed definition of core engagement team, and the proposed participation thresholds for inclusion in the core engagement team, were appropriate.

One commenter agreed that at the engagement level, metrics related to only the core engagement team will be more useful to investors and other stakeholders. Two commenters supported the proposed 10-hour minimum threshold for partners other than engagement partners. One of these also supported the proposed threshold for managers and staff. This commenter suggested, however, that we include only partners and employees of the lead audit firm and exclude component auditors.

One commenter suggested aligning the definition of "core engagement team" with the "lead auditor" definition in amended AS 1201 and AS 2101. Another commenter indicated that the creation of thresholds would conflict with other existing aspects of Form AP. This commenter further stated there would be challenges for firms to accumulate and report this data, specifically obtaining the data from firms that are not required to report on Form FM or Form AP and additional time may be needed for implementation of these metrics.

Another commenter recommended replacing the phrase "who worked" in the proposed definition to "who performed audit procedures" to be consistent with the definitions of engagement team because this commenter was concerned that wording inconsistencies may cause confusion as to whether the same criteria apply across the various definitions. One commenter indicated that it is not clear on what basis the proposed threshold is determined and further indicated that the concept of core engagement team suggests that certain work in the engagement would be either not important or optional and recommended further study.

The proposal also asked whether other individuals involved in the audit (e.g., individuals in the firm's national office, the EQR, employees of shared service centers, or individuals involved in loaned staff arrangements and alternative practice structures) should be treated differently in the metrics and, if so, how they should be considered in the definition of core engagement team. One commenter sought clarification as to whether shared service center employees should be included in the definition of core engagement team and recommended considering the nature and use of centralized services and how service centers continue to evolve across a changing professional landscape. Another commenter suggested including the EQR and specialists in the core engagement team but not treating them differently from other individuals involved in the audit. Two commenters recommended the definition to simply include all individuals who charged time to the engagement or whose cost was included within the engagement to minimize the cost of reporting the metrics, but one of the two commenters recommended excluding the quality functions such as the EQR to avoid any impression that they are part of the engagement team.

We are adopting the proposed definition of core engagement team substantially as proposed:

1. The engagement partner and

2. Members of the engagement team who are:

    a. Partners or employees of the registered public accounting firm issuing the audit report (or individuals who work under that firm's direction and control and function as the firm's employees); and

b. Either of the following:

i. A partner (excluding the engagement partner) who reported ten or more hours on the engagement; or

ii. Managers and staff who reported 40 or more hours on the engagement or, if less, 2% or more of the total audit hours.

As suggested by two commenters, we are reformatting the presentation of core engagement team to clarify that the engagement partner is part of the core engagement team. In addition, we are modifying the descriptions of core engagement team members by substituting "who reported" for "who worked" to make clear that the basis for determining whether hours thresholds have been reached is time reported in the firm's timekeeping system. We did not align the definition of "core engagement team" with the "lead auditor" definition because including information from all of the partners and managers of the firm, rather than just those with significant participation in the engagement, would potentially skew or dilute the data, making the metrics less meaningful.

As we proposed and we are now adopting, the term core engagement team excludes other auditors. As a result, there will be no need to obtain data from other auditors, and the definition will not encompass firms that are not required to file Form AP. Under current reporting requirements for Form AP, the lead auditor has to accumulate all of the hours worked on issuer engagements.[105] While it will require some disaggregation of this data, we do not believe reporting the data for the engagement team for Partner and Manager Involvement and total audit hours for Allocation of Audit Hours will create a significant challenge for firms. Regarding individuals at shared service centers, if partners or managers employed by a shared service center meet the definition of core engagement team, they will be included. As further discussed in the Section III.B.2.d. below, we did not include the EQR in the definition of the "core engagement team"; the core engagement team is a subset of the engagement team, and the EQR is not a part of the engagement team.

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105 *See* discussion of "total audit hours" used for Form AP reporting below in Section III.B.2.ii.

**Figure 4. Core Engagement Team Members**

| Core Engagement Team Members | Examples of Engagement Team Members Who are NOT Core Engagement Team Members |
|---|---|
| • The engagement partner<br>• Other members of the engagement team<br>○ A partner of the firm with ten or more hours on the engagement<br>○ Other firm personnel with 40 or more hours on the engagement or, if less, 2% or more of the total audit hours<br>○ Contractors, leased staff, secondees, and employees of shared service centers who work under the direction and control of the registered public accounting firm issuing the auditor's report and function as the firm's employees with 40 or more hours on the engagement or, if less, 2% or more of the total audit hours | • Other auditors[106]<br>• A partner (excluding the engagement partner) who reported less than ten hours on the engagement<br>• Manager and staff who reported less than 40 hours on the engagement or, if less, less than 2% or more of the total audit hours<br>• Contractors, leased staff, secondees, and employees of shared service centers who work under the direction and control of the registered public accounting firm issuing the auditor's report and function as the firm's employees but reported less than 40 hours on the engagement or, if less, less than 2% or more of the total audit hours |

### d. Engagement quality reviewer (used in Experience of Audit Personnel and Industry Experience)

The objective of the EQR is to perform an evaluation of the significant judgments made by the engagement team and the related conclusions reached in forming the overall conclusion on the engagement and in preparing the engagement report, if a report is to be issued, in order

106 *See* AS 2101.A5.

to determine whether to provide concurring approval of issuance.[107] The EQR must possess the level of knowledge and competence related to accounting, auditing, and financial reporting required to serve as the engagement partner on the engagement under review.[108] While reporting on specific hours spent by the EQR or including the EQR's time in engagement-level metrics may have a negligeable quantitative impact, we believe reporting on EQR's competency for two of the engagement-level metric areas will be important and valuable for stakeholders.

Because the EQR is not a member of the engagement team as defined in AS 2101, EQRs were not included in the proposed metrics when the proposed metrics required disclosure of the engagement team's information unless the disclosure of EQRs was specifically called out in the proposed metric area. Therefore, we solicited comment about whether EQRs should be added to any of the proposed metrics, separately or together with a group such as the engagement team.

Some commenters agreed that EQRs should be excluded from the engagement-level metrics. These commenters indicated not to add them as a separate category because the EQR is not a part of the engagement team as defined by AS 2101 and the inclusion of the EQR would be inconsistent with AS 2101.

One commenter suggested that the EQR should be included in the metrics but presented separately, to ensure that there is no impression that the EQR is not independent. One commenter recommended including EQR in firm-level metrics because firms generally do not assign partners to solely perform engagement quality reviews and firm-level metrics should include all partners with no requirement to allocate their time spent between the roles of an engagement partner and an EQR. Two investor-related commenters generally supported including EQR hours in the metrics. Another commenter questioned the rationale for not including metrics relating specifically to engagement quality reviewers, despite the fact that they are not part of the engagement team.

In the final requirements, EQRs are included in the two experience-related metrics (Experience of Audit Personnel and Industry Experience), where we believe that the information would be significant to users. EQRs are not included in other metrics, primarily due to their quantitatively insignificant impact on the metrics and to avoid any confusion regarding whether they are part of the engagement team. For metrics that depend on total audit hours (i.e.,

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107 *See* AS 1220.02.

108 *See* AS 1220.05.

Partner and Manager Involvement and Allocation of Audit Hours), this approach also aligns with the reporting required for purposes of Form AP, from which EQRs are excluded.

### ii. Total Audit Hours (used in Partner and Manager Involvement and Allocation of Audit Hours)

For several metric areas, we proposed to use "total audit hours," which would be the same as the hours used to compute the extent of participation in an audit of other accounting firms in Form AP.[109] Total audit hours include hours attributable to: (1) the financial statement audit; (2) reviews pursuant to AS 4105, *Reviews of Interim Financial Information*; and (3) the audit of ICFR pursuant to AS 2201.[110]

Under the proposal, some firm-level metrics were based on total audit hours across all issuer engagements while others were based on specific subsets of total audit hours (e.g., partner and manager hours). We also clarified that some engagement-level metrics would also use a subset of total audit hours (e.g., those incurred by partners and managers, on certain areas of the audit, or within stated time periods before or after the issuer's year end).

We are adopting the definition of total audit hours as proposed.

Two commenters criticized the use of hours in metrics. One expressed concern that basing metrics on hours would encourage stakeholders to focus on time spent rather than on whether the work was effective, and potentially exacerbate the notion that auditors should reduce the hours spent on an engagement. The other, while generally not objecting to the use of the hours in specific metrics, asserted that many firms have moved away from the burden of time reporting and that there is no incentive to track time on fixed fee engagements. We continue to believe that basing certain metrics on audit hours is appropriate. It will allow firms to leverage systems already in place for purposes of Form AP reporting and human capital management. Moreover, we are not aware of any alternative method of tracking auditor work

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109 *See* Part IV of Form AP.

110 "Total audit hours" [as amended and adopted by the Board in PCAOB Rel. No. 2024-005, to take effect on December 15, 2025] exclude the hours incurred by: (1) the engagement quality reviewer; (2) specialists engaged, not employed, by the firm; (3) accounting firms in performing the audit of entities in which the issuer has an investment that is accounted for using the equity method; (4) internal auditors, other company personnel, or third parties working under the direction of management or the audit committee who provided direct assistance in the audit of internal control over financial reporting; and (5) internal auditors who provided direct assistance in the audit of the financial statements.

that is commonly accepted by firms and could be implemented without the creation of entirely new systems.

Commenters responding to the specific questions in the proposal on total audit hours generally expressed support for using Form AP hours for the total audit hours in the metrics. A few commenters recommended including engagement quality review hours in total audit hours. A commenter stated that hours from shared service centers should be excluded from both the partner and manager involvement metrics. A few commenters asked that we either include or exclude certain specialist hours in total audit hours. Two commenters suggested that hours spent on quarterly reviews should either be excluded or disaggregated, one stating that otherwise the metric area related to allocation of audit hours would generally show that most hours were incurred before year end. Another commenter requested clarification as to whether hours spent on quarterly reviews are included or excluded from total audit hours, stating that if excluded, firms may need to implement more detailed time tracking mechanisms or estimations of time between quarterly review and year-end audit procedures.

In general, as required for Form AP, total audit hours is comprised of the hours of the lead auditor, other accounting firms participating in the audit with whom the principal auditor does not divide responsibility for the audit, and nonaccounting firm participants that assist the principal auditor or other accounting firms. Consistent with the calculation of total audit hours for Form AP, total audit hours exclude hours incurred by certain persons and entities. In addition, existing Form AP includes reviews performed pursuant to AS 4105 because these reviews are an integral part of the overall audit process. We continue to believe that using total audit hours, as already defined by Form AP and collected by firms, will provide an appropriate and cost-effective basis for calculating metrics.

Commenters, mostly firms and firm-related groups, noted that several metric areas use total audit hours, which includes information from other auditors. According to these commenters, referring to such metrics as "firm-level metrics" is misleading, and they recommended the firm-level metrics be limited to data related solely to the firm filing the Form FM and exclude information from other accounting firms. We are retaining the label of "firm-level metrics" for the metric areas in question as we believe it is important to include all of the relevant information for the lead auditor's engagements. In addition, we believe this information will provide key insights into the way that engagements are conducted by the firm that is the lead auditor.

**iii. Terms Used in Metrics**

In addition to the terms discussed above, many of the terms used in the metrics are defined elsewhere in our standards and rules. Other terms will be defined specifically for use in the metric calculations and may differ from the way such terms are used elsewhere in PCAOB

rules and standards.[111] Terms that are used in only one metric are discussed at greater length in Section III.B.3, in the context of discussing the relevant metric. We have italicized the terminology in the final calculations.

### 3. Metric Descriptions and Calculations

This section describes the firm-level and engagement-level performance metrics we are adopting. Each metric is provided in a text box that provides a description of the metric and the calculation of the metric. Appendix 3 of this release provides illustrative examples to show how metrics would be calculated based on specific facts and circumstances presented therein.

#### i. Partner and Manager Involvement

Partners and managers are responsible for oversight of the engagement team, which includes less experienced staff. Spending time to oversee the work of the audit staff is critical to the engagement. Included in this oversight is the engagement partner's responsibility to exercise due professional care related to supervision and review of the audit, including evaluating whether significant findings or issues are appropriately addressed and determining that the significant judgments and conclusions on which the auditor's report is based are appropriate and supported by sufficient appropriate audit evidence.[112] Less extensive supervision raises the risk of less effective audit procedures. With a lower ratio of senior engagement team time to staff time, the risk may be greater that partners and managers may not be devoting sufficient time to supervise and review staff work and evaluate audit

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[111] For example, we are adopting the definition of "partner" to include only persons who participate in audits. While we believe that is consistent with the use of that term in our auditing standards (*see* footnote 95 above), it is narrower than the use of the term in connection with registration and reporting requirements.

[112] *See General Responsibilities of the Auditor in Conducting an Audit and Amendments to PCAOB Standards*, PCAOB Rel. No. 2024-004 (May 13, 2024) [as adopted by the Board and approved by the SEC, to take effect with respect to audits of fiscal years beginning on or after December 15, 2024], at 8-11 (describing responsibilities of engagement partners under existing PCAOB standards) and 17 (describing clarification for the existing responsibilities of engagement partners); *see also*, e.g.*, In the Matter of Melissa K. Koeppel*, *CPA*, PCAOB File No. 105-2011-007, at 78 (Dec. 29, 2017) (concluding that, as the individual with final responsibility for the audit, the engagement partner must act with due professional care to ensure that the audit team performs all required audit procedures).

judgments. Academic research also suggests that greater partner or manager involvement in the audit is positively associated with proxies for the quality of the audit.[113]

The proposal set forth requirements for firms to calculate firm-level and engagement-level metrics for the percentage of total audit hours incurred by partners and managers. As described in the proposal, this metric area could provide users with information regarding each firm's oversight of their engagements and the supervision of less experienced engagement team members. We are adopting this metric area substantially as proposed, with one modification discussed in more detail below.

Commenters generally agreed with requiring public reporting of the proposed firm-level metrics for Partner and Manager Involvement. Investor-related commenters stated that disclosure of hours worked by senior professionals relative to more junior staff across the firm and on the engagement is valuable. One investor-related group noted that information regarding the hours worked by senior professionals who have more experience in making judgments and evaluating estimates relative to more junior staff provides important insights into the oversight, supervision, and review of the engagement team. One commenter agreed that the proposed metrics would provide useful information to investors, audit committees, or other stakeholders because it would provide a salient indicator of audit quality. Another commenter agreed that the firm-level metric is clear and appropriate because it provides an indication of the level of involvement of partners and managers in the firm's audit engagements. At the same time, a few commenters were concerned that the engagement-level metric could be misunderstood because the level of supervision and review should vary based on the nature of the company (e.g., size and complexity), the nature of the work assigned to engagement team members, the risks of material misstatement, and the knowledge, skill, and ability of each engagement team member. Further, a commenter stated that the engagement-level metric would not provide meaningful information without contextual information obtained through a discussion with the audit committee.

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[113] *See*, *e.g.*, a research paper, Joshua Khavis, Mengtian Li, and Brandon Szerwo, *Manager Staffing Leverage at the Audit Office and Audit Quality,* available at https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4856541; a study using Korean data, Suyon Kim, *Does Engagement Partners' Effort Affect Audit Quality? With a Focus on the Effects of Internal Control System*, 9 Risks 225, (2021); a study using Japanese data, Sarowar Hossain, Kenichi Yazawa, and Gary S. Monroe, *The Relationship Between Audit Team Composition, Audit Fees, and Quality*, 36 AUDITING: A Journal of Practice and Theory 115, (2017); and Agnes WY Lo, Kenny Z. Lin, and Raymond MK Wong, *Does Availability of Audit Partners Affect Audit Quality? Evidence from China*, 37 Journal of Accounting, Auditing & Finance 407, (2022).

We solicited comment on whether data for partners and managers should be presented separately, including whether there should be a separate calculation for the engagement partner. Two commenters expressly supported this disaggregation, one stating that because the engagement partner is the person signing the opinion, it would appear to be more consistent to separate this data. The other commenters on this topic said that further disaggregation of the involvement of partners and managers is not warranted and could create unnecessary complexity. For example, a commenter stated that segregation of involvement by levels in the firm does not provide incremental value and would dilute or potentially mischaracterize what can be inferred from this metric (e.g., disaggregation of the engagement partner role is not likely to be meaningful due to the engagement partner's ability to have assistance). Two commenters expressed concern that adding up partner and manager data and calculating these metrics for all issuer engagements could be very time consuming and unnecessarily increase compliance costs. Another commenter expressed concern that further breakdown by role could lead to more inconsistencies in reporting across engagements (e.g., differences in how firms are structured, such as a managing director role). Commenters also recommended further study by the PCAOB.

We note, in response to commenter concerns about the need for further study, there is extensive academic literature on this topic and widespread support among investor-related groups (see above discussion). We do not believe that adding up partner and manager data and calculating and reporting these metrics will unnecessarily increase compliance costs as firms are already required to track these hours in aggregate for purposes of Form AP reporting. While we acknowledge the importance of the engagement partner's role, as this person is primarily responsible for the engagement as evidenced by the fact that they sign the opinion and is required to be identified on Form AP, we continue to believe that the aggregation of partner and manager involvement and reporting of one percentage provides a more holistic picture of the overall supervision and review of the audit engagement. We agree with most commenters who said that further disaggregation of the involvement of partners and managers is not warranted.

Some commenters, mostly firms and firm-related groups, suggested excluding hours from other accounting firms and focusing only on the involvement of partners and managers of the reporting firm. These commenters were concerned that in situations where accounting firms outside the lead auditor's network are involved, both the firm- and engagement-level metrics would require information from outside the lead auditor's system of quality control. Another commenter requested that firms should present partner and manager involvement across high-, medium-, and low-risk engagements. According to this commenter, it would enhance comparability across firms.

We believe the metric area on partner and manager involvement could be less informative or even potentially misleading if it were based only on the lead auditor, rather than the entire engagement team (including other auditors). Moreover, since relevant data in aggregated form is already collected for purposes of Form AP reporting, it is subject to existing quality controls over firm reporting. We do not believe the additional administrative burden of reporting partner and manager hours will be significant. As to the suggestion to present partner and manager involvement across different engagement risk profiles, we note there is no requirement in PCAOB standards or rules for such categorization and no established framework for differentiating among engagements in that way. Therefore, we do not believe this suggestion would yield comparable information. However, firms will have the ability to provide context in an optional narrative disclosure if they believe information as to relative risk profiles is helpful in interpreting the metric.

We are adopting the firm- and engagement-level metrics for partner and manager involvement substantially as proposed. We believe they will provide useful information to assist in understanding hours worked by senior professionals relative to more junior staff and gauging the associated risks.

However, the final requirements have been modified in one respect, to narrow the population of engagements covered by firm-level reporting. Considering comments received expressing concern with the potential lack of comparability across different types of issuers, we have limited firm-level reporting to only engagements for accelerated filers and large accelerated filers—that is, the engagements for which engagement-level reporting is required—rather than all issuer engagements. We believe this narrower scope will yield better alignment between firm- and engagement-level metrics and more comparable information across engagements. Additionally, this modification should further reduce data collection and reduce the administrative burden associated with calculating and reporting these metrics.

**Partner and Manager Involvement**

***Firm-level description:*** Total audit hours for partners and managers on the engagement team as a percentage of total audit hours, for the 12-month period ended September 30 for all accelerated filer and large accelerated filer engagements for which the firm issued an audit report.

***Engagement-level description***: Total audit hours for partners and managers on the engagement team as a percentage of total audit hours.

***Firm-level calculation:***

$$\frac{\text{*Total audit hours* incurred by *partners* and *managers* on the *engagement team* for all accelerated filer and large accelerated filer engagements}}{\text{*Total audit hours* for all accelerated filer and large accelerated filer engagements}}$$

***Engagement-level calculation:***

$$\frac{\text{*Total audit hours* incurred by *partners* and *managers* on the *engagement team*}}{\text{*Total audit hours* for the engagement}}$$

### ii. Workload

We believe that in general, the greater the workload, the greater the likelihood that members of the engagement team may have insufficient time to appropriately perform the necessary audit procedures and make the appropriate judgments that an audit requires.

Professionals may become less effective when working long hours,[114] and such an environment may affect the level of due professional care they exercise. For example, a heavy workload may create pressure on the audit staff to focus too much on efficiency in executing auditing procedures rather than on ensuring the effectiveness of those procedures or on supervising less experienced engagement team members.

We believe heavy workloads could prevent an engagement partner from providing adequate and focused attention to an audit engagement. The information provided by the

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[114] *See*, *e.g.*, Julie S. Persellin, Jaime J. Schmidt, Scott D. Vandervelde, and Michael S. Wilkins, *Auditor Perceptions of Audit Workloads, Audit Quality, and Job Satisfaction*, 33 Accounting Horizons 95, 101 (2019) and Brant E. Christensen, Nathan J. Newton, and Michael S. Wilkins, *How Do Team Workloads and Team Staffing Affect the Audit? Archival Evidence from U.S. Audits*, 92 Accounting, Organizations and Society 101225, (2021).

metrics at the engagement level may help audit committee members and other stakeholders understand the various activities competing for an engagement partner's time.

Studies find that excessive audit partner workloads can have negative impacts on audit effectiveness, although the literature also suggests that partners may be less affected than more junior staff.[115]

The proposal set forth requirements for firms to calculate firm-level and quarterly engagement-level workload metrics for (i) engagement partners and (ii) other partners, managers, and staff. We proposed separate reporting for engagement partners at both the firm and engagement level, as they have primary responsibility for the audit. At the engagement level, we proposed limiting reporting to the core engagement team, which we believed would be more useful to investors and other stakeholders than information regarding the entire engagement team (some of whom may have extremely limited participation in the audit).

The proposed calculations for workload at both the firm and engagement levels included all working hours incurred during the relevant periods: hours incurred on issuer and non-issuer engagements as well as on training, practice development, staff development, or other firm activities.[116]

We are adopting this metric area substantially as proposed, with modifications discussed in more detail below.

Some commenters agreed with requiring firm- and engagement- level metrics in this area, stating that the proposed workload metrics ensure there is appropriate attention and focus on audit engagements. One commenter asserted that the proposed firm-level metric is significantly less complicated than the engagement-level metric and should be sufficient for assessing a firm's capacity to accept new clients. However, the same commenter expressed concern that the proposed engagement-level metric is very complicated and would take considerable effort for firms to compile and calculate for every engagement. Further, the commenter expressed concern that the cost of calculating this metric likely exceeds any

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115 *See*, *e.g.*, Seokyoun Hwang and Philip Keejae Hong, *Auditors' Workload and Audit Quality under Audit Hour Budget Pressure: Evidence from the Korean Audit Market*, 26 International Journal of Auditing 371, (2022); John Goodwin and Donghui Wu, *What is the Relationship Between Audit Partner Busyness and Audit Quality?*, 33 Contemporary Accounting Research 341, (2016); Persellin, et al., *Auditor Perceptions*.

116 Hours worked for purposes of the proposed metrics excluded hours that were not considered working hours (e.g., paid time off and holiday time).

benefit. Another commenter stated that just having higher workload during peak months does not necessarily impact audit quality.

While some firms and firm-related groups generally expressed support for public disclosure of the firm-level workload metrics, they also expressed concerns with the metrics or requested modifications be considered for firm-level workload calculations. Some firms and firm-related groups questioned what benefits stakeholders would gain from the information. Commenters suggested that alternative measures, such as an annual utilization metric as reported in firms' audit quality reports, may be more meaningful to reflect how a firm is measuring and monitoring the activities competing for their professionals' time.[117] Further, some of these commenters expressed concern about the effort involved in collecting, analyzing, and reporting the data for average weekly hours on a quarterly basis.

We continue to believe that disclosing the firm-level workload metrics quarterly as opposed to annually will provide a comparative basis for the engagement-level metrics. At the engagement level, we believe that information for members of the core engagement team will be especially useful to investors and other stakeholders for the quarter in which the auditor's report is issued, usually the busiest time of the year for the auditor. We also believe that a workload metric based on actual hours worked (i.e., productivity) versus a utilization metric based on a standard number of work hours (e.g., a 40-hour week, including time off) will provide more useful information.

We solicited comment on hours worked, including whether the proposed term should be changed. Some commenters expressed support for including all hours worked including time spent on audits and time spent on activities other than audits. One commenter expressed concern that many firms do not require detailed recording of "non-chargeable" time, so the disclosure of hours worked will be a rough estimate at best for some firms. This commenter expressed a view that the benefits of the workload metrics would not justify the burden of asking firm professionals to spend more time and energy tracking all of their "non-chargeable" time. Another commenter suggested that we break out training and development from the rest of the hours worked. Further, a commenter stated that a clearer definition of the proposed term "hours" is required if this metric is to be used. For example, firms may be inconsistent on how they report hours spent on travel for work purposes. A commenter stated the proposed metrics exclude time off, which is a key component of workload and may vary significantly between levels. By excluding time off or leaves of absences, this commenter expressed concern that the workload metric would not provide consistent and comparable information.

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[117] One example of a utilization metric reported in firms' audit quality reports is "average annual hours worked by audit professionals over 40 hours per week."

We continue to believe it is important to capture the sum of hours that are incurred on engagements and hours spent on training, practice development, personnel development, or other firm activities in the workload metrics, while excluding holiday or other paid time off (i.e., when individuals would not be working). We believe the potential additional administrative burden of including "non-chargeable" time for partners and managers on issuer engagements (firm-level workload metric) will not be burdensome based on our understanding that many firms track this time already. Disaggregating the hours worked, as suggested by one commenter, will further complicate the workload metrics. Finally, we believe the definition of hours worked is sufficiently clear and does not require further explanation for certain types of non-engagement hours.

Firms and firm-related groups stated that because the proposed workload metrics were based on the definitions of partner, manager, and staff, which determination is based on "participation in the audit," it was not clear whether and where certain individuals should be included in this metric as they move between audit support and engagement-serving functions (e.g., individuals who provide tax reporting and compliance services to other clients). One commenter stated that including these individuals would dilute the value that could be derived from metrics related to workload, as peak periods for these other services and activities would mask meaningful trends in the workload of other members of the engagement team whose primary responsibility is performing audit work.

At the engagement level, we do not believe the commenter's concern is relevant because the individuals in question are not likely to be part of the core engagement team (see Section III.B.2.i.c above for discussion of the definition). At the firm level, we believe the workload of these individuals will still be relevant as they presumably shift between engagement work and non-engagement work as needed. Further, trying to figure out a systematic approach for excluding these individuals will only add to the administrative burden of gathering the data and calculating and reporting the metrics.

Other commenters requested that the Board reconsider the inclusion in the workload metrics of partners and professional staff who do not work on issuer audits. One expressed concern that comingling statistics associated with professionals who do not participate in any way on the firm's issuer audits would be contrary to the stated objective of "advancing investor protection and promoting the public interest by enabling stakeholders to make better-informed decisions…" Another stated that the metric as proposed would encompass individuals who work on engagements other than issuer audits (e.g., audits of non-issuer employee benefit plans or governmental entities), who may have a different "busy season" than individuals working on issuer audits. As a result, this metric may show a relatively consistent average weekly hour throughout the year across the firm, even though specific individuals may have more variability in their schedules.

We have streamlined the workload metrics in some respects, in part based on commenter input. To provide a more useful metric, we are limiting the firm-level metric to partners and managers who incurred hours on accelerated filer or large accelerated filer engagements for which the firm issued an audit report. We believe this will provide information that will be comparable to the engagement level information. We are excluding staff from the firm- and engagement-level calculations in order to focus the metric area on the more senior members of the engagement team – those individuals determining that the significant judgments and conclusions on which the auditor's report is based are appropriate. In addition, this will also lessen the administrative burden of gathering the data and calculating and reporting the metrics.

Some commenters found the proposed requirement to segregate engagement partners from other partners in the proposed calculations to be impractical to implement and not a meaningful distinction in the metric. A commenter pointed out that segregating the roles may create a practical challenge in calculating the metrics, as in practice a large portion of partners generally fill both roles. Another commenter asserted that because the proposal provided no justification for distinguishing between "engagement partners" and "other partners," the distinction between engagement and non-engagement partners should be eliminated for purposes of calculating the firm-level workload metric.

We are adopting a firm-level metric that does not require differentiating between engagement partners and other partners in reporting on workload because we question whether useful information could be derived from that distinction, given that many partners serve in both capacities. In addition, we understand it may be a difficult and manual process to identify and track the distinction between the types of partners. As stated above, we continue to believe it is important for firms to disclose their engagement partners' workloads at the engagement level. Overall, we believe the modifications will improve or maintain the value of the information provided by this metric area compared to the proposal, while reducing the administrative burden associated with gathering data and calculating and reporting the metrics.

**Workload**

***Firm-level description***: Average weekly hours worked by the firm's (i) partners and (ii) managers, who, in each case, incurred hours on accelerated filer or large accelerated filer engagements for which the firm issued an audit report, calculated for each calendar quarter of the preceding 12-month period ended September 30 (e.g., September 30, 20X3, June 30, 20X3, March 31, 20X3, and December 31, 20X2).

***Engagement-level description***: Average weekly hours worked by (i) the engagement partner and (ii) partners (excluding the engagement partner) and managers on the core engagement

team, calculated for each of the preceding three fiscal quarters up to the issuer's fiscal year end and the portion of the final fiscal quarter of the engagement through the issuance of the audit report.

***Note:*** Hours worked are the sum of hours that are incurred on issuer and non-issuer engagements and include hours spent on training, practice development, personnel development, or other firm activities. Hours worked exclude hours that are not considered working hours (e.g., paid time off and holiday time).

***Firm-level calculations****:*

(i) Average weekly hours worked by the firm's partners:

$$\frac{\text{Average number of hours worked by } \textit{partners} \text{ who incurred hours on accelerated filer or large accelerated filer engagements in the calendar quarter}}{\text{Number of weeks in the calendar quarter}}$$

(ii) Average weekly hours worked by the firm's managers:

$$\frac{\text{Average number of hours worked by } \textit{managers} \text{ who incurred hours on accelerated filer or large accelerated filer engagements in the calendar quarter}}{\text{Number of weeks in the calendar quarter}}$$

***Engagement-level calculations****:*

(i) Average weekly hours worked by the engagement partner:

$$\frac{\text{Number of hours worked by the } \textit{engagement partner} \text{ in the fiscal quarter}}{\text{Number of weeks in the fiscal quarter}}$$

(ii) Average weekly hours worked by partners (excluding the engagement partner) and managers on the core engagement team:

$$\frac{\text{Average number of hours worked by } \textit{partners} \text{ (excluding the } \textit{engagement partner}\text{) and } \textit{managers} \text{ who are on the } \textit{core engagement team} \text{ in the fiscal quarter}}{\text{Number of weeks in the fiscal quarter}}$$

### iii. Training Hours for Audit Personnel

The professional development training auditors receive should enhance their competence and therefore their ability to perform effective audits. Competence encompasses having the knowledge, skill, and ability to perform assigned activities in accordance with applicable professional and legal requirements and the firm's policies and procedures.[118] Training is a critical aspect of developing auditor competence.

Licensing requirements for continuing education for public accountants to obtain and retain certification speak to the relationship between quality and appropriate training and education.[119] Additionally, QC 1000 mandates certain training requirements, including with respect to ethics and independence.[120]

While we did not propose a training metric, our proposal solicited comment on training as a potential additional metric. Commenters on the topic all agreed about the importance of training to the development of auditors. One commenter included training hours per professional as one of six metrics they believed would increase technical excellence, and other commenters suggested an alternative training metric focused on the percentage of revenue firms spend on training. Other commenters highlighted challenges to defining a training metric that would provide decision-useful information. One commenter stated that training is

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118 *See* PCAOB Rel. No. 2024-004, at 8-9 (describing competence to perform an audit under existing PCAOB standards).

119 *See* paragraph .08 of AS 1000, *General Responsibilities of the Auditor in Conducting and Audit*.

120 *See* QC 1000.50 ("The firm should design, implement, and maintain policies and procedures regarding licensure such that the firm and firm personnel hold licenses or other qualifications required by the relevant jurisdiction(s) under applicable professional and legal requirements."). *See also* QC 1000.34(e) and PCAOB Rel. 2024-005, at 151-152 (describing mandatory training under PCAOB standards).

important for development and building awareness, but on-the-job training is invaluable, yet not measurable. One commenter suggested that training metrics may not be informative given they would be quantitative and not qualitative and also suggested that these concerns would be best addressed through the implementation of QC 1000 and related standards.

We believe there are benefits to having firms report information regarding training. Indeed, academic research provides evidence that certain proxies for auditor training are positively associated with some proxies for audit quality, although the results vary depending on the type of training.[121] We also observe that almost all of the firms that provide voluntary reporting include their average training hours as well as information about their policies and procedures regarding training, which appears to emphasize the value those firms place on the development of their professionals as well as the potential informativeness of an hours-based quantitative measure. Our research also indicates that at least eight other jurisdictions include training as a firm-level metric.[122]

We recognize that quantitative measures such as the number of professional development training hours cannot capture qualitative factors, such as the skill of trainers, the quality and relevance of training content, whether the training is in a specialized area specific to the trainee, and the degree of trainee engagement, that contribute to the effectiveness of training. However, the average number of training hours per audit professional provides an indication of the importance the firm places on the training of its professionals. In addition, given that the metrics are presented as a suite of metrics and are not expected to be considered in isolation, providing some visibility into firms' commitments and efforts to promote the development of their professionals through ensuring they receive adequate training will provide an additional data point for consideration in that context.

Metrics we have considered in this area, both at the firm level and the engagement level, include (i) the average total number of CPE hours per professional; (ii) average number of CPE hours received by audit professionals in specified fields of study, such as (a) accounting and auditing and (b) ethics and independence; and (iii) CPE compliance rates at the firm or specific to engagement teams. In consideration of the importance of training to the development of audit professionals and the impracticality of measuring training through qualitative means, we

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121 *See* Section IV.C.1.iv.a for additional discussion on the academic literature.

122 *See* Accountancy Europe Report at 6, 7, 8, 11, 12, 13, and 14 for IDW (Germany), Quartermasters (Netherlands), CMVM (Portugal), CPAB (Canada), ICAI (India), ACRA (Singapore), and IRBA (South Africa). *See also* FRC Feedback Statement, at 18.

are adopting metrics for average annual professional development training hours[123] for audit partners, managers, and staff, both firm-wide and for the core engagement team. These metrics will create visibility into training at both the firm and engagement level, using data that we believe will be readily accessible to firms.

We considered the suggested alternative of a training metric focused on the percentage of a firm's revenue invested in training. However, we believe that any approach based on the costs of training would be difficult to implement. For example, some firms develop their own training, some firms purchase training, and other firms may reimburse their professionals for third-party training. Also, firms may develop training for non-audit professionals within the organization and then subsequently provide that training to audit professionals, further adding to the complexity of suggested cost-based training metrics. By contrast, we expect that firms will generally already be tracking training hours as part of monitoring ongoing compliance with CPE requirements, which should ease implementation of the hours-based metrics we are adopting. We believe that the difficulties associated with measuring costs would outweigh the advantages of a cost-based metric, as compared to the hours-based approach.

**Training Hours for Audit Personnel**

***Firm-level description:*** Average annual professional development training hours for partners, managers, and staff of the firm, combined.

***Engagement-level description***: Average annual professional development training hours for partners, managers, and staff on the core engagement team, combined.

***Note*** [firm- and engagement-level]: Training metrics should be calculated for the same 12-month period, either ended September 30, or based on the firm's training calendar.

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[123] Professional development training hours are training hours for credit in support of obtaining or maintaining a professional accounting license in a jurisdiction in which the auditor is licensed or pursuing a license. For example, in the United States, professional development training hours would be synonymous with CPE credits as defined by the National Association of State Boards of Accountancy (NASBA). In some jurisdictions, including the United States, a training hour may be less than 60 minutes. If a jurisdiction does not impose training requirements in support of professional licensure, professional development training hours are hours of training associated with acquiring and maintaining professional competence.

***Firm-level calculation:***

Average annual professional development training hours:

$$\frac{\text{Total professional development training hours completed by } \textit{partners}, \textit{managers}, \text{ and } \textit{staff} \text{ of the firm}}{\text{Total number of } \textit{partners}, \textit{managers}, \text{ and } \textit{staff} \text{ of the firm}}$$

***Engagement-level calculation:***

Average annual professional development training hours:

$$\frac{\text{Total professional development training hours completed by } \textit{partners}, \textit{managers}, \text{ and } \textit{staff} \text{ on the } \textit{core engagement team}}{\text{Total number of } \textit{partners}, \textit{managers}, \text{ and } \textit{staff} \text{ on the } \textit{core engagement team}}$$

### iv. Experience of Audit Personnel

The auditor's years of experience at a public accounting firm can provide useful information about how the auditor staffs the audit. Academic studies show that auditor experience is related to improved audit effort and skill, through both pre-client and client-specific experience,[124] and through behavioral adaptations associated with managing their clients.[125] At the firm level, an experience metric can provide information regarding the "bench depth" of firm personnel and the ability of the firm to staff its engagements. At the engagement level, the engagement team's years of experience can provide useful information about the depth of experience of the engagement team for that particular engagement.

We proposed firm-level reporting of the average years of experience at a public accounting firm of the firm's engagement partners, partners other than engagement partners,

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[124] *See*, *e.g.*, Wuchun Chi, Linda A. Myers, Thomas C. Omer, and Hong Xie, *The Effects of Audit Partner Pre-Client and Client-Specific Experience on Audit Quality and on Perceptions of Audit Quality*, 22 Review of Accounting Studies 361, 363 (2016).

[125] *See, e.g.*, G. Bradley Bennett and Richard C. Hatfield, *The Effect of the Social Mismatch Between Staff Auditors and Client Management on the Collection of Audit Evidence*, 88 The Accounting Review 31, (2012).

and managers; and engagement-level reporting of the years of experience at a public accounting firm of the engagement partner and the EQR, as well as the average years of experience of other partners and managers on the core engagement team. Both metrics captured all experience at a public accounting firm, whether or not the firm was registered with the PCAOB, and included audits of issuers and non-issuers, as well as non-audit work.

Some commenters agreed in concept with firm- and engagement-level metrics for experience, stating that they agreed that auditor's years of experience at a public accounting firm may provide useful information about how the auditor staffs the audit. One of these commenters broadly supported both metrics but suggested a number of potential refinements, discussed below. One commenter suggested that an employee experience metric could identify firms that are more likely to have a firm culture that contributes to audit quality. Another commenter suggested that a metric depicting years of experience after CPA licensing would provide insight into whether a firm has more experienced professionals.

Several commenters generally supported the firm-level experience metric, while objecting to all proposed engagement-level metrics, including the experience metric. One of these commenters stated that the proposed firm-level metric met its criteria of being readily interpretable, aligning with measures used by the firm in its system of quality control, having broad linkage to audit quality, having minimal unintended consequences, and meeting the information needs of users.

Some commenters asserted that proposed experience metrics, both at the engagement and firm levels, were not useful or meaningful, saying that there is great potential for misunderstanding and misuse with little value to be derived. Another said that the emphasis on years of experience overlooks the centrality of technology in the future.

Some commenters raised questions about the professionals covered by the metrics. Two commenters suggested that the firm-level metric cover only individuals who have been assigned to issuer audits, one of whom said that firms may use different personnel on issuer audits than non-issuer audits, so a metric that includes personnel regardless of whether they work on issuer audits would not provide an accurate view of personnel that may be staffed on an issuer audit. One commenter questioned whether it was appropriate to provide engagement-level reporting regarding the experience of the EQR, because it might imply that the EQR was part of the engagement team.

Commenters also questioned the appropriate level of disaggregation for reporting. One commenter described the requirement to segregate engagement partners from other partners as impractical to implement and not a meaningful distinction in the metric. Another suggested further disaggregation, with partner and manager experience reported separately and data broken down by industry.

Commenters reacted to the proposal to count only experience in public accounting as relevant. One agreed that experience metrics should be limited to audit experience. Several others suggested that experience in addition to years worked at a public accounting firm, such as industry experience or time spent working at a relevant regulator, should be included. For example, one said that limiting relevant experience exclusively to auditing experience could potentially overlook the comprehensive skill set that individuals gain from various roles throughout their career. Two commenters said that context is needed to understand metrics depicting experience, as the depth of experience and whether it is current may differ considerably. Some commenters expressed concern about the challenges of gathering data regarding experience, particularly if the experience metric is not limited to time spent at the individual's current firm.

Commenters also raised issues with the calculation of the proposed metric. One remarked that the experience metrics provided an incentive to have a number of very experienced partners provide modest assistance in order for their experience to be included in, and significantly improve, the metric. This commenter suggested that requiring a weighted average for this metric would act as a deterrent. One commenter expressed that the calculation did not address how to treat personnel role changes at the firm level.

One commenter suggested that further outreach was needed to determine the ability to prepare such information and for investors and audit committees to understand how such firm-level metrics would be used in decision making.

After considering commenter input, we are adopting the firm- and engagement-level metrics with the modifications described below. While we appreciate that there are limits to the information an experience metric can provide, we believe that it is and will continue to be a useful element in a suite of metrics, even in the context of technological advances and other changes in the audit market.

We considered whether, as some commenters suggested, the firm-level experience metric should be narrowed to cover only professionals who worked on an issuer audit in the most recent year. However, we do not believe that approach would increase the information value of the metric, because individuals may participate in issuer audits in some years but not others, so it would cover only a portion of the total talent pool. Such an approach would also add significant complexity to the calculation, as well as variability year over year. Accordingly, we concluded that it would be more appropriate for firms to report the experience of all audit professionals, as proposed.

We also considered whether to eliminate engagement-level reporting of the experience of the EQR, based on commenter concern that this could imply that the EQR is a member of the engagement team. However, we do not believe that concern is well founded. There is nothing

in Form AP to support such an implication, and our standards are clear that the EQR is not a member of the engagement team. Because of the significance of the EQR role, we continue to believe that EQR experience is important and should be separately reported.

We are eliminating the requirement to provide separate firm-level reporting of the experience of engagement partners. Instead, the final rules require firm-level reporting of (i) the average experience of all partners in aggregate, both those who serve as engagement partners and those who do not, and (ii) the average experience of all managers in aggregate. After considering commenter responses, we are concerned that separate reporting of engagement partner experience may not add significant information value but will increase the complexity and administrative burden associated with the metric. We believe these metrics, with all partners in aggregate, will also serve as a useful baseline for comparison of the engagement-level reporting of engagement partner and EQR experience. We have also separated the partner and manager experience metrics at the engagement level for consistency and comparability with the firm-level metrics.

We considered broadening the scope of relevant experience beyond public accounting but have decided to adopt that aspect of the metric as proposed. We note that the commenters who recommended a broader scope had inconsistent recommendations as to what would constitute relevant experience (e.g., experience in a financial accounting role, previous experience at a regulator, etc.), reflecting the difficulty of arriving at an agreed-upon view of the non-audit experience that would be relevant and should be included. We believe a metric focused on experience in public accounting will be better focused and would avoid that difficulty.

Several commenters raised concerns about the ability to track the historical information called for by the metric, some implying that the experience metric should be limited to experience with the individual's current firm. We are concerned that such a limited metric could be misleading, as it would understate the experience of anyone who changed jobs. Moreover, we believe that firms could readily capture the information from current personnel and otherwise during the hiring and onboarding process, and the information would therefore generally be available to firms without a significant ongoing administrative burden.

We noted the questions commenters raised about how to calculate averages, including how to treat partial years of experience and whether the average at the engagement level should be calculated on a weighted basis to reflect the extent of participation in the audit. As to partial years of experience, firms will be free to report in whole years on a rounded basis or, if they wish, more precisely. While we appreciate that it may be possible to make staffing changes in an effort to manage this or other metrics, we believe that calculating the experience metric for the other partners and managers as a weighted average would add unnecessary complexity. We also considered that the risk of managing the engagement-level experience

metrics is minimized by other considerations, such as industry or other specialized experience needs, that go into staffing decisions. In addition, we expect that comparisons of trends in the reported metrics over time will provide balance.

We also note that, if a firm believed additional information or context would be required for a reader to understand the metrics provided, the firm could provide it as narrative.

**Experience of Audit Personnel**

***Firm-level description:*** Average experience at a public accounting firm of the firm's (i) partners and (ii) managers, as of September 30.

***Engagement-level description***: (i) Total experience at a public accounting firm of the engagement partner, (ii) Total experience at a public accounting firm of the engagement quality reviewer, (iii) Average experience at a public accounting firm of the core engagement team who are partners (excluding the engagement partner), and (iv) Average experience at a public accounting firm of the core engagement team who are managers.

Note: Experience at a public accounting firm is the total number of years worked as an accountant for a public accounting firm (whether or not PCAOB-registered).

***Firm-level calculations:***

(i) Average experience at a public accounting firm of the firm's partners:

$$\frac{\text{Total experience at a public accounting firm of } \textit{partners}}{\text{Total number of } \textit{partners}}$$

(ii) Average experience at a public accounting firm for the firm's managers:

$$\frac{\text{Total experience at a public accounting firm of } \textit{managers}}{\text{Total number of } \textit{managers}}$$

***Engagement-level calculations:***

(i) Total experience at a public accounting firm of the engagement partner:

$$\text{Total experience at a public accounting firm of the } \textit{engagement partner}$$

(ii) Total experience at a public accounting firm of the engagement quality reviewer:

$$\frac{\text{Total experience at a public accounting firm of the } \textit{engagement quality reviewer}}{}$$

(iii) Average experience at a public accounting firm of the core engagement team who are partners (excluding the engagement partner):

$$\frac{\text{Total experience at a public accounting firm of the } \textit{core engagement team} \text{ who are } \textit{partners} \text{ (excluding the } \textit{engagement partner}\text{)}}{\text{Total number of people on the } \textit{core engagement team} \text{ who are } \textit{partners} \text{ (excluding the } \textit{engagement partner}\text{)}}$$

(iv) Average experience at a public accounting firm of the core engagement team who are managers:

$$\frac{\text{Total experience at a public accounting firm of the } \textit{core engagement team} \text{ who are } \textit{managers}}{\text{Total number of people on the } \textit{core engagement team} \text{ who are } \textit{managers}}$$

**v. Industry Experience**

As part of the planning activities of an audit, auditors have a responsibility to gain an understanding of the company's business. These activities include gaining an understanding of matters affecting the industry in which the company operates, such as financial reporting practices, economic conditions, laws and regulations, and technological changes.[126] Experience in a particular industry helps an auditor understand the industry's operating practices, the critical accounting issues confronting companies in that industry, the risks of material misstatement of the financial statements specific to industry factors, and any industry-specific audit procedures.

Understanding the experience of firms' audit personnel across industries is an important factor in assessing the firm's capacity and resources to perform audits of issuer engagements

126 *See* AS 2101.07.

that benefit from specific industry knowledge. We believe industry experience metrics will assist in gaining that understanding.[127]

Importantly, academic literature has long identified auditor industry specialization as related to the effectiveness of audits.[128] One study that examines the impact of auditor industry specialization on the assessment of audit risk and in audit planning found that auditors with industry-specific knowledge improved the auditor's assessment of differential audit risk and the quality of their audit planning decisions.[129]

Investor-related commenters were generally supportive of industry experience metrics stating they believe that it is critical for auditors to have an elevated level of industry-specific knowledge. One investor-related group stated that experience in a particular industry helps an auditor understand that industry's operating practices, critical accounting issues faced in that industry, the risks of material misstatement of the financial statements specific to industry factors, and any industry specific audit procedures. Another commenter suggested that further guidance on the classification of industries would be helpful and also suggested that weighting current experience should be considered. One commenter suggested that the metric be disaggregated between partners and managers.

While most firm and firm-related commenters opposed industry experience metrics, one firm commenter stated that they understand in principle why industry metrics may be perceived as meaningful. Some commenters stated that the proposed industry experience metrics were not useful due to issues with comparability and complexity. Some commenters believed that the industry metrics gave rise to the potential for confusion and misunderstanding, in part because any classification system could group together very different types of issuers that could result in inappropriate comparisons.

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[127] QC 1000.38a.(2)(d) requires firms to establish quality objectives that address the firm's judgments about the extent to which the firm has or can obtain resources to perform the engagement as part of its acceptance and continuance of engagements.

[128] *See, e.g.*, W. Robert Knechel, Vic Naiker, and Gail Pacheco, *Does Auditor Industry Specialization Matter? Evidence from Market Reaction to Auditor Switches*, 26 Auditing: A Journal of Practice and Theory 19, (2007); Steven Balsam, Jagan Krishnan, and Joon S. Yang, *Auditor Industry Specialization and Earnings Quality*, 22 Auditing: A Journal of Practice and Theory 71, (2003); and Allen T. Craswell, Jere R. Francis, and Stephen L. Taylor, *Auditor Brand Name Reputations and Industry Specializations*, 20 Journal of Accounting and Economics 297, (1995).

[129] *See*, Kin-Yew Low, *The Effects of Industry Specialization on Audit Risk Assessments and Audit-Planning Decisions*, 79 The Accounting Review 201, 202 and 214 (2004).

One commenter suggested that the proposed metric does not address the issue that not all audits require specific industry experience and that audit quality is enhanced when an engagement team includes personnel with diverse experiences. Another commenter stated that metrics depicting experience would need context to be meaningful.

After considering commenter input, we have retained industry experience metrics, but simplified them from the proposal. The changes include limiting the scope for reporting at the firm level and limiting the requirements for reporting at the engagement level to the engagement partner, the engagement quality reviewer and certain members of the core engagement team among other changes further discussed below. At a high level, we believe this addresses the concerns of commenters regarding complexity, certain data collection concerns, the potential for confusion and misunderstanding, and also provides for more comparable information.

### a. Thresholds

We proposed that the metrics would count partners who have at least five years of experience throughout their careers in a particular industry and managers who have at least three years of such experience.[130] For determining what counted as a year's experience, we proposed a minimum threshold of 250 hours, or 25% of hours worked, focused on an industry in a given year.

The proposed instructions for reporting the metric included qualitative considerations to assist in determining whether an individual had experience in a specific industry, including consideration that industry experience may be, but is not required to be, exclusive to experience on audit engagements, or exclusive to experience gained at a public accounting firm, but must be relevant, which includes experience in accounting or auditing roles and other specializations, such as experience that is related to fair value estimates in the industry. The instructions also clarified that industry experience may be acquired in non-consecutive years.

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130 A note to the calculations clarifies that industry experience is accumulated throughout an individual's career (i.e., aggregates experience obtained at all career levels). When determining whether an individual has experience in a specific industry the following may be taken into account: (i) industry experience may be, but is not required to be, exclusive to experience on audit engagements, or exclusive to experience gained at an accounting firm, but must be relevant, and (ii) industry experience can be acquired in non-consecutive years. Relevant experience includes experience in accounting or auditing roles and other specializations, such as experience that is related to fair value estimates in the industry. *See* Note 2 to Item 4.5 of Form FM, Note 1 to Item 6.5 of Form AP.

One commenter expressly agreed with the proposed requirement of 250 hours or 25% of the auditor's time as being a reasonable criterion for a year of qualifying industry experience. However, several other commenters criticized the proposed threshold. Some of the concerns raised included tracking the information throughout the career of professionals, particularly at the global network level; obtaining historical data; complying with the proposed 250 hour or 25% thresholds; and maintaining documentation to support the metrics. Another commenter expressed that the thresholds were not meaningful as different individuals may perform the same tasks in different amounts of time. This commenter also expressed that without research supporting the thresholds, it is not possible to recommend how much industry experience would be necessary. While one commenter acknowledged the proposal allowed self-reporting as an option, they had concerns about the ability of personnel to accurately determine whether they worked 250 hours or more in a specific industry going back many years, potentially decades, and encouraged qualitative thresholds for determining industry experience.

One commenter agreed with the proposed 3- and 5-year thresholds for measuring industry experience and also suggested adding an additional threshold of 10-years at the partner level. Other commenters raised other concerns with the proposed reporting requirements. Some commenters disagreed with the proposal to count managers with three years of experience and partners with five years of experience. Among these commenters, some expressed that it would unfairly exclude some partners and managers, could be a disadvantage to smaller firms, could be time consuming to compile data to support, and should not include individuals with de minimis involvement. Commenters that responded to the question of whether industry experience should be limited to audit experience or rather should include all relevant experience agreed with the proposal to include all relevant experience. They also agreed that it need not be consecutive years.

Several additional commenters voiced concern about whether industry experience was required to be recent. Two commenters claimed that our recently adopted quality control standard acknowledges that there is no right level of industry experience,[131] and each audit may require different background and experience.

After considering commenter feedback, we are retaining the 3- and 5-year thresholds for determining whether partners and managers should be included in the industry experience metrics. We have also retained the threshold of 250 hours or 25% of hours worked as the baseline to determine whether a year qualifies as industry experience but recast it as a general

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[131] QC 1000.47 requires firms to design, implement, and maintain policies and procedures such that their personnel obtain and maintain the competence to fulfill their respective assigned engagement roles, including an understanding of, among other things, the industry in which the company operates and its relevant characteristics.

expectation rather than a requirement to allow firms to exercise reasonable judgment. At the firm level, once the 3- or 5-year industry experience threshold has been attained, partners and managers should be included in the metrics until or unless a firm determines, in its reasonable judgment, that the particular industry experience is no longer relevant. At the engagement level we have simplified the reporting requirements by limiting the metrics to the years of experience of the engagement partner, the EQR, and members of the core engagement team. The metrics will not include a requirement to determine the industry experience of other partners and managers who participated in the audit who are not members of the core engagement team. We believe these changes will appropriately address commenter concerns about potential difficulties in gathering and verifying data while continuing to allow firms to take into account matters like experience in related industries, the nature of non-audit experience, and whether experience is recent or remote in time. In addition, consistent with the proposal, the final rules do not specify how the relevant information should be accumulated. Because experience may be obtained in different ways at different points throughout a professional's career, there are many ways in which information could be accumulated to support the firm's judgment, including personnel self-reporting or a firm's own time-keeping system.

### b. Industry Classification

The proposal set forth requirements for firms to provide information regarding partner and manager experience in particular industries. In order for firms to use a consistent approach to industry identification, we proposed the Industry Classification Benchmark (ICB), operated and managed by FTSE Russell. The ICB is used by global stock exchanges, including the London Stock Exchange, Euronext, and NASDAQ OMX, to categorize listed companies. Based on the ICB classification system, firms would have selected from among a total of 31 possible industry classifications.[132]

Several commenters agreed that the proposed index was an appropriate reference for industry classification. One commenter acknowledged that there was a potential for imprecision when reporting on large conglomerate companies that operate in many different industries, but stated their belief that using the ICB rather than the legacy Standard Industrial Classification (SIC) codes is a better strategy from the outset of the creation of the metrics. This commenter also expressed their understanding that there could be some imprecision at the margins. On the other hand, several commenters stated that it would be inconsistent with other reporting required by the SEC using the SIC codes or the North American Industrial Classification system (NAICS). Some commenters stated that firms do not necessarily align with

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[132] *See FTSE Russell Industry Classification Benchmark (ICB), available at* https://www.lseg.com/en/ftse-russell.

the industries proposed. One commenter pointed out that the ICB listing does not include public sector or government and asked whether these should be omitted from the reporting requirements.

Commenters responding to the proposal's question about whether reporting should be expanded to allow for industries in addition to an issuer's primary industry stated that industry reporting for large issuers is complex, some stating that changes over time from mergers and other activities would add to the complexity. Some commenters also stated that the proposed industry metrics would provide challenges with respect to data collection.

In response to these concerns and after further considering recent voluntary public reporting by firms,[133] we have expanded the classification taxonomy and added flexibility. With respect to the proposed industry classification listing, the final requirements continue to provide a listing from which to select industries for reporting purposes, but have been revised to include certain additional industries such as agriculture and forestry and government and public services categories to facilitate reporting for firms that have large practices in these industries or sectors. In addition, for certain industry groupings, such as finance and health care, an "other" sub-grouping has been added to provide flexibility while maintaining a level of comparability at the overall industry level. Firms are also permitted to specify additional industries for reporting in the event that the listing does not include an industry that accurately represents the industries that they serve.

The taxonomy we have adopted is as follows:

[Form FM and Form AP will provide drop-down menus for industry classifications]

| **Industry Classification** | |
|---|---|
| **1** | **Agriculture and Forestry** |
| 1.1 | Agriculture and Forestry |
| **2** | **Automotive** |
| 2.1 | Automotive: Manufacturing |
| 2.2 | Automotive: Retail |
| **3** | **Basic Resources** |
| 3.1 | Basic Resources: Chemicals |
| 3.2 | Basic Resources: Industrial Materials |
| 3.3 | Basic Resources: Industrial Metals and Mining |

[133] Consideration was given to recent Transparency Reports and information available on public firm websites.

| | |
|---|---|
| **4** | **Construction and Materials** |
| 4.1 | Construction and Materials |
| **5** | **Consumer Products and Services** |
| 5.1 | Consumer Products and Services |
| **6** | **Energy** |
| 6.1 | Energy: Alternative Energy |
| 6.2 | Energy: Oil, Gas, and Coal |
| 6.3 | Energy: Other Energy and Transportation |
| **7** | **Finance** |
| 7.1 | Finance: Banks (Excluding Investment Banking and Brokerage Services) |
| 7.2 | Finance: Investment Banking and Brokerage Services |
| 7.3 | Finance: Finance and Credit Services |
| 7.4 | Finance: Insurance |
| 7.5 | Finance: Real Estate |
| 7.6 | Finance: Other |
| **8** | **Government and Public Services** |
| 8.1 | Government and Public Services: Government |
| 8.2 | Government and Public Services: Public Services |
| **9** | **Health Care** |
| 9.1 | Health Care: Health Care Providers |
| 9.2 | Health Care: Pharmaceuticals and Biotechnology |
| 9.3 | Health Care: Medical Equipment and Services |
| 9.4 | Health Care: Other |
| **10** | **Industrial Goods and Services** |
| 10.1 | Industrial Goods and Services: Aerospace and Defense |
| 10.2 | Industrial Goods and Services: General |
| **11** | **Technology, Media, and Telecommunication** |
| 11.1 | Technology, Media, and Telecommunication: Media |
| 11.2 | Technology, Media, and Telecommunication: Technology Hardware and Equipment |
| 11.3 | Technology, Media, and Telecommunication: Telecommunication |
| 11.4 | Technology, Media, and Telecommunication: Other |
| **12** | **Trades and Services** |
| 12.1 | Trades and Services: Travel and Leisure |
| 12.2 | Trades and Services: Retail |
| 12.3 | Trades and Services: Wholesale |

| | |
|---|---|
| 12.4 | Trades and Services: Other |
| **13** | **Utilities** |
| 13.1 | Utilities: Electricity |
| 13.2 | Utilities: Gas, Water, and Multi-utilities |
| 13.3 | Utilities: Waste and Disposal Services |
| **14** | **Other Industry [specify]** |
| 14.1 | [Other] |

We acknowledge that our taxonomy does not align with issuer reporting using SIC or NAICS codes. As discussed in our proposal, we rejected those systems, as well as others, based on several considerations, including that the SIC system has not been updated since the 1980s, the NAICS system uses a production-oriented and North America-centric structure that would not be appropriate as applied to many issuers, and that none of the alternative systems we considered would provide a basis for a meaningful metric. For example, the SIC code system, in addition to being dated, is highly fragmented, employing more than 440 different industry classifications as listed on the SEC's website.[134] We believe this fragmentation would dramatically impair the utility of the metrics, particularly because there is no logical hierarchy by which industries with a need for similar accounting or auditing specializations can be grouped together. By comparison, we believe that the curated taxonomy that we developed and refined in consideration of the ICB system most closely aligns with the industries that firms generally disclose in their transparency reporting and will provide the most relevant basis for comparison among firms.

### c. Metrics

The firm-level metrics provide information related to the firm's industry specialization and the engagement-level metrics provide information related to experience in the issuer's primary industry of engagement partners and engagement quality reviewers. The following sections discuss the proposed metrics, comments received, responses to those comments, and the final requirements for firm- and engagement-level metrics.

#### (1) Firm-level Metrics

At the firm level, having industry experience may provide a group of professionals who can both work on engagements and advise members of engagement teams when additional technical, industry-specific knowledge is needed. Firm-level industry experience may indicate that the firm has specific industry-based audit knowledge, industry-specific tools related to risk

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134 *See* https://www.sec.gov/search-filings/standard-industrial-classification-sic-code-list.

assessment, and industry-specialized methodologies for accounting and auditing. As a firm-level metric, we proposed that firms report, for each industry that represents at least 10% of the firm's revenue from audit services, the number of partners and managers who have accumulated five or more years and three or more years, respectively, of industry experience throughout their careers. We also proposed to allow firms to provide the same information for additional industries voluntarily. As discussed above, the proposed reporting instructions specified a minimum threshold number of years of industry experience for reporting and how those years were to be calculated.

Some commenters questioned the proposed 10% of revenue threshold for identifying the firm's top industries. One commenter stating that considering both the proposed threshold and the fact that the proposed index is not inclusive of all industries in which the firm earned revenue from audit services, the calculation would be problematic or would result in the exclusion of those industries. Another commenter questioned what period the 10% was meant to be measured over and whether it was meant to be aligned with the firm's fiscal year or another period. One firm commenter expressed concern that the proposed metric would require it to compile data for industries in which it did not perform any issuer audits. This commenter, and another, suggested an alternative of calculating the metric based on 10% of a firm's issuer audit practice rather than its overall audit practice. Other commenters suggested that the metric be narrowed to a firm's issuer audit practice, particularly in light of the proposed 10% of the firm's revenue from audit services threshold. One of these commenters additionally suggested that the metric include only partners who serve on issuer audits.

In our proposal, we solicited comment on alternatives to the 10% threshold, such as requiring firms to disclose their top five or top ten industries by revenue from audit services. One commenter stated that this approach would be more practical and clearer for stakeholders.

Some commenters suggested potential alternative approaches. One commenter suggested requiring public disclosure of industry expertise at the firm level based on the percentage of a firm's issuer clients according to the industry marked on those issuers' SEC filings. Another suggested reporting the number of entities under audit in a certain industry rather than partner and managers with years of experience. Other commenters suggested that, rather than focusing on the percentage of revenue and using the ICB listing, each firm should be allowed to list the industries, presumably not limited to the proposed ICB listing, and to choose the number of industries, for which they have specific expertise and report on those.

Several commenters suggested that further study or outreach was needed to determine the ability to prepare such information and for investors and audit committees to understand how such firm-level metrics would be used in decision-making.

After considering the comments received, we are simplifying firm-level reporting of industry experience in several ways:

- We are limiting reporting requirements to firms that issued five or more audit reports for accelerated filers and large accelerated filers during the reporting period, combined. We believe this will reduce the chances that a firm's top industries will not include the industries represented in its issuer audit practice, resulting in a more meaningful data set, while also alleviating compliance burdens on firms with a small issuer practice.[135]

- Rather than requiring reporting with respect to industries that account for at least 10% of the firm's revenue from audit services, we are requiring firms to report the top five industry sectors based on such revenue, regardless of the percentage of revenue they represent. We believe this will address commenter concerns regarding potential complexities of the calculation. We have also clarified the instructions to provide that the determination is based on revenue for the firm's most recently completed fiscal year. While this means that the top five industries will be measured over a different period than the years of experience, we believe that consequences of that misalignment are likely to be immaterial, while it will simplify data collection and align it with the firm's business cycle. We have also provided the ability for firms to report additional industries if our list does not include an appropriate industry grouping.

While we considered commenter suggestions to limit the metric to firm revenue from issuer audits rather than revenue from all audit services, we continue to believe that the metric is more relevant if it includes all audit services. The information it provides offers a user of the information a view to the firm's entire audit practice, not just its issuer audit practice, which informs users of the depth of industry experience of the firm's people. We believe this information is more relevant than the number of issuers a firm audits in a particular industry because, in absence of an understanding of the specific issuer population, that data may be less easily interpreted.

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135 Based on staff's analysis performed on the data obtained from Audit Analytics, Standard & Poor's, and publicly available data from the PCAOB's Registration, Annual and Special Reporting (RASR), *available at* https://rasr.pcaobus.org. For the two-year period ended September 30, 2023, we expect that approximately 50 firms will be required to report this metric each year.

### (2) Engagement-level Metrics

At the engagement level, industry experience provides professionals with an understanding of risks unique to the industry and industry-specific auditing and accounting considerations. The proposed engagement-level metrics required disclosure of the years of experience in the issuer's primary industry for the engagement partner and the engagement quality reviewer. In addition, we proposed that the number of partners (excluding the engagement partner) and managers on the engagement team with experience in the issuer's primary industry also be disclosed.

Commenters raised questions with respect to personnel to be included in the engagement-level industry metrics. One commenter suggested that industry experience metrics be limited to the core engagement team, suggesting that including the EQR implies that the EQR is part of the engagement team, when they are not. This commenter, and some others, suggested that industry experience should be limited to recent experience. A commenter stated that these metrics should be limited to the engagement partner and the EQR, while another commenter stated that partners, other than the engagement partner, and managers, should be disaggregated.

As discussed above, many commenters had concerns with the calculations, including the thresholds to be used in the calculations. In response to these concerns, we have limited reporting to the engagement partner and the engagement quality reviewer, and other partners (excluding the engagement partner) and managers on the core engagement team. We have eliminated the proposed reporting for other firm partners and managers who are not members of the core engagement team. We believe, given the key roles played by the engagement partner and the EQR, and other partners and managers on the core engagement team that this will focus the metric on the most salient information.

**Industry Experience**

***Firm-level description:*** For each of the top five industries of the firm's audit practice (based on revenue from audit services for the firm's most recently completed fiscal year), (i) the number of the firm's partners with five or more years of career experience in that industry and (ii) the number of the firm's managers with three or more years of career experience in that industry, as of September 30.

***Note 1*** [firm-level only]: Reporting of this metric is not required for firms that issued fewer than five audit reports for accelerated filers and large accelerated filers, combined, during the 12 months ended September 30, although such firms may choose to report the metric voluntarily.

***Engagement-level description***: Experience in the issuer's primary industry: (i) years of career industry experience of the engagement partner, (ii) years of career industry experience of the engagement quality reviewer, (iii) the number of partners (excluding the engagement partner) on the core engagement team with five or more years of career industry experience, and (iv) the number of managers on the core engagement team with three or more years of career industry experience.

***Note 2*** [firm- and engagement-level]: Industry experience is accumulated throughout an individual's career (i.e., aggregates experience obtained at all career levels). When determining whether an individual has experience in a specific industry the following may be taken into account: (i) industry experience may be, but is not required to be, exclusive to experience on audit engagements, or exclusive to experience gained at an accounting firm, but must be relevant, and (ii) industry experience can be acquired in non-consecutive years. Relevant experience includes experience in accounting or auditing roles and other specializations, such as experience that is related to fair value estimates in the industry. It is expected that a year of industry experience generally represents approximately 250 hours or 25% of hours worked in a year or more.

***Firm-level calculations:***

(i) The number of the firm's *partners* with five or more years of career industry experience for each of the top five industries of the firm's audit practice.

(ii) The number of the firm's *managers* with three or more years of career industry experience for each of the top five industries of the firm's audit practice.

***Engagement-level calculations:***

(i) Years of career industry experience in the issuer's primary industry of the *engagement partner*.

(ii) Years of career industry experience in the issuer's primary industry of the *engagement quality reviewer.*

(iii) The number of *partners* (excluding the *engagement partner*) on the *core engagement team* with five or more years of career industry experience in the issuer's primary industry.

(iv) The number of *managers* on the *core engagement team* with three or more years of career industry experience in the issuer's primary industry.

### vi. Retention of Audit Personnel

The retention rate and the headcount change inform the overall readiness, availability, and ability of the firm to conduct effective and efficient audits. While some turnover is expected within audit firms,[136] a comparatively high rate of turnover or higher-than-expected turnover could adversely affect audits.[137] It could diminish the available pool of talent who have the appropriate competency. It may take time and resources for the firm to replace the competency lost, likely through effective recruiting and further training. Academic literature consistently finds the same conclusion: turnover negatively affects audit quality, more so at longer-tenured engagements than newer engagements.[138]

The proposal set forth requirements for firms to calculate the average annual retention rate and the average annual headcount change of partners and managers both at the firm- and engagement-level.

At the firm level, we also proposed to require disclosing the average number of partners and managers to provide context for the retention and headcount change metrics. For example, a 67% retention rate at a larger firm (200 departures out of 600 professionals) would involve a different level of employee continuity and hence imply a different magnitude of possible impact on the firm's human resource management, than at a smaller firm (e.g., one departure out of three professionals) because this larger firm will likely need to replace 200 professionals while the smaller firm will only need to replace one professional assuming all things are consistent.

At the engagement level, we also proposed to require disclosing the average tenure on the engagement for partners and managers to quantify the overall continuity of the

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136 *See, e.g.*, Kris Hardies, *A Survival Analysis of Organizational Turnover in the Auditing Profession*, 97 MAB 5, (2023).

137 *See* Christophe Van Linden, Marie-Laure Vandenhaute, and Aleksandra Zimmerman, *Audit Firm Employee Turnover and Audit Quality*, Working Paper, Vrije Universiteit Brussel, SSRN (2023).

138 *See*, *e.g.*, Joshua Khavis and Brandon Szerwo, *Audit-Employee Turnover, Audit Quality, and the Auditor-Client Relationship*, SSRN Electronic Journal (2023); Linden, et al., *Audit Firm Employee Turnover and Audit Quality*; W. Robert Knechel, Juan Mao, Baolei Qi, and Zili Zhuang, *Is There a Brain Drain in Auditing? The Determinants and Consequences of Auditors Leaving Public Accounting*, 38 Contemporary Accounting Research 2461 (2021); and Brant E. Christensen, et al., *How Do Team Workloads and Team Staffing Affect the Audit? Archival Evidence from U.S. Audits*. We note that SSRN does not peer review its submissions.

engagement team members. Average annual retention rate is a year-over-year metric, but tenure would provide overall engagement-level experience as an important component to understand the experience of the engagement team on the specific audit.

### a. Firm-level reporting

The annual retention rate measures the percentage of firm personnel continuously employed for the reporting period to demonstrate the continuity of firm personnel. The average annual headcount change measures changes in the firm's overall headcount of managers or partners, giving an indication of the firm's success in replacing professionals who left roles performing audits and the overall availability of firm personnel. The annual retention rate and the annual headcount change are closely related; however, the annual retention rate would measure the "same people" within the firm, while the annual headcount change would measure the "same number of people." The annual retention rate measures whether the same individuals are still holding their positions at the firm while the annual headcount change is focused on the change in the number of individuals serving in those positions. Changes in annual headcount over time could result from a variety of reasons, for example, changes in a firm's human resource strategy (e.g., greater use of technological resources, shifting more work to shared service centers), or a downturn in the economy.

Commenters generally supported the proposed firm-level metrics. Some said they were sufficiently objective or straightforward and easy to interpret. One of these commenters also indicated that some firms already published similar metrics in firm audit quality reports and another commenter indicated that these metrics allow for some comparisons and may help a user in better understanding a firm. Two investor-related groups agreed with the proposal that a comparatively high rate of turnover or higher-than-expected turnover could adversely affect the audit, while another commenter indicated that staff turnover reporting is directionally supporting audit quality improvement through better continuity year-over-year. One of these commenters also stated that retention metrics will add to the mix of information provided in the final metrics without drawing a specific inference as to an "ideal" retention rate, considering the need to strike a balance between maintaining continuity of the engagement team members and introducing new personnel who will take a "fresh look" at the audit. Another commenter stated that a benefit of the headcount change metric is that it will provide context for the retention metric. A commenter stated if a firm reports a favorable employee retention metric, the firm's culture is ideal to contribute to higher audit quality. One commenter supported the firm-level metrics and acknowledged the importance of assessing the readiness and availability of the firm for conducting effective audits, but requested the Board determine how the metrics correlate with audit quality before requiring public reporting.

One commenter supported firm-level reporting of this metric area, but expressed concern that users could misinterpret the average annual headcount change metric due to

unfamiliarity with the distinction between the turnover rate and headcount change. This commenter urged the PCAOB to host a roundtable discussion or pilot test to determine how audit committees or investors may interpret and use this information. Another commenter agreed that the turnover at various levels could have an impact on audit quality.

Two commenters did not support the firm-level reporting of these metrics. While one commenter agreed with the proposed calculation and description of the metrics, this commenter was concerned that it could be misconstrued and present firms with a competitive disadvantage for recruiting talent without providing context (e.g., turnover due to changes in firm structure, shifting industry concentration, performance, ethical, or independence issues). Another commenter claimed the metric was convoluted and would be at the risk of misinterpretation.

Additionally, two other commenters raised a concern; one of them questioned whether these metrics would be meaningful or of value to investors and whether firms would be sufficiently consistent in calculating the metrics to make them worthwhile and another questioned that the inclusion of all the firm's managers and partners may make this metric meaningless for firms whose issuer audit practice is small in relation to the total practice and recommended more outreach regarding the usefulness for stakeholders.

Regarding the description and calculation of these metrics, several commenters asked questions or suggested refinements. One commenter questioned how the metrics would be calculated in a case of voluntary partner rotation. Another commenter recommended clarifying whether "other service lines within the firm" includes "other accounting services" as defined by PCAOB Rule 1001(o)(i). Additionally, one commenter recommended renaming the description of the average annual headcount change to align with the calculation to avoid confusion; as proposed, it would provide current year headcount as a percent of the prior year headcount, not a change as a percent of the prior year. This commenter also suggested clarifying the meaning of "holding the same position," used in the retention calculation and "transferred out of audit practice," and "continuously employed during the 12-month period" used in the illustrative example of the firm's average annual retention rate calculation. One commenter suggested disaggregating partners and managers.

Three commenters did not support separately reporting senior or all staff level annual retention and annual headcount change metrics.

Taking into account commenter feedback, we are adopting the retention metric as proposed and adopting the headcount change metric with some modifications.

As noted above, academic literature consistently supports that turnover negatively affects audit quality. We believe the retention metric is objective, provides important data, and

is already publicly reported by a number of firms in their audit quality or other reports. This metric was also generally supported by commenters from the different constituencies, including firm, firm-related groups, investor-related groups, and others. Since this or similar metrics are already reported by firms, we do not believe there will be a disadvantage in recruiting, difficulty in consistently reporting of this metric, or a risk of misinterpretation. Firms could also use the expanded narrative disclosures to provide context, if necessary.

We also continue to believe the inclusion of all partners and managers who participate in audits, not a subset of partners and managers who serve issuer engagements, is appropriate because the retention rate and the headcount change inform the overall readiness, availability, and ability of the firm to conduct an effective and efficient audit. While this metric area provides historical information, we believe historical data signals impact on the firm's near-future staffing needs and ability to conduct effective audits due to the time it takes to hire and train additional resources. Firms with sufficient overall headcount could reallocate staffing due to a possible staffing shortage on issuer engagements.

We do not believe that partner rotation, whether mandatory or voluntary, is likely to affect firm-level reporting of this metric, as the rotating partner will likely continue to participate in audits in the subsequent year (albeit on different engagements). The term used in the calculation "holding the same position" means that a partner remains as a partner and a manager remains as a manager of the firm during the reporting period. The term "continuously employed within the 12 months" means the individual is continuously employed by the firm throughout the 12 months, without departing to another employment.

We are revising the average annual headcount change calculation to address concerns raised by commenters, specifically that users may misunderstand this metric as a turnover rate and that the calculation should align with the title. We believe that the revision will help a user's understanding of the metric and align with the title of this metric by reporting the headcount change as a percentage of prior year. For example, using the illustrative example in the proposal,

> Firm A had 204 managers and 200 managers as of October 1, 20X0 and September 30, 20X1, respectively. Under the revised calculation, the average annual headcount change will be -2% based on (200-204)/204= -1.96%.

We believe this change will help users understand that the average annual headcount change of -2% means a 2% decrease in headcount from prior reporting year end to current reporting year end. This information is often used as a human resource management metric.

Lastly, regarding the description and the calculation of the proposed average number of the firm's partners and managers, one commenter indicated that they are clear and appropriate. Another commenter indicated that it would help to provide context for the retention metric but use a simple average of the count at the beginning and end of the year. This commenter also agreed with treating the promotions to another level of seniority as if they occurred at the beginning of the year.

Based on commenters' feedback on firm-level reporting of average number of managers and partners, we are adopting this metric as proposed because comments received agreed with the proposed description and calculation and this metric will help provide context for retention and headcount change metrics. The proposed calculation provided a simple average of the number of partners or managers as of the previous reporting period end and the current reporting period end so that the numbers at the end of each reporting period will be used consistently in the calculation. Because the proposed calculation was not significantly different from using the simple average of the count at the beginning and end of the year, as suggested by a commenter, we are adopting the calculation as proposed.

### b. Engagement-level reporting

For the engagement-level reporting, commenters generally did not support metrics in this area, while several commenters supported both firm- and engagement-level reporting. Many commenters who did not support such metrics cited the lack of context in the metrics itself or difficulties in explaining a wide range of factors that caused the engagement-level turnover (e.g., mandatory partner rotation, personal issues (i.e., family or medical leave, or relocations), firm's strategic resources management (i.e., scheduling conflicts, resource constraints, independence issues, or need for additional expertise)). Some commenters also cited the difficulty in interpreting the information, the risk of misinterpretation, misuse and misleading users, and even potentially being punitive to engagement teams and issuers. Others offered further reasons for not including this metric, which included difficulty in tracking and having consistent reporting on Form AP to make these metrics worthwhile. One commenter indicated the possibility of being detrimental to audit quality if these metrics incentivize firms to manage to achieve certain metrics, based on the commenter's view that engagement staffing should be based on identified risks of material misstatement of the issuer. This commenter and another commenter further expressed concerns that the engagement-level retention rate for smaller engagement teams will be significantly more sensitive to any turnover relative to the retention rate for larger engagement teams because the size of engagement teams tends to vary with the size of the engagement.

Two commenters also indicated that this metric is unnecessary because engagement resource management is already covered by the firm's quality control system. One commenter indicated that the engagement partner is responsible for determining the sufficiency and

appropriateness of engagement resources and prior year information will not be relevant in evaluating the quality of an engagement team in the current year. Another commenter emphasized that properly managed turnover will increase audit quality to reduce familiarity biases.

Some commenters believe these metrics will be more relevant to the audit committee or audit committee and management or should be provided only to the audit committee to allow for robust discussions. One commenter only supported disclosure of the engagement-level tenure metric to the audit committee because it will provide meaningful information to assist audit committees in exercising their duties to oversee the auditor; however, this commenter did not support other retention metrics as the engagement team staffing is a firm-level decision with factors that are not engagement specific or local laws and regulations that the firms may not be able to disclose.

One commenter indicated that these metrics should be considered in conjunction with other metrics reported rather than presuming a specific correlation with audit quality or auditor's independence, indicating as an example that there are specific legal and ethical mandatory rotation of key audit partners requirements in Europe. Another commenter asked various questions in the calculation of the engagement-level metrics for inclusion or exclusion of certain specific conditions (e.g., whether there is a time limit in how far back a partner or manager's tenure to be included).

Based on comments received, we are not adopting the engagement-level reporting of these metrics at this time, primarily due to some of the challenges described by commenters including difficulty in providing context (including some information that is not permitted for public disclosure), consistent reporting, and interpreting this metric area at the engagement level, due to, for example, sensitivity of engagement-level turnover on smaller engagements compared to larger engagements because turnover will have more direct and significant impact to engagement-level reporting due to the relatively smaller size of the managers and partners involved in each engagement.

**Retention of Audit Personnel**

***Firm-level description:*** Retention and headcount change of (a) the firm's partners and (b) the firm's managers for the 12-month period ended September 30:

(i) Average number of the firm's partners and managers

(ii) Average annual retention rate (percentage of the firm's partners and managers who remained employed with the firm for the entire 12-month period)

(iii) Average annual headcount change (percent change in the number of the firm's partners and managers from the previous reporting period to the current reporting period, based on the number at the beginning of the period)

***Firm-level calculations:***

(i) Average number

$$\frac{\text{The number of [}\textit{partners}/\textit{managers}\text{] as of October 1 (Year 1) + the number of [}\textit{partners}/\textit{managers}\text{] as of September 30 (Year 2)}}{2}$$

(ii) Average annual retention rate

$$\frac{\text{The number of [}\textit{partners}/\textit{managers}\text{] continuously holding the same position from October 1 (Year 1) to September 30 (Year 2)}}{\text{Number of [}\textit{partners}/\textit{managers}\text{] as of October 1 (Year 1)}}$$

***Note:*** The partners and managers of the firm included in the numerator of this calculation are those with one or more years of service and who were employed continuously during of the 12-month period. Any partners and managers of the firm hired or positions added during the 12-month period would not be counted in either the numerator or denominator of this formula. The retention rate would not include departures of partners and managers of the firm who joined and subsequently left during the 12-month period. The retention rate treats promotions to another level of seniority as if they occurred at the beginning of the year; therefore, the number of promoted employees would be included in both the numerator and the denominator of the level at which they ended the year and excluded from both the numerator and the denominator of the level at which they began the year.

(iii) Average annual headcount change

$$\frac{\text{Number of [}\textit{partners}/\textit{managers}\text{] as of September 30 (Year 2) – Number of [}\textit{partners/managers}\text{] as of September 30 (Year 1)}}{\text{Number of [}\textit{partners}/\textit{managers}\text{] as of September 30 (Year 1)}}$$

**vii. Allocation of Audit Hours**

At the engagement level, we believe performing audit procedures prior to the issuer's year end will allow the engagement team to identify significant issues in a timely manner and provide the engagement team with the opportunity to address those issues earlier. We also believe it will enable engagement teams to have the resources available to appropriately respond to significant issues identified after year end. Discussing this metric with the audit committee could provide the audit committee with information regarding aspects of the engagement's performance. Academic literature suggests that allocation of a greater proportion of total hours to earlier audit phases, prior to a company's year end, is associated with a lower likelihood of restatements[139] and late Form 10-K filings and also decreased total audit hours.[140]

As proposed, the firm-level and engagement-level metrics related to allocation of audit hours would have required firms to report the percentage of total audit hours incurred both prior to the issuer's year end and following the issuer's year end, separately.

Several commenters supported the reporting of this metric as proposed (i.e., at both the firm and engagement level), while some commenters only supported required reporting of this metric at the firm level. Of those commenters that supported reporting this metric at only the firm level, two commenters requested the following clarifications regarding various elements of the calculation:

- Whether the period being reported at the firm level should be based on audit reports dated from 10/1 - 9/30 or based on engagements with a fiscal year end from 10/1 - 9/30. This commenter expressed concern that if the proposal's intention was the latter, significant challenges with the proposed 11/30 reporting period for Form FM should be anticipated.

- How this metric would be applied to an initial public offering ("IPO") engagement where the audit covers up to three years where often the work doesn't follow the traditional audit cycle or timeline.

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139 Daniel Aobdia, Preeti Choudhary, and Noah Newberger, *The Economics of Audit Production: What Matters for Audit Quality? An Empirical Analysis of the Role of Midlevel Managers within the Audit Firm,* The Accounting Review, (2024).

140 Brant E. Christensen, Nathan J. Newton, Michael S. Wilkins, *Archival Evidence on the Audit Process: Determinants and Consequences of Interim Effort,* 38 Contemporary Accounting Research 2, (2021).

A commenter expressed concern that because the reporting period for Form FM is different than the engagement period for which total audit hours are calculated for Form AP, this will create a challenge with data collection and validation for different periods. This commenter also expressed concern that this metric requires the use of total audit hours, which relies on information from other auditors. The commenter recommended that the Board consider whether the use of other auditor information is necessary to meet the Board's objective. One commenter expressed concern that the firm-level metric would not be comparable due to changes in circumstances of specific issuers because while individual issuer circumstances may not be significant enough to move the metrics for larger firms, for smaller firms individual issuer circumstances could impact the overall results. As an example, for a smaller firm with an issuer that had a large acquisition during the fourth quarter, that would lead to a significant shift of hours after the end of the year.

As described above in Section III.A.6, the reporting period for firm-level metrics reported on Form FM will generally be the 12-month period ended September 30 in each year. When reporting this metric, the firm could use the information reported at the engagement level on Form AP for this metric to calculate the firm-level metric for reporting on Form FM. For multi-year audit engagements, including IPO engagements, because the audited financial statements would be included in one auditor's report, it is not possible to identify one particular year end that a firm should use that would not skew the reported metric. Therefore, we are excluding multi-year audits from the required reporting of this metric. Given the commenter concerns raised around the collection and data validation of this metric for all issuer engagements, we have modified the firm-level description and calculation of this metric area to include only those accelerated filer and large accelerated engagements that will be reported at the engagement level. We believe this narrower scope will yield better alignment between firm- and engagement-level metrics and more comparable information across engagements. Related to commenter concerns about the collection of information from other auditors, Form AP currently requires firms to collect information regarding the hours of other auditors in calculating total audit hours. Total audit hours collected for Form AP already includes hours related to the quarterly reviews, so those hours would also be included in the numerator and denominator for this metric, see also discussion above in Section III.B.2.ii.

Some commenters stressed the importance of providing narrative context in relation to the reporting of this metric, for example:

- One commenter (that only supported reporting at the firm level) asserted that reported metrics may be misleading without proper narrative disclosure to provide the necessary context to users. This commenter elaborated that circumstances beyond the auditor's control may influence the allocation of overall audit hours, and users should be cautioned against making presumptions that a higher proportion of hours after the issuers' year ends is a signal of lower quality.

- One commenter expressed the view that comparability of these metrics can be highly dependent on factors such as industry, type of audit (i.e., financial statement audit or integrated audit), and transaction timing and volume, among others and that stakeholders will need appropriate context to interpret the significance of these metrics. This commenter also stated that there is a risk that stakeholders may be biased towards inferring that a quantitative metric for allocation of audit hours is a proxy for audit quality, which further supports the need for sufficient appropriate context to interpret the results.

We agree that allowing firms to provide a narrative disclosure will be important in certain situations to help users understand the context of a specific metric. See additional discussion related to this optional narrative disclosure above in Section III.A.8.

Several commenters, firms and firm-related groups, disagreed with the proposal to report this metric at the engagement level publicly and instead suggested that this metric would be more effectively addressed via dialogue with the audit committee. These commenters expressed the following views:

- For the engagement-level metrics to achieve the Board's stated objectives, such metrics would best be delivered through effective two-way communication between the auditor and the audit committee to provide the relevant and necessary context.

- Even if offered the opportunity to provide narrative context, auditors may not be inclined to provide a full explanation as to why hours allocation may have skewed to after year-end for a particular issuer, as doing so might disclose confidential information about the issuer's preparedness for the audit or other facts, which might result in disputes.

- There are a variety of factors that influence the allocation of hours before or after the entity's year end which are beyond the control of the auditor and may drive a disproportionate allocation of hours before or after the entity's year end in a given audit, including those related to the entity entering into transactions and changes in the entity's operations or systems.

Other commenters disagreed with the proposal to report this metric entirely. These commenters expressed the following concerns:

- The timing of audit procedures (and resulting hours) is primarily a function of audit strategy decisions based on the assessment of a company's ICFR and inadequate ICFR may require most hours to be incurred after the balance sheet date. This commenter stated that more hours incurred after the balance sheet date may, in

fact, indicate a proper evaluation of ICFR and higher audit quality and therefore this metric would provide little insight into audit quality.

- This metric is not directly related to audit quality. The timing of the engagement procedures depends on many variables, including the nature of the audit areas, specific risks on an engagement, the effectiveness of interim and roll-forward procedures, the availability of staff, when the client is available, the client's specific financial reporting systems, and internal controls. This commenter stated that this information could potentially be misleading or misinterpreted.

- This metric seems somewhat arbitrary and may provide misleading information for those smaller engagements where a higher proportion of the work is performed post-year end.

- It is unclear whether the metric is meaningful because it might be impacted by among other factors, macro-economic trends, company controls and activities, and use of shared service centers and more generally, may require too much explanation to provide meaningful comparisons.

- This metric would not be comparable between larger firms and other firms and could have unintended consequences. In an audit of a smaller reporting company, it is frequently impracticable to perform much work prior to an issuer's year end, both out of concerns for efficiency and because small companies, who might have an outsourced finance function, cannot support significant interim work.

- Since most companies have a calendar year-end, firms have strong incentives to perform work as of an interim date to move hours outside of the traditional busy season. A firm's ability to shift work to an interim period is dependent upon a variety of factors, many of which are unrelated to audit quality.

We considered commenter feedback, and in particular commenter concerns related to the fact that particular facts and circumstances surrounding an engagement could significantly skew a firm's reported metric when compared to other firms that may have a different portfolio of issuer engagements. While we understand that each engagement is affected by the specific facts and circumstances, we continue to believe that users of this information will benefit from understanding how audit hours are allocated on engagements, supplemented by narrative disclosure to provide context, as needed.

At the engagement level, it may be more relevant for a firm to provide a narrative disclosure to explain the particular facts and circumstances related to the current reporting period's metric for this area. One firm stated that "Pulling work forward, where feasible and

appropriate, enables engagement teams more time to focus on areas of highest risk in the audit." Based on our oversight activities, we agree with this statement, and we believe that this information will be beneficial to users at both the firm level and the engagement level. As with all the metrics we encourage the auditor and audit committee to have a robust dialogue.

The proposal asked whether a different, more granular, metric would be more appropriate, for example allocation of audit hours devoted to each phase of the audit—planning, quarterly reviews, interim field work, final field work up until report release date, and post-report release date until audit documentation completion date. Most commenters who commented on this question did not agree that a different, more granular, metric would be more appropriate. Views provided by these commenters included the following:

- A more granular metric devoted to different phases of an engagement would be very challenging to measure and interpret as the audit is an iterative process. In addition, audit procedures may be performed to meet more than one specific objective and thus may relate for instance to both planning and execution phases of the engagement.

- It will be costly to assemble the information to report and such additional time spent on data reporting diverts very important time during the audit and creates an unnecessary dilemma for engagement teams as to whether it is more important to comply with audit quality standards or reporting requirement rules.

We agree with these commenters that a more granular metric is not necessary to achieve the objectives of this metric and have not modified the proposed metric to make it more granular.

Other than clarifying that multiyear audits are outside the scope of the reporting requirement and revising the scoping of the firm level metric to limit it to only those accelerated filers and large accelerated filers of the firm, we are adopting this metric as proposed.

**Allocation of Audit Hours**

***Firm-level description:*** Percentage of total audit hours incurred (i) prior to issuers' year ends and (ii) following issuers' year ends, for the 12-month period ended September 30 for all accelerated filer and large accelerated filer engagements for which the firm issued an audit report.

***Engagement-level description***: Percentage of total audit hours incurred (i) prior to the issuer's year end and (ii) following the issuer's year end.

***Note:*** Multi-year audits are excluded from both the firm- and engagement-level calculations.

***Firm-level calculations:***

(i) Percentage of total audit hours incurred prior to issuers' year ends:

$$\frac{\textit{Total audit hours} \text{ incurred prior to issuers' year ends for all accelerated filer and large accelerated filer engagements}}{\textit{Total audit hours} \text{ for all accelerated filer and large accelerated filer engagements}}$$

(ii) Percentage of total audit hours incurred following issuers' year ends:

$$\frac{\textit{Total audit hours} \text{ incurred following issuers' year ends for all accelerated filer and large accelerated filer engagements}}{\textit{Total audit hours} \text{ for all accelerated filer and large accelerated filer engagements}}$$

***Engagement-level calculations:***

(i) Percentage of total audit hours incurred prior to the issuer's year end:

$$\frac{\textit{Total audit hours} \text{ incurred prior to the issuer's year end}}{\textit{Total audit hours}}$$

(ii) Percentage of total audit hours incurred following the issuer's year end:

$$\frac{\textit{Total audit hours} \text{ incurred following the issuer's year end}}{\textit{Total audit hours}}$$

**viii.Restatement History**

Restatements for errors (e.g., not for changes in accounting principles) are generally considered a signal of potential difficulties in at least parts of a firm's audit practice. Academic

literature suggests that restatements provide the cleanest empirical measure of audit failure.[141] Overall, we believe the academic literature supports a measure that accumulates the pattern of restatements for firms, as this would provide a strong measure against which other metrics may be identified in the future.

The proposed firm-level metric set forth requirements for firms to report information related to restatements,[142] including both revision restatements (sometimes referred to as "little r" restatements)[143] and reissuance restatements (sometimes referred to as "Big R" restatements)[144] of audited financial statements for all issuer engagements of the firm. The proposal also included reporting of reissuance restatements of management's report on ICFR.[145] We are adopting this metric area with several modifications discussed in more detail below.

The proposal asked whether the proposed descriptions of revision restatement and reissuance restatement were clear and appropriate. The two commenters on this question agreed that the proposed descriptions were clear and appropriate. The descriptions are adopted with modifications: (i) in addition to referring to restatements identified and disclosed by the issuer in a filing with the SEC, the final description of reissuance restatement also refers

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141 *See, e.g.*, DeFond and Zhang, *A Review of Archival Auditing Research*.

142 The term "restatements" has the same meaning as defined in the FASB Accounting Standards Codification ("FASB ASC") Topic 250, *Accounting Changes and Error Corrections; see also,* "retrospective restatement" as defined in IFRS Accounting Standard (IAS) 8, *Accounting Policies, Changes in Accounting Estimates and Errors*. The phrase "error in previously issued financial statements" has the same meaning as defined in the FASB ASC 250; *see also* "prior period errors" as defined in IAS 8.

143 A "revision restatement" of audited financial statements was described in the proposal as "when an immaterial error in previously-issued audited financial statements, that is material to the current period financial statements, is corrected by an issuer in the current period comparative financial statements by restating the prior period information and disclosing the revision."

144 A "reissuance restatement" of audited financial statements was described in the proposal as "when a material error in previously-issued audited financial statements, report on management's assessment of the effectiveness of ICFR, or both, is identified and disclosed by an *issuer* in a filing with the SEC (e.g., on Form 8-K Item 4.02, Non-Reliance on Previously Issued Financial Statements or a Related Audit Report or Completed Interim Review)."

145 A "reissuance restatement of management's report on ICFR" was described in the proposal as "When a material error in a previously-issued report on management's assessment of the effectiveness of internal control over financial reporting is identified and disclosed by an *issuer* in a filing with the SEC."

to circumstances in which the firm is required to file a notice pursuant to Item 2.1 of Form 3,[146] and (ii) the final description of revision restatement has been revised to improve the alignment with the description used by the SEC in its adopting release for exchange listing "clawback" rules[147] and to clarify that the restated financial information and the disclosure appear in a filing with the SEC. The revisions to the description of reissuance restatement ensure that the data set is complete because it captures circumstances where the issuer fails to comply with its reporting obligations. The revisions to the description of revision restatement avoid potential misalignment with the SEC's characterization of little r restatements and also provide a clear trigger (SEC filing) for when a restatement is included in the metrics.

Accordingly, the descriptions of reissuance restatement and revision restatement in the final rules provide as follows (footnotes omitted):

> Reissuance restatement: When a material error in previously-issued financial statements is identified and disclosed by an *issuer* in a filing with the SEC (e.g., on Form 8-K Item 4.02, Non-Reliance on Previously Issued Financial Statements or a Related Audit Report or Completed Interim Review) or the firm is required to file a notice pursuant to Item 2.1 of Form 3.
>
> Revision restatement: When an error in previously-issued financial statements that did not result in a reissuance restatement, but would give rise to a material misstatement if (a) the error was left uncorrected in the current report or (b) the error correction was recognized in the current period, is corrected and disclosed by an *issuer* in a filing with the SEC.

The proposed metric included only restatements that related to corrections of errors and excluded all other restatements, including those resulting from changes in accounting principles. The proposed metric also excluded corrections in the current period financial statements of errors that were not material to the previously-issued financial statements and

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[146] Item 2.1 applies when a firm:

> has withdrawn an *audit report* on an *issuer's* financial statements, or withdrawn its consent to the use of its name in a report, document, or written communication containing an *issuer*'s financial statements, and the *issuer* has failed to comply with a *Commission* requirement to make a report concerning the matter pursuant to Item 4.02 of *Commission* Form 8-K.

[147] *See Listing Standards for Recovery of Erroneously Awarded Compensation*, SEC Rel. No. 34-96159 (Oct. 26, 2022) at 28 ("restatements that correct errors that are not material to previously issued financial statements, but would result in a material misstatement if (a) the errors were left uncorrected in the current report or (b) the error correction was recognized in the current period").

are not material to the current period financial statements (e.g., a voluntary restatement or an out-of-period adjustment), because these are not restatements as described in this rulemaking. One commenter suggested that the metric should explicitly exclude restatements resulting from stock splits and similar activities that result in non-error restatements. As proposed, the metric addressed only restatements for errors, and we do not believe it is necessary to list specific types of non-error restatements.

Commenters generally supported the reporting of a restatement metric, including all of the investors and investor-related groups that addressed the topic. Some pointed out that firm transparency or audit quality reports often include a similar metric.

However, two commenters questioned the usefulness of the proposed metric and asserted that such a metric alone could provide only limited insight into the quality of public oversight over issuers and auditors. One commenter stated that this information was already publicly available, and it did not appear necessary to require firms to report it but if it were reported, a streamlined metric that merely reported on the total number of restatements for the year would be preferable. One commenter, who generally supported the proposed metric, stated that it should only include those audits where the auditor withdrew and amended the opinion.

Some commenters generally supported the proposed metric but suggested changes to various elements discussed in more detail below, including:

- Removing revision restatements from the proposed required reporting.
- Counting multi-year restatements as one restatement, not separately.
- Reducing the number of reporting periods to be reported from five to three.
- Not requiring engagement-level reporting.

One aspect of the proposal that did not draw comment, and is adopted as proposed, is the proposed reporting of reissuance restatements of management's report on ICFR, together with reporting of the number of issuer engagements for which the firm initially issued an audit report expressing an opinion on ICFR.[148] Firms are required to report those reissuance

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[148] Under Sarbanes-Oxley, the auditor is required to attest to management's assessment of the effectiveness of the company's internal control only for companies that qualify as "large accelerated filers" or "accelerated filers," other than "emerging growth companies." *See* Section 404 of Sarbanes-Oxley, 15 U.S.C. § 7262.

restatements of management's report on ICFR that disclose an additional material weakness or additional elements to a previously disclosed material weakness for all issuer engagements.

### a. Revision and reissuance restatements

The proposed metric set forth requirements for firms to include information related to both reissuance restatements and revision restatements for all issuer engagements of the firm in the firm's required reporting. Three commenters agreed specifically with this aspect of the required reporting, with one commenter stating that providing information related to revision restatements gives a holistic picture of the firm's audit performance, reliability of the financial statements, and transparency from the fact that all restatements are reported and not just reissuance restatements.

The other commenters on this aspect of the proposal, all firms or firm-related groups, disagreed with the proposed requirement to include revision restatements in the metric. They expressed the following concerns:

- Such restatements are not material to the prior periods and to report them suggests an inappropriate level of importance to information deemed immaterial.

- These types of restatements are not currently separately tracked by some smaller firms, given that revision restatements are not material to the year to which they relate, thus are not necessary or useful to decision-making.

- Requiring the disclosure of these instances in the same context as reissuance restatements could inappropriately suggest that there are potential implications for the quality of the audit performed.

We continue to believe that the restatement history metric should include all restatements for errors, both revision restatements and reissuance restatements. As noted above, several commenters were supportive of our proposed scope, including all the investors and investor-related groups that addressed the issue. We believe that this scope will provide a more complete picture of the extent to which financial statements audited by the firm contain errors that subsequently have to be corrected.

We also believe that our reporting requirements should not distinguish between revision restatements and reissuance restatements in a way that may create inappropriate incentives for auditors and issuers as they make materiality determinations with respect to previous period errors. The SEC addressed this concern in its rulemaking regarding exchange

listing "clawback" rules, which also apply to both revision restatements and reissuance restatements.[149]

We understand that revision restatements and reissuance restatements do not necessarily convey the same information, particularly as to the performance of the auditor. As proposed, revision restatements will be reported on a separate line from reissuance restatements, which will enable users to analyze the two different types separately.

In the final metric, both revision restatements and reissuance restatements will be measured based on disclosure in an SEC filing. Reissuance restatements will also include circumstances in which the issuer is required to make an SEC filing under Form 8-K Item 4.02[150] and fails to do so, which riggers a requirement for the firm to file a notice pursuant to Item 2.1 of PCAOB Form 3. Disclosure in an SEC filing could take a variety of forms, such as checking the box on the cover page of Form 10-K and Form 20-F to indicate correction of error in a previously issued financial statement, as one commenter suggested; filing a Form 8-K in response to Item 4.02; or simply including restated prior period information in a periodic report or registration statement. We believe that measuring restatements based on SEC filings will provide an objective point of reference that will enable firms to track the relevant data. We note that one commenter asserted that some smaller firms do not currently track revision restatements. As noted above, under QC 1000 firms are required to track restatement data (i.e., both types of restatements) in order to design engagement monitoring activities and determine whether engagement deficiencies exist. In addition, given the public availability of the data and the ease with which the SEC's electronic data gathering analysis and retrieval ("EDGAR") database can be searched, we do not believe that gathering the data will be overly burdensome, regardless of whether it is a firm's current practice to do so.

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149 *See* SEC Rel. No. 34-96159 at 35-6 (in connection with including both revision restatements and reissuance restatements in its clawback rules, stating that "this construction of the statutory language addresses concerns that issuers could manipulate materiality and restatement determinations to avoid application of the compensation recovery policy"). *See also Assessing Materiality: Focusing on the Reasonable Investor When Evaluating Errors* (Mar. 9, 2022), *available at* https://www.sec.gov/newsroom/speeches-statements/munter-statement-assessing-materiality-030922, (observing that some materiality analyses appear to be biased toward supporting an outcome that an error is not material to previously-issued financial statements, resulting in "little r" revision restatements).

150 *See* Form 8-K Item 4.02, *Non-Reliance on Previously Issued Financial Statements or a Related Audit Report or Completed Interim Review*.

### b. Multi-year audit restatements

The proposal contemplated that, in the case of multi-year audits where one auditor's report covers the audits of multiple years of financial statements, the metric would treat every year that is restated as a separate restatement. While one commenter supported the proposed treatment of these types of audit restatements, firms and firm-related groups stated that multi-year restatements should be based only on the initial year audited, and should not be counted separately for each year. These commenters expressed concern that, as proposed, the metric would reduce understandability and comparability as it would misalign with how the audit was classified when reporting the metrics in the initial year the audit report was issued, creating the potential for a misleading multiplier effect. One firm stated that some restatements may be triggered by a distinct issue in one year, which may or may not be material to other years presented, but those other years are still corrected in the restatement process. Another firm expressed concern about the potential complexity and difficulty of the proposed reporting. A firm-related group suggested that, as an alternative, the multi-year-audit restatements might instead be covered by providing total years impacted by restatements as a supplementary metric.

We have considered commenter input on this issue, but we continue to believe that the most accurate and appropriate presentation of multi-year audit restatements is to count each year that is restated as a separate restatement when reporting this metric. If a firm has additional context related to a multi-year audit restatement that it believes will assist users in properly interpreting the metric, the firm could describe it as optional narrative accompanying the metric.

### c. Number of reporting periods to present

The proposal provided that this metric would be reported for the current reporting period and each of the preceding four years, for a total of five years.[151] One firm agreed with the proposal, stating that the five-year period strikes a balance between providing sufficient historical context to identify trends and patterns in audit quality and restatements and it also maintains the current relevance.

The other commenters on this aspect of the metric, all firms and firm-related groups, disagreed with the proposal and instead suggested that firms be required to report the current

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[151] Based on an internal evaluation of restatement patterns covering the period from Q1 2008 to Q2 2018 by the PCAOB's Office of Economic Risk and Analysis, 98% of restatements during this period were announced with a delay of approximately five years or less and about 80% of the restatements were announced with a delay of three years or less.

period and each of the two preceding years, for a total of three years. These commenters offered the following rationales:

- Three years would be consistent with an issuer's reporting of periods in an annual report in accordance with SEC rules and regulations.

- It would be better to require firms to report three years because it will greatly reduce the burden on terminated firms to track the restatements of their former audit clients (e.g., newly implemented monitoring and communication protocols with successor audit firms and previously audited companies). Since issuers are required to present three years of income statements in the financial statements included in Form 10-K, they will need to obtain consents from former auditors for those prior periods. As a result, terminated firms will be made aware of any restatements when requested to provide consents.

- Five years is unnecessarily long given this information is readily available via the SEC's EDGAR system.

We have considered the comments received and determined to limit the metric to three years, rather than the five years initially proposed. As commenters have pointed out, this will better align with SEC requirements regarding financial statement presentation and may therefore reduce any potential efforts or costs associated with implementation. While the change may result in some reissuance restatements falling outside the reporting period, we believe that focusing on more current information will provide users with a more relevant metric.

### d. Engagement-level reporting

The proposal stated that since restatements are disclosed in the financial statements, we were not proposing to require that firms report this metric at the engagement level. Commenters who expressed views on this aspect of the proposal agreed with this view stating that this information is already publicly available from the SEC. One firm supported engagement-level reporting of this metric explaining that it could lead to deeper accountability to assess the performance of audit teams by linking the restatements to the responsible engagement team, and it would result in promoting higher standards of audit quality. Taking into account commenter feedback, we continue to believe that reporting restatement information at the engagement level is unnecessary because it is already publicly available in a searchable format for any particular issuer through the SEC's EDGAR filing system. Conversely, for users to aggregate restatement information for all of a firm's issuer engagements could require significant time and effort, which is why we are only adopting this metric at the firm level. Engagement-level reporting is not required under the final rules.

### e. Other commenter feedback

Other commenter suggestions include:

- Predecessor and successor auditor. Under the proposal, the restatement metric would apply with respect to audit reports "initially issued by the firm." As a result, restatements would be included in the metric of the firm that issued the original audit report on the financial statements or on the audit of ICFR, regardless of whether the firm had itself identified the error or continued to serve as the issuer's auditor. Firms, in particular those that resign from the engagement or are otherwise replaced, would need to monitor whether previously-issued audited financial statements, reports on management's assessment of the effectiveness of ICFR, or both, are subsequently restated for at least three years. Two commenters that addressed this aspect of the metric agreed with the treatment provided under the proposal, and we are adopting it as proposed.

- Prospective reporting upon effective date. Several commenters suggested that if the Board proceeded with the proposal to include revision restatements in the required reporting for this metric, prospective reporting upon implementation would be more practicable. As discussed above, under QC 1000 firms are required to track restatement data in order to design engagement monitoring activities and determine whether engagement deficiencies exist, therefore firms will already have been tracking this information upon the effective date of the requirements in this rulemaking.

**Restatement History (Firm-level only)**

***Firm-level description:*** For each of the last three 12-month periods ended September 30, provide the following:

(i) The number of audit reports initially issued by the firm for issuers during that 12-month period, in connection with which any of the following subsequently occurred:

(a) revision restatement of the financial statements for errors
(b) reissuance restatement of the financial statements for errors
(c) reissuance restatement of management's report on ICFR disclosing an additional material weakness or additional elements to a previously disclosed material weakness.

(ii) Total issuer engagements for which the firm initially issued audit reports during that 12-month period.

(iii) Total issuer engagements for which the firm initially issued audit reports expressing an opinion on internal control over financial reporting during that 12-month period.

***Firm-level calculations:***

(i) The number of audit reports initially issued by the firm for issuers during that 12-month period, in connection with which any of the following subsequently occurred:

(a) *revision restatement* of the financial statements for errors.
(b) *reissuance restatement* of the financial statements for errors.
(c) *reissuance restatement of management's report on ICFR* disclosing an additional material weakness or additional elements to a previously disclosed material weakness.

(ii) Total issuer engagements for which the firm initially issued audit reports during that 12-month period.

(iii) Total issuer engagements for which the firm initially issued audit reports expressing an opinion on ICFR during that 12-month period.

## C. Reporting

### 1. Thresholds for Required Reporting

We proposed to apply the same threshold for both firm-level and engagement-level reporting, focused on auditors and audit engagements for issuers that qualify as accelerated filers or large accelerated filers under SEC rules. We proposed that firm-level reporting would be required of every firm that audits at least one company that has self-identified as an accelerated filer or large accelerated filer by checking the box on an SEC filing (or, because Form 40-F does not contain such a check box, at least one Form 40-F filer that meets the

criteria to be an accelerated filer or large accelerated filer under SEC rules)[152] during the reporting period. We also proposed that engagement-level reporting would be required for every audit of such an accelerated or large accelerated filer.

We believed the proposed threshold would focus the reporting requirements on the firms and engagements in which investors and other stakeholders have the greatest interest in additional information, and that establishing the same threshold for firm- and engagement-level reporting would foster comparability across both issuers and firms and provide richer context for the evaluation of engagement-level information. The proposal also contemplated that firms that were not subject to the reporting requirements could choose to report voluntarily.

This approach excludes engagement-level information about audits of non-issuers, including broker-dealers, and of issuers that are not accelerated filers or large accelerated filers under SEC rules. These include, for example, investment companies;[153] employee stock purchase, savings, and similar plans that are required to file reports with the SEC on Form 11-

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[152] *See* Exchange Act Rule 12b-2, 17 C.F.R. § 240.12b-2. Generally, under Rule 12b-2, a large accelerated filer is an issuer that meets certain reporting conditions and has a public float (aggregate worldwide market value of voting and non-voting common equity held by nonaffiliates) of $700 million or more. An accelerated filer is generally an issuer that meets the same reporting conditions; has a public float of $75 million or more, but less than $700 million; and had revenue of $100 million or more in the most recent fiscal year for which audited financial statements are available.

[153] Section 3(a)(1) of the Investment Company Act of 1940, 15 U.S.C. § 80a-3(a)(1), defines an "investment company" as an issuer which (A) is or holds itself out as being engaged primarily, or proposes to engage primarily, in the business of investing, reinvesting, or trading in securities; (B) is engaged or proposes to engage in the business of issuing face-amount certificates of the installment type, or has been engaged in such business and has any such certificate outstanding; or (C) is engaged or proposes to engage in the business of investing, reinvesting, owning, holding, or trading in securities, and owns or proposes to acquire investment securities having a value exceeding 40 per centum of the value of such issuer's total assets (exclusive of Government securities and cash items) on an unconsolidated basis. Audits of business development companies (BDCs) that met the criteria to be an accelerated filer or large accelerated filer would be included.

K;[154] and many smaller reporting companies.[155] It also excludes firm-level information about firms whose PCAOB practice was limited to such audits.[156]

### i. Firm- and Engagement-level Reporting Thresholds

We solicited comment on whether the proposed reporting thresholds for firm- and engagement-level were appropriate. Investors and investor-related groups generally supported the proposed thresholds for both firm- and engagement-level reporting. They agreed that the proposed requirements would appropriately apply to the audits, and auditors, of companies that account for the majority of the U.S. public company market capitalization, and would capture the situations where investment and proxy voting decisions would be most likely to benefit from additional information about the audit and auditor. One firm-related group broadly agreed with the thresholds for both firm- and engagement-level reporting because it believes different reporting requirements are not warranted. Another firm-related group also agreed with the proposed reporting thresholds as appropriately targeting the largest companies having a significant impact on the market capitalization of issuers. Two commenters recommended extending the reporting requirements to all PCAOB-registered firms, either immediately or over time.

On the other hand, all firms and a firm-related group that commented on the firm-level reporting threshold objected to it, generally suggesting instead that firm-level reporting should be required of firms that are annually inspected by the PCAOB, with some recommending voluntary reporting by smaller firms. One commenter suggested reporting only for annually inspected firms that audit at least one accelerated filer or large accelerated filer. Another commenter recommended that firm-level reporting should be required only of firms with 25 or more large accelerated and accelerated filer engagements, saying that firms with a small number of large accelerated and accelerated filer engagements would not produce meaningful metrics with sufficient anonymity as their metrics can be unduly influenced by a single engagement. Some of these commenters asserted that requiring reporting only from annually-inspected firms would balance scalability concerns with the need for investor protection, as it would still capture a large majority of the U.S. public company market capitalization. One commenter stated that the issuer portfolio at firms with less than 100 issuers is not sufficiently

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154 *See* Exchange Act Rule 15d-21, 17 C.F.R. §240.15d-21.

155 *See* Regulation S-K, Item 10(f)(1), 17 C.F.R. §229.10(f)(1).

156 Firms that do themselves not serve as lead auditor for an accelerated filer or large accelerated filer but play a substantial role in audits led by other firms would also not be subject to the proposed reporting requirements. *See* PCAOB Rule 1001(p)(ii) for the definition of "play a substantial role in the preparation or furnishing of an audit report."

like those firms inspected by the PCAOB annually to provide valuable comparisons and another commenter expressed concern about issuers that frequently move above or below the accelerated or large accelerated filer thresholds.[157] One commenter added that there is precedent to use an alternative threshold based on firms that issue audit reports for more than 100 issuers, such as PCAOB's annual inspection and QC 1000.18 requirements.

Several commenters also raised concerns about the cost of metrics reporting and stated that requiring reporting only from annually-inspected firms will better support the cost to comply with the proposed requirements and alleviate related unintended consequences, particularly greatly reducing the burden for smaller firms and firms in foreign jurisdictions.

Another commenter supported requiring reporting only from annually-inspected firms because it would alleviate concerns about privacy and confidentiality, particularly for firms outside the United States that issue a limited number of large accelerated or accelerated filer auditor reports annually and are subject to laws and regulations in those areas, because firm-level metrics may effectively result in the disclosure of engagement-level information. They further noted that such a threshold may avoid redundant reporting burdens for these firms and disclosure of confidential information of specific issuers, but still achieve the objectives of reporting firm level metrics as "firm-level reporting would consist only of summary data" as proposed.

For the engagement-level reporting threshold, because firms objected to any public reporting of engagement-level metrics, most firms did not comment further on the threshold for engagement-level reporting except for offering some other suggestions. See Section III.C.1. ii. below for other comments received.

We are adopting the thresholds for both firm-level and engagement-level reporting with one change. Firm-level reporting will be required of every firm that audits at least one company that has self-identified as an "accelerated filer" or "large accelerated filer" by checking the box on an SEC filing during the reporting period. Engagement-level reporting will be required for every audit of such an accelerated or large accelerated filer.

The final threshold does not refer to Form 40-F filers that meet the definition of "accelerated filer" or "large accelerated filer" under SEC rules, which were included in the

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[157] Based on the staff's analysis performed on the data obtained from Audit Analytics, Standard & Poor's, and publicly available data from the RASR, *available at* https://rasr.pcaobus.org. In the four-year period ended September 30, 2022, on average, approximately 4% of filers that reported on Form 10-K and Form 20-F and had not previously self-identified as either a large accelerated filer or accelerated filer newly self-identified as either a large accelerated or accelerated filer each year.

proposal, based on our understanding that such companies are not regarded as accelerated filers or large accelerated filers. Companies that file both Form 40-F and another SEC annual reporting form, and that check the box to self-identify as an accelerated filer or large accelerated filer on that other form, will still be included.

We continue to believe that requiring reporting for auditors and audits of large accelerated filers and accelerated filers is the most appropriate approach. As stated in the proposal, we estimated that the firm-level reporting requirements will apply to approximately 210 firms,[158] including 22 of the top 25 U.S. firms by total firm revenue,[159] and all of the 2022 PCAOB annually inspected firms that continue to audit issuers,[160] and that the proposed engagement-level reporting requirements would apply to approximately 3,400 issuer audits, representing 99% of the total market capitalization of issuers reporting on Form 10-K and Form 20-F.[161]

We analyzed the other reporting thresholds suggested by commenters based on the same data. Coverage would be significantly reduced if we required reporting only from

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158 The data was obtained from Audit Analytics, Standard & Poor's, and publicly available data from the RASR, *available at* https://rasr.pcaobus.org. Firms that issued audit opinions for issuers that met the large accelerated or accelerated filer definition in the 12 months ended September 30, 2023, were included in this number. Large accelerated filer or accelerated filer status was based on the most recently filed quarterly or annual report as of February 10, 2024.

159 *See* Accounting Today, *2024 Top 100 Firms + Accounting's Regional Leaders* (March 2024), for a listing of the top 25 U.S. Firms. Based on staff analysis, the three firms in the top 25 firms that would be excluded from the reporting requirements are Aprio, LLP; Carr, Riggs & Ingram LLC; and Citrin Cooperman & Company, LLP.

160 *See* the 14 firms listed as 2022 Annually Inspected Firms, *available at* https://pcaobus.org/oversight/inspections/basics-of-inspections. B F Borgers CPA PC was removed for the purpose of this analysis as its registration withdrawal is currently pending.

161 The data was obtained from Audit Analytics, Standard & Poor's, and publicly available data from the RASR, *available at* https://rasr.pcaobus.org. Large accelerated filers and accelerated filers were included in this number. Large accelerated filer or accelerated filer status was based on the most recent quarterly or annual filing as of February 10, 2024. Market capitalization was calculated as of December 31, 2023. Because in some instances multiple audit reports were issued in the same year, the total number of audit reports issued during the same time period using the same data source would be approximately 3,500.

annually inspected firms: 13 firms,[162] including 12 of the top 25 U.S. firms by total revenue compared to 22 firms.[163] Similarly, if only annually inspected firms were required to provide engagement-level reporting, it would apply to approximately 2,700 issuer audits, representing 83% of the total market capitalization of issuers reporting on Form 10-K and Form 20-F. If only firms with 25 or more large accelerated or accelerated filers were required to report, then firm-level reporting would apply to 11 firms, including 9 of the top 25 U.S. firms by total revenue, and engagement-level reporting would apply to approximately 2,800 issuer audits, representing 84% of the total market capitalization of issuers reporting on Form 10-K, and Form 20-F.

In addition to the significant coverage decreases, limiting metrics reporting to annually inspected firms would exclude non-US firms that audit a small number of non-US based issuers with substantial market capitalizations. If we rank firms based on the market capitalization of the issuers they audit, the top 30 firms audited 94% of the total market capitalization of accelerated filer and large accelerated filer issuers. However, only five of these top 30 firms are annually inspected. The remaining 25 firms are all non-U.S., and all but one of them audited large accelerated filers averaging at least $10 billion in market capitalization. Similarly, limiting metrics reporting to firms with 25 or more large accelerated or accelerated filers would result in only six of the top 30 firms (ranked based on the total market capitalization of the issuers firms audit) reporting the metrics, and would exclude most non-U.S. firms that audit non-U.S. based issuers with substantial market capitalizations.

We considered applying the reporting requirements to all registered firms, as one commenter suggested. However, we continue to believe that investors and other stakeholders have the greatest interest in additional information regarding large accelerated and accelerated filers and the firms that audit them, and the comments supporting the proposal that we received from investors and investor-related groups tend to confirm that view. For that reason, we believe that requiring metrics reporting for all registered firms could impose costs that are not justified in light of the anticipated benefits.

Regarding the concerns of privacy or possibly disclosing confidential or otherwise protected information, particularly for firms outside the United States, we are not aware of any specific issues and no commenter identified any particular requirements that would conflict

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[162] From the 14 firms listed as 2022 Annually Inspected Firms as described in footnote 160, B F Borgers CPA PC was removed for the purpose of this analysis as its registration withdrawal is currently pending.

[163] *See* Accounting Today, *2024 Top 100 Firms + Accounting's Regional Leaders* (March 2024), for a listing of the top 25 Firms. Based on staff analysis, two annually inspected firms (B F Borgers CPA PC and Cohen & Company, Ltd.) were not included in the top 25 firms.

with the disclosure of the metrics we are adopting. See Section III.C.6 below for further discussion of privacy and confidentiality issues.

**ii. Other commenter feedback**

We solicited comment on whether smaller firms should have different reporting requirements than larger firms. In addition to comments described above, several commenters recommended having different reporting requirements for smaller firms than for larger firms.

In addition, two firms requested clarification or application guidance regarding the treatment of issuers that change filer status into an accelerated or large accelerated filer during the reporting period. These commenters recommended allowing these issuers to have one full year of implementation period after the changes in filer status. We note that firm-level reporting will be required of all firms that issued an audit report for at least one large accelerated filer or accelerated filer during the reporting period, and that engagement-level reporting will be required in connection with each audit report issued for a large accelerated filer or accelerated filer. Accordingly, the relevant date to determine large accelerated filer or accelerated filer status will be the date the audit report is issued. Because SEC requirements regarding becoming a large accelerated filer or accelerated filer include at least six months lag time,[164] we do not believe that an additional transition period would be necessary under our rules.

We solicited comment on whether we should require engagement-level metrics for audits of investment companies (other than BDCs that are accelerated filers or large accelerated filers) or non-accelerated filers. Several commenters supported excluding one or more categories of such entities from metrics reporting because the proposed metrics would be less likely to assist in investment and voting decisions. On the other hand, one commenter recommended including publicly traded "closed end" investment companies, registered open end investment companies, and broker-dealers that are publicly traded on the basis that some

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[164] Under the SEC definitions of "large accelerated filer" and "accelerated filer," the determination that an issuer has become a large accelerated filer or accelerated filer is generally based on the public float as of the end of the issuer's second fiscal quarter, to take effect as of the end of the fiscal year. See Exchange Act Rule 12b-2(3), 17 C.F.R. §240.12b-2(3). We note that issuers that are eligible to use the requirements for smaller reporting companies under the revenue test in paragraph (2) or (3)(iii)(B) of the SEC's "smaller reporting company" definition could cease to be accelerated filers based on a determination made at or after the fiscal year end. However, since metrics requirements would not apply in such a case, we do not believe any transition period is necessary.

mutual fund investors ratify the appointment of the auditor and audit committees presumably approve for the auditor for these companies.

As proposed, we are not requiring engagement-level reporting on these investment companies and non-accelerated filers. For audits of investment companies, we continue to believe that the arguments underpinning requests for additional information about audits and auditors will not apply, or apply with the same force, in these situations, where shareholder ratification of the appointment of the auditor may not be typical and the metrics would be less likely to assist in investment and voting decisions. Regarding the reporting of non-accelerated filers, as discussed in Section III.C.1.i. above, these issuers have significantly smaller market capitalization per issuer on average and we are concerned that the benefits associated with such reporting would not justify the costs.

### 2. Reporting of Firm-Level Metrics (Form FM)

We proposed that firms report their firm-level metrics annually on a new Form FM, *Firm Metrics*. Of those commenters that support reporting firm-level metrics, some also explicitly expressed support for reporting annually on Form FM. One commenter recommended that Form FM be amended to explicitly include the definitions of the metrics and metric formulas to provide pertinent information to enhance the context and understandability for users.

The proposal asked whether, rather than reporting on Form FM, firms should report firm-level metrics, as of March 31 on Form 2, which is due on June 30. One commenter stated that the firm-level metrics could be reported on Form 2 to simplify the reporting for firms and consolidate the information. One commenter did not support reporting firm-level metrics on Form 2 stating that between issuer filings through March 31 and the performance of procedures on the first quarter filings through May, firms are exceptionally busy through the middle of May each calendar year. Another commenter questioned whether the information, being reported only annually, would be too old to assist decision-making.

Taking into account commenter feedback, we continue to believe that reporting firm-level metrics publicly on a new Form FM filed by November 30 will provide investors and other stakeholders with timely and useful information about auditors and will provide a basis of comparison for the engagement-level metrics, where applicable. We do not believe that Form 2 would be the appropriate place to report the firm-level metrics because the due date of Form 2, June 30, falls after the general timing of shareholder meetings (typically April through June for issuers with a calendar fiscal year) and this information would generally arrive too late to be considered in deciding how to vote on ratification of the appointment of the auditor. We believe audit committees would also benefit from having this information earlier, since it could

be useful when determining whether to reappoint the auditor.[165] While firm metrics would be reported only once a year, we believe that the information they convey would still be useful, both to investors (who otherwise have access to extremely limited information about the auditor) and to audit committees (who may benefit from standardized firm-wide information that helps put their engagement in context).

The information disclosed on Form FM will be available in a searchable database on the Board's website, similar to the Form AP database. As noted above in Section III.A.8, in addition to the required firm-level metrics, firms will have the option to provide a brief narrative to accompany each metric. In response to the commenter that emphasized the importance of including all definitions and metric formulas in Form FM we have expanded Part III of Form FM, *Terminology*, to include all of the definitions used in the metrics, not just those used in multiple metrics. As proposed, the formula for each required metric is included in Part IV, *Metric Calculations, Reporting and Discussion* of Form FM.

The proposal provided that the reporting period for Form FM would generally be the 12-month period ended September 30 in each year[166] and filed on or before November 30, 61 days after the end of the reporting period.

Some commenters expressed support for the proposed reporting period ending on September 30. One of these commenters also suggested that consideration be given to allowing firms to pick a reporting period based on their firm's cycles. A few commenters expressed concern with the reporting date of September 30 and instead suggested firms be permitted to choose their own timing for Form FM. These commenters expressed the following views:

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[165] *See* Letter from Center for Audit Quality (Aug. 1, 2024) at 3 ("The majority [59%] of audit committee members surveyed agree some standard information about auditors should be considered when making their selection and performing their oversight responsibilities").

[166] Exceptions to the proposed reporting period of firm-level metrics reported on Form FM included the proposed metrics for Quality Performance Ratings and Compensation and Audit Firms' Internal Monitoring. The proposal stated that "[these] proposed firm-level metrics relate to activities for which firms may already have defined periods or cycles that may not align with our proposed reporting date. In these cases, we propose that the time period covered by the metrics may be tailored to a firm's existing processes and procedures." Neither of these metrics are included in the metrics we are adopting today. However, we are adopting a metric related to the Training Hours for Audit Personnel metric which will permit firms to use an already-established training calendar cycle for calculation and reporting of this metric, which may not align with the Form FM reporting period.

- The reporting date for firm-level metrics should not matter to investors, therefore the PCAOB should consider firm input as to the date that best aligns with their internal processes.

- Concern about the amount of work firms will be required to do on this new form along with the QC 1000 requirements and the relationship with information reported on Form 2 on a different time period. This commenter suggested that the Board should undertake a comprehensive review of all reporting requirements, systems, reporting, and dates.

- Concern that small- and mid-sized firms will be particularly burdened with having to evaluate the quality control system under the newly adopted quality control standard, support the annual inspection, and assemble data for reporting in Form FM all at the same time.

We do not believe that permitting firms to choose their own timing for Form FM would ultimately serve the users of the metrics, because of the enhanced comparability that a common measurement date and measurement period provide. In particular, audit committees, who may seek to consider comparative metrics when determining which audit firm to appoint, would not be served by using potentially outdated or non-comparable data from a firm. The proposed reporting date aligns with the date the firm is required to evaluate its QC system under QC 1000, which was adopted by the Board and approved by the SEC on September 9, 2024. While we understand that this date will cause some firms to have additional PCAOB reporting responsibilities simultaneously, we continue to believe that this timing is preferable since it is prior to the calendar year end and the traditional busy period for many firms, which we believe would reduce potential resource or time constraints and further benefit firms.

Two commenters supported the proposed November 30 due date of Form FM. One commenter, who supported the proposed November 30 due date, specifically found it helpful that the date aligned with QC 1000. Some firms expressed concern that the proposed due date would create challenges going forward for firms to support their annual inspections, evaluate the quality control system, and assemble data for reporting in Form FM all at the same time. One commenter suggested that the due date for Form FM should be three months from the end of the reporting period, or December 31. Another commenter expressed concern that a 61-day period may not be sufficient to allow firms to accurately and completely collect, assemble, and report the metrics and instead suggested that firms should be permitted to choose their own filing date. One commenter, who supported the proposed reporting date of September 30, suggested the PCAOB consider a longer period of time in which to submit Form FM in the initial years after the effective date.

We believe the 61-day period will provide sufficient time for firms to accumulate data and calculate the metrics and report to the PCAOB. In addition, as discussed above in Section III.B.3, we have reduced the scope of the following metric areas in particular: (i) Partner and Manager Involvement, Workload, and Allocation of Audit Hours, to include only large accelerated filer and accelerated filer engagements; and (ii) Industry Experience, to limit the reporting to those firms that issued five or more audit reports for accelerated filers and large accelerated filers, combined, during the reporting period. All of these changes should further reduce the reporting effort and help to address commenter concerns. A benefit of aligning the Form FM reporting period and filing deadline with QC 1000 is that some firms, if they choose, could also use these metrics in their monitoring and remediation process as part of the QC system, enabling the firm to use comparable information underlying both reporting obligations for Form QC and Form FM. Under the final rules, as proposed, reporting on Form FM is due on or before November 30, 61 days after the end of the reporting period. In addition, see discussion of the effective date in Section VI.

Form FM is adopted with the following modifications:

- Making conforming revisions to reflect the changes to metrics discussed above (see Section III.B.3).

- Related to the optional narrative, (i) expanding the character limit to 1,000 characters and (ii) adding additional instructions for firms that elect to provide the optional narrative (see Section III.A.8).

- Rearranging instructional language within the form and expanding Part III of Form FM to include all terminology used in the metrics (discussed above).

- Removing references to 40-F filers (see Section III.C.1.i).

Together with new Form FM, we also proposed a new reporting rule, Rule 2203C, which did not draw comment and is adopted substantially as proposed, and making conforming changes to Rules 2205 and 2206. The text of Rule 2203C; Form FM, together with the form instructions; and the conforming amendments are included in Appendix 1.

### 3. Reporting of Engagement-Level Metrics (Form AP)

We proposed to require firms to report engagement-level metrics on Form AP, along with the already required disclosure of the name of the engagement partner and information

about other firms involved in the audit.[167] We believe that Form AP provides an established mechanism for conveying engagement-level information that is familiar to investors and other stakeholders.[168] Reporting on Form AP will allow access to the engagement-level metrics in a centralized location and will allow for the dissemination of the metrics through already established data channels. Form AP is also downloadable, which will provide users of the information the ability to perform comparisons across engagements, including analyses of the entire Form AP data set.

We proposed adding a new section to Form AP for firms to report the required metrics. As noted above, in addition to the specific engagement-level metrics, we proposed that the firm would be able to provide an optional narrative description to accompany each metric. As proposed, the firm would have been able to provide up to 500 characters as part of their narrative description to provide context to facilitate the reader's understanding of the metric. To reflect Form AP's broader content, we also proposed to rename it "Audit Participants and Metrics." The text of the Form AP amendments and the form instructions are included in Appendix 2.

Commenters who supported public reporting of engagement-level metrics generally agreed with reporting on Form AP. However, several commenters disagreed with public reporting of engagement-level metrics. We have addressed these comments above in Section III.A.2. One commenter suggested that the reporting date should be changed to November to align to the audit committee's considerations of reapproving a firm and when considering the following year's audit plan. Additionally, one commenter voiced their concern that there is mixed evidence on the influence of Form AP disclosures on decision-making.

We are adopting the requirement as set forth in the proposal to report engagement-level metrics on Form AP and rename the form Audit Participants and Metrics. Correspondingly,

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[167] *See* PCAOB Rule 3211. PCAOB Rule 3211 requires the filing of a report on Form AP regarding an audit report the first time the audit report is included in a document filed with the SEC. In the event of any change to the audit report, including any change in the dating of the report, PCAOB Rule 3211 requires the filing of a new Form AP the first time the revised audit report is included in a document filed with the SEC. If the auditor's report is reissued and dual-dated, the firm is required to file a new Form AP that would reflect the most updated information of the proposed engagement-level metrics (*e.g.*, total audit hours as of the latest audit report date based on the cumulative total audit hours). For most audits, Form AP is due within 35 days after an audit report is first included in an issuer SEC filing. The entire Form AP data set (updated daily) and data dictionary are available to download in CSV format under the section, "Download the entire data set," at https://pcaobus.org/resources/auditorsearch.

[168] Information related to usage statistics can be found on the PCAOB's website (https://pcaobus.org/resources/auditorsearch).

we have retitled Rule 3211 as *Audit Participants and Metrics* and made a conforming amendment to AS 3101.20. We are making certain amendments to the requirements for reporting on Form AP as follows:

- Conforming revisions to reflect the changes to include the metrics discussed above (see Section III.B.3).

- Related to the optional narrative, (i) expanding the character limit to 1,000 characters and (ii) adding additional instructions for firms that elect to provide the optional narrative (see Section III.A.8).

Form AP's deadline of 35 days after the issuance of the auditor's report already takes into account the timing of the proxy vote for most issuers.

#### 4. Amendments to Form FM and Form AP

As is required for other PCAOB forms, we proposed that firms be required to amend Form FM or Form AP to correct inaccurate information or provide omitted information that should have been included.[169]

Some commenters requested that we consider adopting some level of materiality or de minimis threshold for the proposed metrics reporting and specifically address how firms should consider whether to amend their reporting when differences arise. These commenters expressed the following views:

- Although a materiality concept, on its own, will not eliminate the challenges currently identified and those that are unknown, it may help reduce confusion to investors and other stakeholders resulting from the need to report amendments caused by immaterial changes in estimates and unintentional errors and to help avoid unnecessary penalties for materially correct reporting.

- The risk of enforcement for minor, unintentional errors in reporting may also play a role in public accounting firms' decision to cease auditing public companies.

- Guidance would be essential for implementing any final standard effectively to balance the costs of compiling and reporting the information and this guidance

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[169] The requirements for amendment of Form FM are similar to those that apply to Form 2. *See* https://pcaobus.org/about/rules-rulemaking/rules/form_2; *see also, e.g.,* Staff Questions and Answers Annual Reporting on Form 2, at Q34, *available at* https://assets.pcaobus.org/pcaob-dev/docs/default-source/registration/rasr/documents/staff_qa-annual_reporting.pdf?sfvrsn=5e7259ff_0.

should extend to the evaluation of differences that may arise in the disclosure of participating firms on Form AP.

- The proposal should be amended for the application of materiality thresholds based on reasonable assurance.

- The Board should consider revisions to Rule 3211 to add materiality thresholds based on reasonable assurance and clarify whether the current guidance regarding amendments would extend to all metrics as well as how routine corrections and re-allocations of time entries and other matters affecting metrics reported on Forms FM are expected to be handled.

- If the PCAOB does not adopt a materiality threshold for Form FM, firms may need to consider which controls need to operate at a level of absolute assurance, which the firm stated would add significant effort and cost.

- The final rule should include a safe harbor for reporting that includes unintentional and immaterial deviations from an otherwise accurate reflection of a metric.

- The amendments should include a mechanism for revisions and a statute of limitations, such as reporting of time, should be included in the final rule. We believe that the reference to statute of limitations is intended to request a specified period after filing beyond which no amendments would be required for corrections.

One investor-related group indicated that they would not object if the PCAOB established a de minimis threshold for unintentional inaccuracy in reporting metrics. Another commenter recommended that the PCAOB establish a de minimis threshold for unintentional inaccuracy that applies to all firm reporting, not just in relation to the proposal.

We are not adopting a materiality or de minimis threshold in connection with the obligation to amend forms to correct information that was incorrect at the time the report was filed or to provide information that was omitted from the report and was required to be provided at the time the report was filed. Historically, the Board has not established, and has not found necessary, materiality or de minimis thresholds in connection with form amendments. As a commenter acknowledged, a materiality or de minimis threshold will not necessarily eliminate challenges commenters have identified or those that have yet to be identified in connection with potential corrections. Indeed, we believe that implementing a materiality or de minimis threshold would introduce unnecessary complexity and uncertainty to the form amendment process and, further, would potentially threaten, or be perceived to threaten, the accuracy and reliability of reported information, thereby undermining the intended purpose of the amendments.

Similarly, the Board has not historically provided, or believed necessary, a safe harbor provision for unintentional errors and such a provision would potentially compromise the accuracy and reliability of reported information. Likewise, the Board has not historically provided, or believed necessary, a "statute of limitations" to limit the time period for which amendments would be necessary, and such a provision could potentially compromise the value of the forms in conducting historical research. In the inspection and enforcement context, the Board can exercise its discretion on a case-by-case basis.

Consistent with existing Form AP guidance, no amendments to Form FM or Form AP would be needed solely to reflect changes in the metrics that would result from differences between reasonably estimated data and actual data, in the event such information becomes available after the filing deadlines of the forms. As discussed above in Section III.A.7, in calculating both firm- and engagement-level metrics, actual data is required to be used, if available. If actual data is unavailable, firms may use a reasonable method to estimate such data. For example, if a firm used a reasonable method to estimate hours worked by partners and managers at the end of a reporting period, and those partners and managers subsequently submit timesheets for that period that include additional hours worked above the estimate used by the firm on Form FM or Form AP, the firm would not be expected to file an amended report for any deviations.

At present, we believe applying the existing Form AP guidance is appropriate and sufficient for the final rules. We will monitor for issues connected to form amendments and consider updates to implementation guidance as appropriate. Addressing issues as they arise through implementation guidance—as opposed to establishing a materiality or de minimis threshold in the adopting release or through a rule amendment—will help ensure that any guidance is informed by, and better tailored to, issues raised by experience under the final rules rather than speculative concerns. We believe monitoring for the need for guidance is a better solution than implementing a materiality or de minimis threshold in the adopting release or through rule amendment.

Lastly, regarding the comment that the amendments should include a "mechanism for revisions," we are not aware of any deficiencies in the current mechanism for amending forms and believe it suffices.

### 5. Inclusion of Metrics in the Audit Report

In addition to the proposed reporting on Form FM and Form AP, we solicited comment on whether some or all of the firm-level and engagement-level metrics, together with any additional narrative that the firm may choose to provide, should also be included in the audit reports the firm issues for audits of large accelerated filers and accelerated filers. While some commenters supported inclusion of the metrics in the audit report, many commenters

disagreed with this approach citing that, for example, it could potentially detract from the clarity and purpose of the report, could result in delays in the issuance of audit reports, and amendments to the audit report for corrections to metrics could create unnecessary burden for issuers and confusion for investors.

Taking into account commenter feedback, including both the potential benefits and unintended consequences, we are not requiring inclusion of the metrics in the audit report at this time.

### 6. Confidential Treatment and Conflicts with non-U.S. Law

#### i. Requests for confidential treatment not permitted

The primary objective of our rulemaking is to enhance public transparency regarding audits and auditors, which inherently involves the disclosure of new information. We did not propose to allow firms to request confidential treatment for the proposed metrics but requested comment on this approach and specifically requested that commenters identify any laws that realistically might prevent a firm from disclosing the information required by the metrics. In response, firms and firm-related groups expressed general concern about the potential for conflicts or focused on the proposed disclosure of engagement-level metrics, such as hours worked per week on an engagement, engagement team tenure, and experience by industry, and the percentage of hours contributed by specialists and shared service centers. However, we disagree with the assertion that all previously undisclosed information should be considered sensitive by default. The information called for by the metrics does not pertain to proprietary methodologies or operational strategies that could give competitive advantages if disclosed. Rather, the information called for is descriptive of the audit process itself. We believe that general claims of sensitivity, absent specific legal prohibitions or clear practical ramifications, are not sufficient to outweigh the benefits of increased transparency. Our rulemaking is guided by the goal of deepening the public's understanding of audit practices in audits of issuers, consistent with our statutory responsibilities.

Some firms and firm-related groups raised concerns regarding the potential antitrust implications of disclosing detailed metrics about engagement staffing and workload allocations. One of these commenters referenced the Supreme Court's ruling in *United States v. Container Corporation of America*,[170] which highlights the competitive risks associated with the exchange of confidential information among competitors, particularly in concentrated industries. However, it is important to distinguish between the exchange of information directly among competitors – which may indeed raise antitrust issues – and this rulemaking's mandate for

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[170] 393 U.S. 333 (1969).

public disclosure. The information that the PCAOB is requiring firms to disclose is not shared privately among competing firms but is made publicly available to all stakeholders, including investors, audit committees, and the general public. This type of disclosure is fundamentally different from the scenarios associated with anti-competitive behavior under antitrust laws.[171] In light of these factors, we believe the metrics do not contravene the antitrust laws, and the public benefit of these disclosures outweighs any theoretical competitive risks suggested by the commenters.

Two commenters raised concerns regarding Section 105(b)(5) of Sarbanes-Oxley, which protects information prepared or received by or specifically for the Board in connection with a PCAOB inspection or investigation. It is important to note that Section 105(b)(5) specifically protects only information that is prepared or received by or specifically for the Board in connection with a PCAOB inspection or investigation. The metrics we are requiring, however, are not prepared or received under such confidential circumstances. These metrics are intended for public disclosure to enhance transparency across the audits of issuers and to provide stakeholders – including investors, audit committees, and the general public – with important insights into audit practices. Therefore, requiring the public disclosure of these metrics does not violate the provisions of Section 105(b)(5).

Additionally, one firm and a firm-related group raised concerns regarding the AICPA Code of Professional Conduct,[172] which provides that a member in public practice shall not disclose confidential client information without the specific consent of the client. It is important to differentiate the information required by the metrics from the client-specific confidential information covered under the AICPA Code. The metrics require information such as workload data, staffing allocations, and experience levels of personnel involved in audits of issuers. This information does not include confidential client information or specific details about client engagements that would be protected under the AICPA Code. Instead, it focuses on the operational aspects of registered firms and the audits they perform that are important for the public to understand and assess the audits of issuers. The objective of this rulemaking is to

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[171] The purpose of these disclosures is to enhance transparency and accountability in the audits of issuers, allowing investors and other stakeholders to make informed decisions and hold auditors accountable. This aligns with our statutory mission to protect investors and the public interest, rather than to facilitate or enable competitive positioning among firms. Furthermore, the disclosure of such information by a regulatory authority for the purposes of transparency and accountability does not fall under the purview of antitrust concerns, as it does not facilitate collusion or the sharing of competitively secret information in a manner that would distort market dynamics. Instead, it ensures that all market participants and stakeholders have access to the same information.

[172] *See*, e.g., AICPA Code of Professional Conduct 1.700.001 ("A member in public practice shall not disclose any confidential client information without the specific consent of the client").

enhance transparency and accountability within the audits of issuers, and the information required by the metrics supports this goal without requiring auditors to breach their confidentiality obligations to clients.[173]

Finally, although some firms raised generalized concerns about potential conflicts with foreign laws, they did not provide specific examples that would justify prohibiting the public disclosure of the information in the metrics or warranting its confidential treatment. As discussed more fully in Section III.C.6.ii below, we do not believe that any law, whether foreign or domestic, provides a reasonable basis for withholding the information in the metrics from public disclosure.

As such, we are not permitting firms to request confidential treatment for the metrics. This approach is consistent with our belief that these metrics will provide valuable additional information, context, and perspective on audit firms and audit engagements, which can be used by investors, audit committees, and other stakeholders.

However, we are mindful of our obligation to protect information that is confidential under applicable laws relating to the confidentiality of proprietary, personal, or other sensitive information. To balance these concerns, the final metrics have been specifically designed to exclude information that could reasonably qualify for confidential treatment protection, such as personally identifiable, methodological, or client-specific information. Additionally, we provide firms the option to include a narrative description with each metric to explain or contextualize the disclosures, allowing firms to clarify any potentially misleading information that could be viewed as sensitive.

By adopting this approach, we believe that prohibiting confidential treatment requests on Forms FM and AP will further the public interest while adhering to our obligation to protect certain categories of firm information.

In light of the objectives of this rulemaking, we have decided not to permit confidential treatment for the metrics required on Forms FM and AP.

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[173] Similarly, some firms raised concerns about optional narrative disclosures, particularly regarding the need to maintain client confidentiality and protect commercially sensitive information. We have carefully designed the required metrics to avoid such issues. We expect firms to tailor their optional narrative responses in a similar manner, should they choose to provide them. This will enable firms to meet the transparency objectives of Forms FM and AP without compromising client confidentiality or disclosing sensitive commercial information.

### ii. Assertions of conflicts with non-U.S. law

We did not propose to allow firms the opportunity to assert conflicts with non-U.S. laws on either proposed Form FM or Form AP, as proposed to be amended. The proposal acknowledged that there may be certain limitations with respect to the data or information about a firm, its personnel, or the performance of the firm's engagements that a firm may communicate publicly because it may conflict with a non-U.S. law, and asked commenters to describe any such laws and the proposed metrics to which it was realistically foreseeable that they would apply.

Some commenters disagreed with the proposal not to allow firms to assert conflicts. One commenter strongly urged the Board to maintain the well-established rulemaking history that recognizes and respects non-U.S. firms' distinct legal obligations and preserves the right for firms to assert a conflict of law. The Board is committed to cooperation and reasonable accommodation in its oversight of registered non-U.S. firms, and in the past has generally provided non-U.S. firms the opportunity to at least preliminarily withhold some information from its existing forms on the basis of an asserted conflict with non-U.S. laws. However, the Board has not provided for firms to assert such a conflict with respect to all information required by those PCAOB forms. Moreover, we note the Board has never permitted such withholding of information for Form AP. In addition, even where the Board has allowed registered firms to assert legal conflicts in connection with other forms, that accommodation does not entail a right for a firm to continue to withhold the information if it is sufficiently important.[174]

Other commenters suggested there were potential conflicts between reporting of the proposed metrics and current laws:

- One commenter strongly recommended the Board consult with others, including the International Forum of Independent Audit Regulators (IFIAR), to determine whether any law would prohibit a firm from providing information requested in the proposal

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[174] *See Improving the Transparency of Audits: Rules to Require Disclosure of Certain Audit Participants on a New PCAOB Form and Related Amendments to Auditing Standards*, PCAOB Rel. No. 2015-008 at 37; PCAOB Rel. No. 2008-004 at 37-38 n.38 ("Rule 2207(e) preserves the Board's authority to obtain information by preserving the possibility that, in an appropriate case involving sufficiently important information that is not otherwise forthcoming (e.g., through cooperation with non-U.S. regulators), the Board can ultimately put the firm to the choice of providing the information or being subject to a sanction for violating the Board's rules.").

and further diminish comparability (or increase the risk of misuse) of affected metrics.

- A commenter also asserted that there are laws in various jurisdictions (e.g., France and Switzerland) that could have a significant impact on cross-border transfer of data and the comparability of such data.

- Other commenters stated that firms with a small number of relevant issuer engagements, for example, disclosure of certain engagement-level metrics may lead to breach of confidentiality for client information, issues with disclosure of commercially sensitive information (e.g., time spent) or disclosure of personal data in breach of regulations, and potentially violate laws and regulations within some non-U.S. jurisdictions. (e.g., General Data Protection Regulation ("GDPR")).[175]

- A commenter stated that based on their understanding from non-U.S. firms (although the commenter firm itself is not a non-U.S. firm) some of the proposed new required disclosures go beyond what non-U.S. regulators require and may lead to violations of local laws resulting from disclosure of information that non-U.S. auditors are required to keep confidential under professional secrecy obligations and/or laws and regulations governing disclosure of personal information.

- Another commenter stated that the proposed expansion of mandatory disclosures directly increases the likelihood that a non-U.S. firm may be legally barred from providing the relevant information.

One commenter encouraged the Board to include a specific provision that acknowledges that any required disclosure by a firm would need to comply with applicable local laws and regulations, while another stated that allowing firms to assert conflicts with non-U.S. laws would still require those firms to obtain legal opinions to support withholding the information.

One of those commenters stated that information published where only one engagement is performed will be clearly identifiable to an individual engagement, which they asserted may breach personal data requirements under legislation such as GDPR. However,

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[175] *See* Regulation (EU) 2016/679. The GDPR was passed by the European Union and became effective on May 25, 2018. The complete text of the regulation is available at https://eur-lex.europa.eu/eli/reg/2016/679/oj. Section 1 of Article 2 of the GDPR applies to "processing of personal data wholly or partly by automated means and to the processing other than by automated means of personal data which form part of a filing system or are intended to form part of a filing system."

neither this commenter nor any other articulated how any of the required metrics could reveal information allowing any individual to be directly or indirectly identified in contravention of GDPR or similar laws.

In considering whether to allow the opportunity to assert conflicts, the Board has considered both whether it is realistically foreseeable that any law would prohibit providing the required information and, even if it were realistically foreseeable, whether allowing a firm preliminarily to withhold the information is consistent with the Board's broader responsibilities and the particular regulatory objective.[176] The comments provided on this subject have not identified with sufficient specificity a realistically foreseeable likelihood that a law would prohibit providing the required information. The concerns that were mentioned were expressed in very general and hypothetical terms. Moreover, with respect to the suggestion that the Board consult with IFIAR, we note that staff did advise a number of our non-U.S. counterparts regarding the proposal with a view to facilitating their participation in our notice and comment process if they so chose, and none submitted comment letters.

In addition, we continue to believe that allowing a firm preliminarily to withhold the required information is inconsistent with the Board's broader responsibilities and the particular regulatory objective of this rulemaking, namely public transparency.[177] This is the case notwithstanding that firms, as a commenter observed, have to provide a legal opinion regarding a conflict of law under the Board's rules relating to asserted conflicts. Accordingly, we are not permitting assertions of conflicts for Form AP or Form FM in the final amendments.[178]

With respect to the commenter suggestion that we include a specific provision that acknowledges that any required disclosure by a firm would need to comply with applicable local laws and regulations, we believe such a provision could be construed as tacit permission to withhold information without complying even with the existing requirements under the Board's rules related to the assertion of conflicts. Given that this would be an even more permissive framework than currently exists for withholding information where assertions of conflicts are permitted under our rules, the same analysis applies with more force to this suggestion.

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176 *See* PCAOB Rel. No. 2015-008 at 37; PCAOB Rel. No. 2008-004 at 36.

177 *Id*.

178 If an actual conflict were to materialize, the Board would have tools to address it. For example, Section 106(c) of Sarbanes-Oxley authorizes the Board to, subject to the approval of the Commission, exempt any foreign public accounting firm, or any class of such firms, from any provision of the rules of the Board.

We believe our notice and comment process, together with our oversight experience, sufficiently inform this policy choice.

#### 7. Structure of Metrics Data

Several commenters suggested that data on Form AP and Form FM be filed using eXtensible Business Reporting Language ("XBRL") to be consistent with SEC registrant filings. We note that the data on Form AP will continue to be downloadable and machine-readable. However, making a change to require reporting using XBRL would introduce additional costs for all firms that file Form AP. Therefore, reporting on Form AP and Form FM will be done using the same platform as our other reporting forms (currently, our web-based RASR system which uses XML and, in the future, potentially new means of information exchanges as the PCAOB continues to modernize its reporting technology aimed at simplifying and automating data collection, processing, and interoperability).

### D. Documentation

For firm- and engagement-level metrics, we proposed that the firm would be required to retain documentation in sufficient detail to enable an experienced auditor, having no previous connection with the determination of the metrics, to understand the calculations, the data on which they are based, and the method used to estimate data when actual amounts were unavailable. This is similar to the "experienced auditor" threshold specified in AS 1215, *Audit Documentation*.

We solicited comment on whether the proposed documentation requirement is clear and appropriate. One commenter agreed that the documentation requirement is clear and appropriate, while another commenter recommended further clarifications. The commenter recommended explicitly referring to AS 1215 as the commenter believes there are no explicit documentation requirements within Proposed Rule 2203C and Form FM instructions related to firm-level metrics.

We are adopting the proposed documentation requirement as proposed. We described the documentation requirement for Form FM in General Instruction 7, that the firm should retain documentation in sufficient detail to enable an experienced auditor, having no previous connection with the determination of the metrics, to understand the computations of amounts, the amounts on which they are based, and the method(s) used to estimate the amounts when actual amounts were unavailable.[179] We believe this is sufficient to introduce the concept of "experienced auditor" into the documentation requirement for Form FM, similar to the

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[179] Rule 2203C requires that firms file Form FM by following the instructions to Form FM.

"experienced auditor" threshold specified in AS 1215. Existing Form AP included a similar documentation requirement and under the amendments to Form AP adopted today, this requirement appears in General Instruction 10, as amended.

## E. Additional Firm and Engagement Metrics Considered

In addition to the firm and engagement metrics we are adopting, we considered and solicited comment on a number of (i) proposed metrics included in Section III.B.2 of the proposal and (ii) potential additional metrics included in Section III.E of the proposal. We have determined not to adopt these additional firm and engagement metrics at this time. The additional metrics are discussed below and in Section IV.D.3.iv.

### 1. Proposed Firm and Engagement Metrics

#### i. Audit Resources – Use of Auditor's Specialists and Shared Service Centers

The proposal included metrics relating to the use of auditor's specialists[180] and shared service centers ("SSCs"),[181] which were intended to help users gain a greater understanding of the use of these audit resources, including the frequency with which firms use specialists and SSCs on their engagements at the firm level generally and, at the engagement level, to provide the context required to understand the extent of the use of auditor's specialists and SSCs on a particular issuer engagement.

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[180] A specialist, as used in this context, includes both auditor-employed specialists, as defined in AS 1201.C1, and auditor-engaged specialists, as described in AS 1210.01. Under those definitions, a specialist is a person possessing special skill or knowledge in a particular field other than accounting or auditing. Specialists would generally not include members of the engagement team whose specialization is in the fields of either IT or income taxes (tax) because IT and tax are specialized areas of auditing and accounting. However, if IT or tax specialists are employed or engaged in a capacity other than specialized auditing and accounting as part of the issuer engagement, it may be appropriate to include them as specialists.

[181] A shared service center is described as an associated entity of a firm, set up by a network of accounting firms, that, among other things, supplies those firms with personnel to assist in the performance of audits, and that is not itself an other accounting firm. *See* PCAOB, *Staff Guidance: Form AP, Auditor Reporting of Certain Audit Participants, and Related Voluntary Audit Report Disclosure Under AS 3101, The Auditor's Report on an Audit of Financial Statements When the Auditor Expresses an Unqualified Opinion*, (updated July 1, 2024). ("Staff Guidance on Form AP"), at n. 24, *available at* https://assets.pcaobus.org/pcaob-dev/docs/default-source/standards/documents/07-01-2024-transparency-implementation-guidance.pdf?sfvrsn=b9753eb_2.

At the firm level, the proposal set forth requirements for firms to provide the percentages of issuer engagements that used auditor's specialists and shared service centers, respectively. At the engagement level, the proposal provided that firms would report the percentage of total audit hours provided by auditor's specialists and by shared service centers for each audit the firm performed of an accelerated filer and large accelerated filer.

Commenters on the proposed use of audit resources metrics who generally opposed the disclosure of the metrics stated that the information was unlikely to be readily interpretable or useful because of comparability challenges. In contrast, one commenter found the proposed descriptions for the resource metrics to be appropriate. Some commenters who supported these metrics noted that challenges with comparability might be able to be overcome through use of the proposed voluntary narrative. Some commenters, who were not generally supportive of the proposed Audit Resources metrics, suggested that if they were adopted they should be limited to firms' issuer audit practices.

### a. Use of Auditor's Specialists

Some commenters were generally supportive of the firm-level metric for specialists. One commenter stated it would be supportive of disclosure of the specialist metrics with modifications to disclose the percentage of hours incurred by specialists on issuer audit engagements. Another commenter suggested disaggregating time among independent specialists, auditor-affiliated specialists, and management-affiliated specialists, and breaking down the specialist metrics by industry.

Among the commenters that were not supportive of the specialist metrics, several concerns were raised including concerns with the proposed method for calculating auditor-engaged specialists hours when actual hours were not available, the lack of visibility to the hours incurred by specialists, the need to rely on information from other auditors, challenges with comparability and data collection, and the overall complexity of the proposed metrics. One commenter suggested that the engagement-level metric for specialists would be inconsistent with other Form AP instructions and may be misleading. Some commenters responded that the amount of specialist involvement on an engagement and overall at the firm level is highly contextual and the relationship to audit quality is not one dimensional. One commenter refuted the objective of providing investors a basis for discussion with management with respect to the use of specialists, stating that investors almost never take advantage of the opportunity to ask questions.

Alternative approaches for specialist metrics were also suggested by commenters. One suggested an alternative approach for engagement-level specialist metrics such as utilization metrics and qualitative descriptions, supported by narrative disclosures to provide necessary context and clarity. This commenter also suggested an alternative firm-level metric for

specialists based on the average percentage of usage of specialists across all of the firm's engagements, potentially covering only engagements where specialist hours exceeded a minimum percentage of total audit hours. Two commenters suggested the Board add an additional metric disclosing the percentage of audit hours incurred by specialists on issuer audit engagements (as a percentage of the total audit hours on issuers). Another commenter also suggested that using hours worked rather than the number of engagements as the basis for the calculation would provide more useful information at the firm level. This commenter also suggested disclosure of the use of specialists, and their hours on a CAM-by-CAM basis, as well as overall.

Two commenters responded to the question in our proposal about including thresholds for resource metrics. One stated that including de minimis amounts would result in implementation challenges. The second, however, made the opposite argument, stating that including all specialist and SSC hours in audit resource metrics without a threshold would ensure that the metric remains straightforward and inclusive of all relevant contributions and provide a more complete picture of a firm's audit processes and resource utilization. Most commenters that responded to the question as to whether resource metrics should be further disaggregated, e.g., by industry, replied that this would be overly burdensome without added value. However, another commented that use of auditor specialists would be more helpful if broken down by industry.

### b. Use of Shared Service Centers

Some commenters were supportive of SSC metrics. One of them stated that the use of SSCs was growing but not well understood, and that narrative context would be necessary.

Other commenters raised multiple questions with respect to SSCs. Several of these were in relation to the definition of an SSC, which was proposed to be consistent with the definition used in Form AP, stating that there are many different approaches to the use of other resources than what is encompassed in that definition, which could lead to misunderstanding and lack of comparability. One of these commenters stated that the work of SSCs is dependent on the structure and resources of each firm and its SSCs and the specific needs of the individual engagement. Another commenter stated that the definition proposed a shared service center encompassed only those centers that are set up by a "network" of accounting firms and would not encompass an outsourcing center set up by a single firm. This commenter suggested the definition be revised to encompass all services that are not under the direct supervision of the engagement partner. Some commenters were concerned that SSC metrics would be misinterpreted as indicating that greater SSC hours indicated lower quality. Some commenters supported evaluation of the use of SSCs at the engagement level, but did not support publicly disclosing this information. Another commenter said that, given that engagement team members routinely work remotely, there should not be a difference between that arrangement

and SSCs and, as a result, the metric would not be meaningful. This commenter also stated that it would not be meaningful to provide an explanation of work performed at an SSC because it is all ultimately the responsibility of the audit partner.

We have taken commenter input, as well as observations from PCAOB oversight activities and the relevant academic literature, into account, and have determined not to adopt the proposed firm- and engagement-level audit resources metrics at this time. In doing so, we recognized, as discussed above, that several commenters suggested there would be challenges relative to comparability and data collection, and there would also be the potential for misunderstanding by users of the information. As we stated in the proposal, these are highly contextual measurements because the use of the work of specialists is generally performed to satisfy needs specific to an industry or issuer and the use of the work of SSCs is dependent on the structure and resources of both the firm and the SSC, as well as the specific needs of individual engagement teams. We acknowledge that the nature and uses of SSCs continue to expand. As they do, we expect to continue to study and focus inquiries in this area to better understand the impact of SSCs on audit quality, firm economics, and engagement staffing models. We anticipate these efforts will inform future consideration of whether additional guidance or other regulatory action is warranted.

#### ii. Audit Hours and Risk Areas

The proposed engagement-level metric would have required firms to calculate the time incurred by all partners and managers on the engagement team in auditing the areas of significant risks,[182] critical accounting policies and practices,[183] and critical accounting estimates,[184] in aggregate, as a percentage of total audit hours incurred by partners and managers on the engagement team. Because a firm-level metric would have been heavily

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[182] As defined in paragraph .A5 of AS 2110, *Identifying and Assessing Risks of Material Misstatement* ("risk of material misstatement that requires special audit consideration").

[183] As defined in AS 1301.A4 ("A company's accounting policies and practices that are both most important to the portrayal of the company's financial condition and results, and require management's most difficult, subjective, or complex judgments, often as a result of the need to make estimates about the effects of matters that are inherently uncertain.")

[184] As defined in AS 1301.A3 ("An accounting estimate where (a) the nature of the estimate is material due to the levels of subjectivity and judgment necessary to account for highly uncertain matters or the susceptibility of such matters to change and (b) the impact of the estimate on financial condition or operating performance is material.")

influenced by the mix of companies that a firm audits, we did not propose to require firms to report this metric at the firm level.

Two commenters supported this metric as proposed, while several other commenters generally supported this metric with revisions; suggestions included reporting the absolute number of audit hours as well as the percentage, and adding time spent on performing fraud procedures. Another commenter, an investor-related group, supported this metric as proposed, but further suggested reporting the total audit hours incurred by staff on the engagement team in the areas of significant risks, critical accounting policies and practices, and critical accounting estimates because these areas are considered the most significant for the audit. This commenter also suggested reporting hours by specialists, senior professionals, and staff in connection with critical audit matters.

Many other commenters criticized the proposed metric. These commenters provided the following reasons as the basis for their decision not to support this metric:

- The metric does not consider the evolving role of technology in the audit and the use of technology can significantly contribute to audit effort.

- Risk assessment is an iterative process throughout the audit which means that identifying significant risks and critical accounting policies, practices, and accounting estimates may change during an audit, resulting in changes in how auditors track their time for reporting under this metric.

- An individual's hours charged to auditing a particular account balance may include work performed that is unrelated to an identified significant risk.

- The nature of the audit procedures performed could include overlap with other areas of the audit depending on discussions held and procedures performed.

- Tracking time at the granular level needed to accurately capture hours for significant risks and critical accounting policies, practices, and accounting estimates would require additional resources, including time and costs, that are not directly associated with audit quality.

- Reporting this information would require coordination across firms for audits involving other auditors, who may be using different systems to track the underlying information.

- Since the risk of management override of controls is a presumed risk in all audits, how should it be considered since the response is pervasive to the audit.

Several commenters, including firms, stated that firms are not currently tracking this information, or they believe that firms are not currently tracking this information. One commenter added that although they do not believe firms are currently tracking this information, it should be possible to extract this data from internal monitoring systems with considerable time and complexity.

Commenter views were divided on whether the metric should be revised to also include engaged specialist hours given that, under the proposal, the definition of engagement team includes employed specialists, but not engaged specialists. Some commenters agreed that this metric should include engaged specialist hours, while other commenters did not.

Taking into account commenter feedback as well as the fact that firms' approach to identifying and classifying significant risks can vary greatly, we are concerned that the potential for misinterpretation of this metric and the costs associated with establishing systems to collect the necessary data may not be justified. We are not adopting the metric related to audit hours and risk areas at this time.

**iii. Quality Performance Ratings and Compensation**

The proposal set forth firm-level reporting requirements for firms to calculate (i) the distribution of quality performance ratings across partners and (ii) a comparison of average annual compensation adjustments (as a percentage of the average adjustment received by the highest rated group) for partners in each quality performance rating category over a one-year period.

Overall, some commenters supported this metric area, agreeing with the proposed rationale that comparing the relationship between internal firm quality performance ratings and changes in compensation levels could provide evidence of the extent of any correlation between quality performance ratings and compensation, and thereby provide an important signal of the value of a quality commitment for the firm.

However, other commenters did not support this metric area or expressed concerns because of the number of difficulties in reporting and using the metric. Commenters raised the possibility of a lack of comparability or consistency (e.g., differences in firm's structure, strategies and systems used in performance evaluations, and definition of compensation, and inclusion of non-equity partner and directors in the calculation), resulting in potential misuse of the metrics or providing no or limited value to stakeholders. Many also pointed to variability in firms' quality performance rating systems both across firms and within the firm over time. Some commenters also indicated that there are many factors that firms consider in determining compensation, and that firms use mechanisms to drive accountability of partners that would not be taken into account in the metrics calculation, resulting in no direct one-on-one

relationship between the compensation adjustments and performance ratings. Some commenters expressed a number of concerns about the definition of compensation, as well as the treatment of non-equity partners.

Several commenters expressed concerns about confidential information. One commenter specifically cited the risk of disclosing confidential business information that is proprietary and protected from disclosure under Sarbanes-Oxley Section 102(e). Another commenter indicated (i) the possibility of identifying specific partners' compensation at smaller firms and (ii) the disclosure of this metric area may be prohibited by laws and regulations outside of the United States. A commenter also said that PCAOB-registered firms are for-profit entities that should have flexibility in designing a compensation strategy that is tailored to their business model and needs.

Instead of the proposed metrics, several commenters suggested disclosing firms' policies related to partner compensation and performance ratings, including how partner audit quality is measured and how that measurement influences compensation. Some of these commenters said that disclosing these policies would demonstrate the firms' quality commitment and the value it places on quality while alleviating the comparability and confidentiality concerns and meeting the objective of this proposed metric. Some commenters stated that qualitative disclosures related to performance management and compensation policies are already disclosed in the firms' annual transparency reports. One commenter indicated the complexity of the performance measurement goes beyond mechanical calculation. Another commenter indicated that the metric is not useful as an unambiguous indicator of audit quality and likely focuses on matters unrelated to audit quality.

Two commenters explicitly supported the exemption granted to firms that are not within the scope of the SEC's partner rotation rule. One commenter questioned whether this metric would relate to all issuer audit engagements or all audit engagements and another indicated that combining issuer and non-issuer information would conflict with proposed PCAOB Rule 2400. Furthermore, a commenter indicated that this metric encompasses all partners of the firm and would not be useful when the issuer audit practice is a small portion of the overall firm operations.

While there was some support from commenters, we are not adopting this metric area at this time, primarily due to the challenges described by commenters (e.g., lack of comparability and variability in establishing a firm's quality rating system) and the ambiguity in relation to audit quality, which may be difficult to overcome for this metric area to be meaningful for stakeholders. Because this rulemaking project is focused on requiring certain firms to report certain quantitative metrics that will foster comparability, we are also not adopting the alternatives suggested by various commenters that the firms disclose policies regarding the partner compensation and performance ratings.

### iv. Audit Firms' Internal Monitoring

The proposal set forth firm-level requirements for firms to calculate the percentage of issuer engagements that were selected for internal monitoring in the firm's most recently completed cycle (i.e., the number of completed issuer engagements internally monitored, divided by the number of total issuer engagements) and the percentage of those issuer engagements with engagement deficiencies.[185]

At the engagement level, the proposal set forth requirements for firms to disclose whether a previous engagement was selected for internal monitoring in the most recently completed monitoring cycle, the year-end date of the engagement subject to review, whether any engagement deficiencies were identified, and the nature of those deficiencies. The nature of the engagement deficiencies would be one of the following: (i) financial statement line item, (ii) disclosure, or (iii) other noncompliance with applicable professional or legal requirements.[186] We also proposed that certain details be provided about the engagement deficiency, including the area of noncompliance and the type of deficiency.

Some commenters, primarily investor-related, expressed support for both the proposed firm- and engagement-level metrics. One investor-related commenter suggested that Part I.A deficiencies be included separately in addition to the proposed requirements. Other commenters stated the proposed metrics would provide useful information into understanding firms' monitoring procedures and outcomes, facilitating comparisons regarding the quantity and types of engagement deficiencies detected, while one commenter stated that the monitoring and remediation process was an essential component of firms' quality management systems and agreed that providing a certain level of transparency in this area could be useful for interested stakeholders.

The firm-level metric was generally supported by some firm and firm-related commenters. One noted that it reports certain of this information in its transparency reports. Another highlighted that its internal monitoring was broader in scope, including targeted monitoring of its teams' use of certain tools or technologies, adding that may be inconsistent with the PCAOB's intent with respect to firm-level reporting. Some of these commenters suggested reducing the scope by requiring reporting of only PCAOB Inspection Report Part I.A

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[185] The term "engagement deficiency" as used in the proposal is defined in QC 1000.A4 ("An instance of noncompliance with applicable professional and legal requirements by the firm, firm personnel, or other participants with respect to an engagement of the firm, or by the firm or firm personnel with respect to an engagement of another firm").

[186] The term "applicable professional and legal requirements," as used in this rulemaking, has the same meaning as defined in QC 1000.A2.

inspection findings. Another suggested reporting the percentage of compliant internal reviews rather than deficient engagements.

Conversely, several firm commenters were opposed to the proposed internal monitoring metrics at the firm level. The concerns raised by these commenters included noting that differences in monitoring programs would render the information provided inconsistent and uninformative and also that it could be disadvantageous to smaller firms that may have more variability in their internal monitoring year over year. In additional, several firm and firm-related commenters disagreed with the deficiencies required to be disclosed in the proposed firm-level metrics being aligned to QC 1000. One stated that presentation of such a broad range of deficiencies into a single metric without distinction could lead a user to inappropriately conclude that the firm had significant quality issues, which could in turn negatively impact their confidence in the reliability of the firm's audit reports. Another commenter expressed their belief that firm-level public reporting of internal inspection findings could be a disincentive for finding deficiencies. This commenter also stated that firms should be allowed to request confidential treatment for metrics related to internal monitoring.

At the engagement level, virtually all firm commenters objected to the proposed internal monitoring metrics. Specific objections raised included those related to confidentiality concerns, comparability challenges, and the potential for confusion or misunderstanding. Several commenters expressed concerns that the proposed metrics risked undermining internal inspection programs if they cause firms to move from broad monitoring processes to align more closely with PCAOB inspections in response to the proposed requirements. One commenter stated that once these metrics become public, firms could come under pressure from various constituencies to report results that are within a perceived acceptable range. Another commenter voiced concern that firms could be incentivized to alter their internal monitoring processes in a manner inconsistent with the objectives of the proposal. Some commenters suggested that an alternative could be to require communication with an issuer's audit committee.

Taking commenter input into account, we have determined not to adopt the proposed firm- and engagement-level internal monitoring metrics at this time.

### 2. Potential Additional Firm and Engagement Metrics

In our proposal, we discussed three particular areas—training, access to technical resources, and investment in audit infrastructure—that we did not propose to require for reporting but, in light of significance of these areas, for which we solicited specific commenter input.

All of these potential metrics related to aspects of a firm's ongoing investment in audit quality, which we believe is critically important. However, in working to develop metrics in these areas we encountered challenges in defining what to measure and how to measure it, questions about whether metrics would be informative and appropriately free from bias, and concerns about potential unintended consequences. After considering commenter feedback, we are adopting a modified metric related to training, which is discussed in detail in Section III.B.3.iii. However, we are not adopting metrics in the areas of access to technical resources or investments in audit infrastructure, as discussed further below.

In addition to the metrics we considered, as noted above, some commenters on the proposal suggested a metric for PCAOB Part I.A deficiencies. Our response to this suggestion is discussed further in Section III.E.2.iii.

#### i. Access to Technical Resources

We solicited comment on possible firm-level metrics relating to the relative size of a firm's central personnel (or other resources engaged by the firm) available to provide engagement teams with advice on complex, unusual, or unfamiliar issues and the extent to which such resources were used in the firms' engagements. Metrics that were considered at the engagement level focused on consultations that were performed with professionals outside of the engagement team on difficult or contentious matters.

Commenters who responded to questions about the potential metric for access to technical resources largely agreed with the considerations and conclusions in the proposal. Some of those commenters replied that the metrics would not be useful, be difficult to measure, not be comparable, and could be seen as being biased towards larger firms. One commenter mentioned that arguments could be made for or against many metrics, but they broadly agreed access to [technical] resources should be dropped. One commenter expressed that it would be difficult to define national office in a way that was meaningful.

After considering these comments, and in light of our original analysis, we are not proposing to adopt a metric related to access to technical resources.

#### ii. Investment in Audit Infrastructure

Metrics we considered in relation to investment in audit infrastructure were primarily at the firm level and were focused on the expenditures that firms self-identified as being in support of audit quality either in total or on a per headcount basis.

Commenters generally stated that such a metric would be very facts and circumstances dependent, such that meaningful comparisons could not be made. One commenter suggested that investment in infrastructure was best discussed with an in-depth understanding of the

circumstances to obtain appropriate context. Another suggested that the data would be stale by the time it was reported, adding to its lack of usefulness. One commenter mentioned that arguments could be made for or against many metrics, but they broadly agreed investment in audit infrastructure should be dropped. However, one commenter stated that they would support a metric that provides the percentage of firm revenues invested in technology accessible by audit teams. Similarly, another commenter supported including a metric that provides the percentage of firm revenues invested in technology and stated they believe this metric could offer useful information to investors about the firm's ability to adapt to future challenges.

After considering commenter feedback, we are not adopting a requirement to disclose a metric on investment in audit infrastructure.

We considered the commenters that supported a metric related to revenue invested in technology, but weighing the challenges presented by doing so, specifically with respect to comparability and concerns in potential bias with respect to smaller firms, we continue to believe the unintended consequences and the costs would not be justified by the benefits such a metric might provide.

**iii. PCAOB Part I.A Deficiencies**

Some commenters recommended requiring a metric which we did not include as a potential additional metric in the proposal – a percentage of the PCAOB Part I.A deficiencies relative to "the total inspections." The commenters acknowledged that this information is already publicly available. However, they suggested that including this percentage with other required metrics would highlight its importance and provide valuable information. One of the commenters went on to state that increasing the visibility of the PCAOB's inspection results would increase the importance of the results of the inspection process to audit firms, which they believe will lead to an improvement in overall audit quality.

After considering commenter feedback, we are not adopting a requirement to disclose a metric for PCAOB Part I.A deficiencies. Principally, we have concerns that the time lag implicit in such a metric would be potentially confusing. The other metrics would report as of September 30 or for the 12 months then ended, but a metric based on PCAOB inspection results would relate to audits conducted one or more years previously and may reflect issues that have long since been remediated.[187] In our view, presenting data on inspection findings from previous years together with a suite of other metrics that all relate to the current period may confuse

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[187] The PCAOB inspects audits completed in the prior year, and the ensuing reports have historically been released a year or more after the inspection is completed.

users. Of course, inspections reports, including discussion of Part I.A. deficiencies, will continue to be available on the PCAOB website.[188]

# IV. ECONOMIC ANALYSIS

The Board is mindful of the economic impacts of its standard setting. This economic analysis describes the economic baseline, need, and expected economic impacts of the final rules, as well as alternative approaches considered. Because there are limited data to quantitatively estimate the economic impacts of the final rules, much of the Board's economic analysis is qualitative. However, where feasible, the economic analysis incorporates quantitative information, including analysis of internal PCAOB data, publicly available data, and results from academic literature.

## A. Baseline

This section establishes the economic baseline against which the impact of the final rules can be considered. Section II describes important components of the baseline, specifically a discussion of current firm- and engagement-level disclosure requirements, voluntary reporting practices, and actions in other jurisdictions relevant to the final rules. Below, we highlight information presented in Section II most relevant to the economic baseline and provide additional academic references and statistics.

Current PCAOB rules and standards do not require registered firms to publicly disclose firm or engagement-level information like the final metrics. As discussed in Section II.A.3, firms are currently required to publicly disclose some information related to the firm and its engagements in a variety of PCAOB forms (e.g., Form AP, Form 2).[189] Usage statistics suggest that the public actively seeks out the information contained in these forms. For example, PCAOB usage statistics show that during calendar year 2023, there were close to 7.4 million page views, and just over 23,000 unique visitors, for PCAOB's RASR Web service that provides

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[188] *See, e.g.*, PCAOB charts illustrating much of the data in the U.S. global network firms ("GNFs") and U.S. annual non-affiliated firms ("NAFs") inspection reports, *available at* https://pcaobus.org/oversight/inspections/global-network-firms-inspection-data and https://pcaobus.org/oversight/inspections/non-affiliated-firms-inspection-data, respectively. GNFs are the member firms of the six global accounting firm networks (BDO International Ltd., Deloitte Touche Tohmatsu Ltd., Ernst & Young Global Ltd., Grant Thornton International Ltd., KPMG International Ltd., and PricewaterhouseCoopers International Ltd.). NAFs are both U.S. and non-U.S. accounting firms registered with the Board that are not GNFs. Some of the NAFs belong to international networks.

[189] The Board is concurrently adopting new reporting requirements for registered firms. *See* PCAOB Rel. No. 2024-013.

public access to firm filings, including Forms 1, 2, 3, 4, and AP.[190] Additionally, in 2023 there were over 333,000 unique searches performed on AuditorSearch, the PCAOB's online search tool, and the Form AP data set was downloaded over 2,000 times.[191]

In addition to the information that the firm makes public through required form filings, the PCAOB provides firm-level public disclosure through firm inspection reports.[192] For the 2023 calendar year, firm inspection reports were downloaded approximately 113,000 times. Academic research suggests that audit committees use the information contained in PCAOB inspection reports.[193] Additionally, some academic research suggests that PCAOB inspection reports provide useful information to investors.[194] However, some research suggests that institutional investors may not be aware of or find value in PCAOB inspection reports.[195] One

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190 The RASR database can be found on the PCAOB's website (https://rasr.pcaobus.org/Search/Search.aspx). The usage statistics underestimate actual public interest because investors, researchers, auditors, audit committees, and issuer management may source PCAOB information through external third-party data service providers—such as Ideagen's Audit Analytics. However, they also overestimate actual public interest to some extent because the usage statistics include internal PCAOB users.

191 Information related to usage statistics can be found on the PCAOB's website (https://pcaobus.org/resources/auditorsearch).

192 Firm inspection reports can be found on the PCAOB's website (https://pcaobus.org/oversight/inspections/firm-inspection-reports).

193 *See*, *e.g.*, Daniel Aobdia, *The Impact of the PCAOB Individual Engagement Inspection Process—Preliminary Evidence*, 93 The Accounting Review 53 (2018) (finding that "the client is more likely to switch auditor" when offices or partners receive a Part I auditing deficiency).

194 *See*, *e.g.*, Andrew Acito, Amir Amel-Zadeh, James Anderson, William L. Anderson, Daniel Aobdia, Francois Brochet, Huaizhi Chen, Jonathan T. Fluharty-Jaidee, Martin Schmalz, Manyun Tang, and Scott Jinzhiyang Wang, *Market-Based Incentives for Optimal Audit Quality*, SSRN Electronic Journal (2024) (finding that when PCAOB inspection reports can be easily linked to the issuer being audited, issuers whose audit was not found to be deficient significantly outperform issuers whose audit was found to be deficient); Nemit Shroff, *Real Effects of PCAOB International Inspections*, 95 The Accounting Review 399 (2020) (finding, using a sample of foreign companies, that companies enjoy greater access to capital when their auditor's PCAOB inspection report does not include Part I deficiencies). We note that SSRN does not peer review its submissions.

195 *See*, *e.g.*, Center for Audit Quality, *Perspectives on Corporate Reporting, the Audit, and Regulatory Environment Institutional Investor Research Findings*, (Nov. 2023) ("CAQ 2023 Survey") (finding that most institutional investors interviewed were unaware of PCAOB inspections reports, and to the extent investors were aware, found the report results to be expected) and Clive Lennox and

commenter noted that the proposal did not provide information on who was accessing the website information or why they were accessing it. The PCAOB does not collect information on who is accessing the website information (e.g., IP addresses) or why they are accessing it.

In addition to PCAOB information, investors and audit committees may be able to obtain information related to audit quality from auditor legal proceedings—e.g., pursuant to SEC enforcement actions.[196] However, due to the investigation and litigation process, engagement-specific information may be publicly available only after a substantial lag. Furthermore, academic researchers have also used a variety of publicly available firm and engagement-level proxies for audit quality including audit firm size, issuer restatements, and industry specialization.[197] One commenter noted that the auditor's tenure with the company is available in the auditor's report and audit fee information is available in the company's proxy statement.

As discussed in Section II.A.4, some large U.S. audit firms voluntarily publicly disclose certain firm-level information through their firm transparency reports—e.g., general discussions of turnover rates, independence policies and practices, or aggregated staff headcounts. Staff reviewed the most recent audit quality report for each of the eight firms considered in the CAQ Report. As these firms' audit quality reports generally do not provide quantitative engagement-level information, the staff's analysis focused on whether they provide quantitative firm-level information substantially similar to the final firm-level metrics.

Overall, the staff's analysis indicates that voluntary firm reporting addresses many of the areas included in the final metrics, though in most instances more narrowly. The reports generally provide quantitative information related to staff training and retention, which we believe are substantially similar to the final metrics for Training Hours for Audit Personnel and Retention of Audit Personnel, respectively. However, we note that the reports that include a retention metric define it in different ways and report it at different levels of aggregation. The reports generally provide quantitative information related to staffing leverage. However, the quantitative information is generally at the head-count level and no report accounts for audit

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Jeffrey Pittman, *Auditing the Auditors: Evidence on the Recent Reforms to the External Monitoring of Audit Firms*, 49 Journal of Accounting and Economics 84 (2010) (finding that companies do not perceive that the PCAOB's disclosed inspection reports are valuable for signaling audit quality).

196 *See, e.g.*, the SEC's *Accounting and Auditing Enforcement Releases available at* https://www.sec.gov/divisions/enforce/friactions.

197 *See*, *e.g.*, Daniel Aobdia, *Do Practitioner Assessments Agree with Academic Proxies for Audit Quality? Evidence from PCAOB and Internal Inspections*, 67 Journal of Accounting and Economics 144 (2019); Jere R. Francis, *A Framework for Understanding and Researching Audit Quality*, 30 AUDITING: A Journal of Practice & Theory 125 (2011); and DeFond and Zhang, *A Review of Archival Auditing Research*.

hours, as the final Partner and Manager Involvement metrics require. Half of the reports provide quantitative information related to the frequency of restatements which are similar to the final Restatement History metric. However, in these cases, the reports do not indicate whether the reported restatements include reissuance restatements, revision restatements, or both. Some other reports provide quantitative information related to the frequency of restatements associated with PCAOB-inspected engagements only. Half of the reports provide quantitative information related to years of experience. However, the quantitative information does not include managers' experience as the final Experience of Audit Personnel metric requires. Some reports provide metrics similar to the final Workload metric. However, in these cases, the calculations may differ from the final Workload metric in important ways (e.g., they are limited to the busy season only or include more staff than required) and it is unclear whether the calculations include the same types of hours required under the final rules (e.g., PTO hours). The reports generally do not provide quantitative information related to the allocation of audit hours and no report provides quantitative information related to industry experience. However, we note that these firms generally provide information related to the industries they serve on their websites which is similar to the component of the firm-level industry expertise metric that identifies the five top industries of the firm's audit practice.

One commenter said that, though only a small portion of firms voluntarily disclose metrics, these firms cover most U.S. public companies. We acknowledge that this point implies that most audit committees and investors have some information about topics covered by the final metrics. However, staff found that the existing disclosures are not uniform or comparable across firms. Furthermore, staff found that firms generally do not voluntarily publicly report engagement-level metrics and one investor group said that the firms' transparency reports are seen as marketing material rather than investor information. One commenter emphasized that firms already publish transparency reports and urged the PCAOB to analyze firms' current transparency reporting practices and solicit feedback from investors, audit committees and other stakeholders on their contents. We performed such an analysis in Section II.A.4 and above and have addressed comments on the economic baseline that we received from stakeholders as part of our notice and comment process. The limitations of voluntary firm transparency reports, along with the related academic literature, are further discussed in Section IV.B.1.ii.

Audit committees can receive other information through sources not available to the public. Auditing standards and PCAOB and SEC rules require specific communications from auditors to audit committees regarding a variety of matters related to the audit engagement. For example, under AS 1301, the auditor is required to communicate to the audit committee *inter alia* (i) all critical accounting policies and practices to be used; (ii) a description of the process management used to develop critical accounting estimates; and (iii) significant risks

identified during the auditor's risk assessment process.[198] Moreover, audit committees may obtain information under other disclosure requirements—e.g., reporting under Section 10A of the Exchange Act, where the auditor must report to the issuer's board of directors, in certain situations, related to illegal acts at an issuer.[199] In exercising their oversight responsibilities, audit committees may also request more firm- or engagement-specific information from their auditor. For example, audit committees may seek information from the auditor about PCAOB inspections, including information not contained in the PCAOB's public inspection reports.[200] Audit committees may also request information from other audit firms as part of a request for proposal if they are considering engaging a new auditor.

Audit firms, partners, and engagement teams have developed reputations based on the public and non-public information discussed above, as well as audit committees' direct experience with them. Through surveys and interviews with audit committee members, one study concluded that the firm's reputation for industry experience and the audit partner's accessibility, ability to address accounting issues on a timely basis, and ability to liaise with the firm's national office are the key characteristics that audit committees consider when selecting an auditor.[201] This finding suggests that audit committees currently receive and use information like some of the final metrics (e.g., Industry Experience and Workload).

We believe many firms internally track some information related to the final metrics. One commenter on the Concept Release stated that they believe that many firms are using the 28 AQIs identified in the Concept Release at some level to (i) manage the firm and (ii) manage the quality of audits at the office level and at the engagement level. Three U.S. GNFs stated in their comments on the Concept Release that they track some of the proposed metrics discussed in the Concept Release for monitoring purposes. Information gathered by staff in 2018 and 2019 pursuant to PCAOB oversight activities indicate that U.S. GNFs generally had identified and were tracking performance metrics at both the firm and engagement level. At the firm level, U.S. GNFs generally tracked PCAOB inspection history, restatements, voluntary turnover rates / retention rates, partner to staff ratios / professionals by level, average partner

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198 *See* Section II.A.3.ii for additional discussion related to auditor communications with audit committees. *See also* Section 10A(k) of the Exchange Act, 15 U.S.C. § 78j-1(k) and Rule 2–07 of Regulation S-X, 17 C.F.R. § 210.2–07.

199 *See*, *e.g.*, Section 10A of the Exchange Act, 15 U.S.C. § 78j-1.

200 *See Information for Audit Committees About The PCAOB Inspection Process,* PCAOB Rel. No. 2012–003 (Aug. 1, 2012).

201 *See* Elizabeth D. Almer, Donna R. Philbrick, and Kathleen H. Rupley, *What Drives Auditor Selection?*, 8 Current Issues in Auditing A26, A27 (2014).

workload, and investment in audit quality. At the engagement level, U.S. GNFs generally tracked distribution of engagement hours during the year, partner workload and utilization, partner years of experience (by industry, level, or issuer), engagement leverage, engagement milestone compliance, involvement in pre-issuance review programs, and use of IT and other specialists. One firm tracked audit hours performed at SSCs. However, several commenters representing firms and firm-related groups explained that they do not currently track information in a form that will be required for several of the metrics. For example, one commenter said that firms have no internal tracking of personnel's total experience prior to joining the firm. One commenter said that smaller and medium-sized firms do not track the industry experience of audit personnel. Though this information suggests that a significant amount of information is collected by the U.S. GNFs at both the firm and engagement levels, one academic study suggests that partners seldom use metrics related to audit quality when evaluating the quality of their work or the work of their colleagues.[202]

Commenters noted that the PCAOB already has access to information about audit firms. One commenter suggested that we describe the information currently requested from firms. The PCAOB requests a variety of information from firms to inform its inspections process, which focuses on evaluating whether firms are in compliance with PCAOB standards. Some of the information is related to some of the final metrics. However, the information is generally not comparable across firms, engagements, and time; the quality of the information is inconsistent; and the information is generally not available for all firms and engagements.[203]

To better understand the adequacy of currently available information or need for additional disclosures, one commenter suggested that we consider data on: (i) attendance at annual shareholder meetings; (ii) votes on auditor ratification; or (iii) passive versus active investors. We were unable to identify any data sources regarding attendance at annual meetings. However, we note that shareholder votes are typically cast electronically by proxy and not in-person at annual meetings.[204] Moreover, anecdotal evidence suggests that

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202 *See* Marion Brivot, Mélanie Roussy, and Maryse Mayer, *Conventions of Audit Quality: The Perspective of Public and Private Company Audit Partners*, 37 Auditing: A Journal of Practice & Theory 51, 68 (2018).

203 We believe this is driven, in part, by variation in firms' approaches to quality control and how they record information. We note that, under Section 105(b)(5) of Sarbanes-Oxley, this information is only available for PCAOB regulatory use.

204 *See, e.g.,* Broadridge, *2023 Proxy Season Key Stats and Performance Ratings*, (2023) (reporting that, of the votes Broadridge processed, 97% of shares were voted electronically by retail and institutional shareholders).

attendance, particularly among retail investors, is generally low.[205] This may reflect the fact that material information relevant to investor decision-making is typically provided through the proxy statement and annual report, rather than being newly disclosed at the annual meeting. We do not believe this provides strong evidence for or against the adequacy of currently available data or investors' information preferences. Regarding votes on auditor ratification, our economic analysis is informed by and cites several academic studies on shareholder voting to ratify the appointment of the auditor. Additionally, data from Audit Analytics suggests that the proportion of investors opposing ratification, while still infrequent, has been increasing.[206] Overall, the research suggests that investors, primarily institutional investors, use information related to audit performance. In cases where they do not, we believe this is more likely driven by the costs of gathering and understanding the information rather than a lack of demand.[207] Regarding passive versus active investors, research suggests that household direct holdings comprise roughly 50% of U.S. equity capital with the remaining 50% held by ETFs, passive mutual funds, active mutual funds, or hedge funds.[208] Among funds, roughly 50% are actively managed.[209] Based on our review of academic literature and our consideration of costs, we believe that individual retail investors will be less likely to use the final metrics than institutional investors.[210] Therefore, this research suggests that investors who are more likely to use the final metrics will use the final metrics to inform their capital allocation decision-making own or manage roughly 25% of U.S. equity capital. However, we note that, by investing in proportion to the market value of a company, passive investors freeride on the decisions of the active investors, thus amplifying the effects of improved decision-making of the more active investors

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205 *See*, *e.g.*, Yaron Nili and Megan Wischmeier Shaner, *Virtual Annual Meetings: A Path Toward Shareholder Democracy and Stakeholder Engagement*, SSRN Electronic Journal (2022) (discussing how "[m]eaningful participation at the yearly gathering of corporate shareholders has become a relic of the mid-twentieth century" and "[l]ow retail investor attendance and participation is a well-documented problem in public corporations") and cites therein. We note that SSRN does not peer review its submissions.

206 *See* WSJ, *Investor Votes Against Big Companies' Auditors Climb*, (June 18, 2024).

207 *See* Section IV.B.2 for additional discussion.

208 *See* Nicolae Garleanu and Lasse Heje Pedersen, *Active and Passive Investing: Understanding Samuelson's Dictum*, 12 The Review of Asset Pricing Studies 389 (2020).

209 *See* John Rekenthaler, *Index Funds Have Officially Won*, Morningstar (Feb. 13, 2024).

210 *See* Section IV.B.2.i and Section IV.C.2 below.

who are more likely to use the final metrics.[211] Also, one audit committee chair said at the September 26, 2024 IAG meeting ("September 2024 IAG meeting") that passive investors take corporate governance very seriously. Similarly, an investor group commenter said that passive portfolio managers' stewardship counterparts will use the information in their voting decisions. As such, in contrast to capital allocation decision-making, the final metrics may inform passive funds' governance-related decision-making.

One commenter suggested that the prevalence of Part I.A deficiencies is an important reason for the proposal and recommended that we provide an analysis of the causes of Part I.A deficiencies to help stakeholders assess the benefits of the final rules. Part I.A deficiency trends are available in PCAOB Rel. No. 2024-005.[212] Firms have recently indicated to PCAOB staff that unusually high staff turnover and use of less experienced staff may have contributed to rising auditing deficiencies. PCAOB inspection staff also found that utilization of individuals with specialized skill or knowledge and significant, timely, and detailed supervision and review were good practices.[213] The final metrics will reflect several of these aspects of the audit (e.g., Partner and Manager Involvement). However, based in part on other comments we received on the proposal, we are not adopting metrics related to the use of specialists.[214]

One commenter said that to the extent investors need additional information to inform their voting decisions, the audit committee has the ability to provide that information in their report in the proxy statement, including a summary of the metrics they used to assess the auditor. However, another commenter said that proxy statements provide little information to shareholders on which they can base their decision to ratify the appointment of the auditor and no information related to the quality of the audit or the audit firm is required to be disclosed on the proxy statement.

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211 *See*, *e.g.*, Jeffrey L. Coles, Davidson Heath, and Matthew C. Ringgenberg, *On Index Investing*, 145 Journal of Financial Economics 665 (2022) (discussing how "[p]assive investors are necessarily freeriding on the research and effort exerted by active managers") and Ruggero Jappelli, *Dynamic Asset Pricing with Passive Investing*, unpublished working paper (2024) (finding that "the effect of standardized unexpected earnings on abnormal returns is significantly amplified by the wealth passively tracking the stock").

212 *See* PCAOB Rel. No. 2024-005, at 315.

213 *See* Spotlight: Staff Update and Preview of 2022 Inspection Observations (July 2023) ("2022 Inspection Observations Preview"), at 4, *available at* https://pcaobus.org/resources/staff-publications.

214 *See* Section III.E.1 for additional discussion on our decision not to adopt the proposed use of auditor's specialists metric.

One commenter said that several Form AP studies were excluded from our baseline.[215] We recognize that some of these analyses detect little impact of prior PCAOB disclosure rules. We note that Section IV.C.1.i. of the proposal described how the benefits of prior PCAOB disclosure rules vary by rule and analysis. Referring to an academic article, the same commenter suggested that the baseline section had not provided ample research to show that investors would use the proposed metrics.[216] The proposal and Section IV.C.1 below refer to the article cited by the commenter as well as several others regarding how investors may respond to the metrics.

Lastly, as discussed in Section III.C.1, staff estimates that approximately 210 firms will be subject to the final firm-level disclosure requirements, including 22 of the top 25 U.S. firms by 2023 total firm revenue and all of the 2022 annually inspected firms that continue to audit issuers. Approximately 50 firms will be required to report the final firm-level Industry Experience metrics. Approximately 3,400 issuer audits will be subject to the final engagement-level disclosures, covering approximately 99% of the total market capitalization of issuers reporting on Form 10-K and Form 20-F.

## B. Need

This section discusses the economic problem to be addressed and explains how the final rules address it. In general, two observations suggest that there is an economic need for the final rules:

- Investors and audit committees cannot easily observe the services performed by auditors. This restricts (i) audit committees' ability to more efficiently and effectively monitor and select auditors as well as (ii) investors' ability to more efficiently and effectively ratify the appointment of the auditor and allocate capital. As a result, there is a risk that auditors will not supply an efficient level of assurance to the market.[217]

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215 We discuss this comment including the studies referred to in the preamble to Section IV.C.1.i below.

216 *See* J. Owen Brown and Velina K. Popova, *How Do Investors Respond to Disclosure of Audit Quality Indicators?*, 38 AUDITING: A Journal of Practice & Theory 31, 47 (2019).

217 An efficient allocation of resources occurs when total surplus is maximized. Total surplus is maximized when the good or service in question is supplied until the marginal benefit is equal to the marginal cost. *See* N. Gregory Mankiw, *Principles of Economics* 146-148 (6th edition 2008).

- Furthermore, there are currently insufficient incentives for firms to fully meet the market demand for accurate, standardized, and decision-relevant information.[218] There is also a challenge coordinating firms on a system of comparable disclosures. As a result of the lack of incentives and coordination challenges, we believe auditors are not supplying the market with additional information even when doing so would be efficient. Indeed, information about audit engagements and firms that would allow (i) audit committees to more efficiently and effectively monitor and select auditors and (ii) investors to more efficiently and effectively ratify the appointment of the auditor and allocate capital, as sought by the market, is often limited or difficult to obtain.

The final rules will help address these problems in two primary ways:

- First, the final rules will require certain firms to publicly report specified metrics relating to certain audits and their audit practices. Through this disclosure, the final metrics will aid investor and audit committee decision-making.

- Second, the final rules will impose standardized calculations and require regular public reporting of those metrics. The resulting comparability will further aid investor and audit committee decision-making.

Importantly, we note that the final metrics are not intended to be used in isolation to ascertain audit quality at an audit firm or for an audit engagement because audit quality is driven by a complex array of factors beyond those that can be addressed by metrics. We believe investors' and audit committees' ability to use the metrics is likely to increase over time as users are able to aggregate multiple data points, make comparisons, and observe trends.

### 1. Problem to be Addressed

#### i. Allocative Inefficiency in the Market for Audit Services

The auditor has a responsibility to obtain reasonable assurance about whether the issuer's financial statements are free of material misstatement. Reliable financial statements help investors evaluate issuers' performance and monitor management's stewardship of investor capital. However, because audits possess many of the attributes of a credence good,

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[218] Given the considerations in Sections IV.C.1 and IV.C.2, it appears reasonable to assume that this lack of incentive for firms to provide such information is likely to cause the apparent undersupply of information, rather than the cost of providing the information being greater than the social benefit.

investors find it challenging to evaluate the quality of the services provided by auditors.[219] As a result, the lack of transparency into the audit process could enable auditors to act on their private incentives and under-audit (i.e., deploy insufficient auditor resources) or over-audit (i.e., undertake procedures that do not efficiently contribute to forming an opinion on the financial statements).[220] In effect, there is a risk that auditors will not supply an efficient level of service to the market. While we acknowledge that audit quality is difficult to observe, the PCAOB is able to obtain insights into audit quality through inspection of firms' compliance with auditing standards. The results of recent PCAOB inspections indicate that room for improvement exists.[221]

One commenter agreed with the characterization of the audit as a credence good. Several commenters agreed that investors and other stakeholders cannot easily observe services performed by auditors, which limits their ability to make informed decisions about investing capital, ratifying the selection of auditors and voting for members of the board of directors, including directors who serve on the audit committee. Several commenters said that the audit has become commodified and that firms compete primarily on cost due to a lack of information on audit quality. One commenter said that this results in audit firms "squeezing" professional staff for productivity.

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219 *See* Daniel Aobdia, Saad Siddiqui, and Andres Vinelli, *Heterogeneity in Expertise in a Credence Goods Setting: Evidence from Audit Partners*, 26 Review of Accounting Studies 693 (2021) (finding evidence consistent with audits being credence goods).

220 *See*, *e.g.*, Monika Causholli and W. Robert Knechel, *An Examination of the Credence Attributes of an Audit*, 26 Accounting Horizons 631, 632, 633 (2012) (discussing how audits have attributes of a credence good, namely the outcome of an audit is unobservable and the auditor is best informed regarding how much effort is necessary to perform the audit).

221 *See, e.g.*, *Spotlight Staff Update and Preview of 2022 Inspection Observations* (July 2023), *available at* https://pcaobus.org/resources/staff-publications (discussing the "concerning trend" in "the percentage of audit engagements reviewed that are expected to be included in Part I.A of an inspection report"). One commenter said that many audit quality studies reveal that audit quality is improving, deficiencies are narrowly focused, and financial statement restatements are down. We note that the commenter did not provide support for these assertions. By contrast, and as stated here and in the proposal, the PCAOB has pointed to a concerning trend in auditing deficiencies. Indeed, the trend appears to be continuing in the aggregate. *See*, *e.g.*, *Spotlight Staff Update on 2023 Inspection Activities* (Aug. 2024), *available at* https://pcaobus.org/resources/staff-publications. Furthermore, while the incidence of restatements has been decreasing since 2013, there was an uptick in 2022. *See*, *e.g.*, Center for Audit Quality, *Financial Restatement Trends in the United States: 2013-2022*, (June 2024). We note that the uptick in restatements could increase further because some financial statements that have not yet restated may do so in the future.

The issuer's board of directors is generally required to establish an audit committee that is statutorily entrusted to appoint, compensate, and oversee the work of the auditor.[222] One commenter said that audit committees of accelerated and large accelerated filers are composed entirely of independent directors.[223] However, similar to investors—though to a lesser degree—audit committees cannot easily observe the services performed by auditors. Moreover, audit committees may focus on the interests of current shareholders rather than the broader public interest (e.g., market confidence, potential future shareholders, or investors in other issuers). Furthermore, there are risks that the audit committee may not monitor the auditor effectively. For example, the auditor may seek to satisfy the interests of management rather than investors if management is able to exercise influence over the audit committee's supervision of the auditor.[224] One commenter said that audit committee members are incentivized to ingratiate themselves to management and that this does not serve investors who need to hold the audit committee accountable. Such circumstances can lead to a *de facto*

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[222] Companies whose securities are listed on national securities exchanges are generally required to constitute an audit committee. *See* Section 301 of Sarbanes-Oxley; Section 10A(m)(2) of the Exchange Act. As an additional safeguard, the auditor is also required to be independent of the audit client. *See* Regulation S-X Rule 2-01, 17 C.F.R. § 210.2-01; *see also* PCAOB Rule 3520, *Auditor Independence*.

[223] Pursuant to Exchange Act Section 10A(m)(1) and Exchange Act Rule 10A-3, the listing rules of national securities exchanges generally require that all members of a listed company's audit committee be independent. *See, e.g.,* New York Stock Exchange Listing Manual Section 303a.06, Nasdaq Rule 5605(c). Companies that do not have securities listed on an exchange are not subject to such a requirement.

[224] *See, e.g.*, Joshua Ronen, *Corporate Audits and How to Fix Them*, 24 Journal of Economic Perspectives 189 (2010) (explaining that audit committee members are paid by the company and can be dependent on top company management for a variety of benefits, including referrals as a possible member on the board of directors and audit committees of other companies); Liesbeth Bruynseels and Eddy Cardinaels, *The Audit Committee: Management Watchdog or Personal Friend of the CEO?*, 89 The Accounting Review 113 (2014) (finding that companies whose audit committees have "friendship" ties to the CEO purchase fewer audit services and engage more in earnings management); Cory A. Cassell, Linda A. Myers, Roy Schmardebeck, and Jian Zhou, *The Monitoring Effectiveness of Co-Opted Audit Committees,* 35 Contemporary Accounting Research 1732 (2018) (finding that the likelihood of a financial statement misstatement is higher and that absolute discretionary accruals are larger when audit committee co-option, as measured by the proportion of audit committees who joined the board of directors after the current CEO's appointment, is higher); and Nathan Berglund, Michelle Draeger, and Mikhail Sterin, *Management's Undue Influence over Audit Committee Members: Evidence from Auditor Reporting and Opinion Shopping,* 41 AUDITING: A Journal of Practice & Theory 49 (2022) (finding that greater management influence over audit committee members is associated with a lower propensity of the auditor to issue a modified going concern opinion to a distressed company under audit and with increased opinion shopping behavior).

principal-agent relationship between company management and the auditor. Also, as one panelist said during the September 2024 IAG, there is a wide range of financial expertise among audit committees and audit committee chairs.

As a result, investors have an important, albeit indirect, role overseeing the work of both the auditor and the audit committee. Indeed, while the audit committee more directly oversees the auditor, most publicly traded companies allow investors to vote to ratify the appointment of the auditor. This mechanism allows investors to voice their preferences on auditor selection.[225] At the September 2024 IAG meeting, one investor said that shareholders have an important role holding both auditors and audit committees to account. By contrast, another IAG member said that investors should not oversee the audit because that is the role of the audit committee and one commenter said that the proposal would challenge the legal structure of corporate governance. However, a lack of transparency into the audit process may leave investors unable to make well-informed decisions when voting on selections made by the

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[225] Shareholder ratification of the appointment of the auditor is not statutorily required in the U.S. and in many cases the ratification vote is non-binding. One commenter agreed with this point. The commenter also suggested that it is rare for shareholders to not ratify the audit committee's selection. However, according to Audit Analytics, accessed on Mar. 1, 2024, in 2023, ratification votes were held by 2,802 distinct companies included in the Russell 3000 index, which comports with other estimates that indicate between 80 and 95 percent of companies hold votes on ratification proposals as part of their proxy voting process. *See also* ACAP Final Report, at VIII.20 (finding that 95 percent of S&P 500 companies and 70-80 percent of smaller companies put ratification proposals to an annual shareholder vote) and Lauren M. Cunningham, *Auditor Ratification: Can't Get No (Dis)Satisfaction*, 31 Accounting Horizons 159, 161 (2017) (finding that more than 90 percent of a sample of Russell 3000 companies voluntarily include a ratification vote on the ballot). We note that broker discretionary voting is permitted on ratification proposals and ratification proposals may be used as a mechanism by some companies to achieve a quorum to conduct an annual meeting as a result of brokers exercising discretionary votes. Although the ratification vote is in many cases non-binding, it can still be impactful as it sends a signal of shareholder views. Academic studies show that non-binding votes in other settings can pressure boards to reconsider its policies and are considered by proxy advisors in setting their recommendation for board members. *See*, *e.g.*, Yonca Ertimur, Fabrizio Ferri, and Stephen R. Stubben, *Board of Directors' Responsiveness to Shareholders: Evidence from Shareholder Proposals*, 16 Journal of Corporate Finance 53 (2010) (finding a "positive relation between the percentage of votes cast in favor of the [non-binding] proposal and the likelihood of implementation."); and Aiyesha Dey, Austin Starkweather, and Joshua White, *Proxy Advisory Firms and Corporate Shareholder Engagement*, 37 Review of Financial Studies 3877 (2024) (showing that when non-binding Say-On-Pay voting support falls below 70 percent, managers respond by increasing shareholder engagement). The ability to vote on ratification of the appointment of the auditor is recognized by investor groups as an important element of corporate governance. *See*, *e.g.*, Council of Institutional Investors, *Policies on Corporate Governance*, (Sept. 11, 2023) at 2.13f *available at* https://www.cii.org/corp_gov_policies.

audit committee or on re-election of audit committee members to the board of directors.[226] Figure 5 illustrates oversight relationships pertinent to the final rules. The dotted line indicates that investors' oversight relationship with the auditor is less direct than the audit committee's oversight relationship.

**Figure 5.** Oversight relationships pertinent to the final rules

### ii. The Market for Information Related to Auditors and their Engagements is Inefficient

*Supply-Side Problems*

Some basic economic theories suggest that high-quality firms should have an incentive to voluntarily disclose information to the extent it allows them to differentiate themselves from low-quality competitors.[227] However, economic theory also suggests that there may be countervailing incentives that limit voluntary disclosure in practice. For example, firms may be

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[226] The IAG indicated in their comment letter regarding proposed QC 1000 that investors need information to make better decisions when voting to ratify the appointment of the auditor and the election to the board of directors of the Chair or members of the audit committee.

[227] *See*, *e.g.*, Kip W. Viscusi, *A Note on "Lemons" Markets with Quality Certification*, 9 The Bell Journal of Economics 277 (1978).

deterred by the costs they would incur privately, such as how their competitors could leverage the disclosures to capture market share.[228] There may also be no mechanism for firms to credibly disclose certain non-verifiable or difficult to verify information, which can lead to the failure of such information markets to exist entirely.[229] There could also be a status-quo bias whereby a firm prefers to continue a non-disclosure policy despite investors' calls for additional information.[230] Limited competition for the largest issuers could also reduce the largest firms' incentives to voluntarily disclose information. Finally, firms may tend to underprovide information due to: (i) the positive externalities[231] conferred by comparable and uniform public disclosures (i.e., firms may not directly benefit from some of the value provided to investors and audit committees); and (ii) the challenges of coordinating on a single comparable and uniform reporting framework.[232]

Auditors could in principle supply information to investors and audit committees individually depending on their unique preferences. However, the costs to the firm to do so would grow with the number of interested investors and audit committees and the extent of information they would request. By contrast, under the final rules, the costs to produce the final metrics will not grow with the number of interested users.

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228 *See*, *e.g.*, *id.*; Oliver Board, *Competition and Disclosure*, 57 The Journal of Industrial Economics 197 (2009) (finding that companies may be reluctant to voluntarily disclose in competitive markets); and Daniel A. Bens, Philip G. Berger, and Steven J. Monahan, *Discretionary Disclosure in Financial Reporting: An Examination Comparing Internal Firm Data to Externally Reported Segment Data*, 86 The Accounting Review 417 (2011) (finding that companies provide fewer segment disclosures due to proprietary costs or competitive concerns).

229 *See* Akerlof, *The Market for "Lemons*."

230 There are a variety of reasons why individuals may choose the *status quo* outcome in lieu of an unknown outcome, including aversion to the uncertainty inherent in moving from the *status quo* to another option. For additional discussion on status quo bias, *see* William Samuelson and Richard Zeckhauser, *Status Quo Bias in Decision Making*, 1 Journal of Risk and Uncertainty 7 (1988).

231 *See* Mankiw, *Principles of Economics* 196 ("An externality arises when a person engages in an activity that influences the well-being of a bystander but neither pays nor receives any compensation for that effect… If it is beneficial, it is called a positive externality.").

232 *See, e.g.*, Anat R. Admati and Paul Pfleiderer, *Forcing Firms to Talk: Financial Disclosure Regulation and Externalities*, 13 The Review of Financial Studies 479 (2000) (discussing how individual firms "internalize less than fully the social value of the information they release") and George Loewenstein, Cass R. Sunstein, and Russell Golman*, Disclosure: Psychology Changes Everything*, 6 Annual Review of Economics 391, 397 (2014).

*Demand-Side Problems*

While investors may seek to acquire information from the issuer, they could incur significant private costs in doing so.[233] At the September 2024 IAG meeting, one investor said that her asset management firm is generally denied meetings with audit committee chairs of U.S. issuers. Further, the company may need to publicly disclose information provided on a selective basis.[234] Indeed, at the September 2024 IAG meeting, several audit committee chairs said audit committees are reluctant to meet with shareholders individually due to the risk of violating disclosure laws. Hence the potential benefits of the information to an individual investor would be dissipated because all other investors would have the same information and any informational advantage would be lost. This would further reduce individual investors' incentives to obtain the information. A free-rider problem thus exists among investors in which the costs incurred by one or more investors to convince firms to disclose information would not be shared by all investors who benefit from the disclosure.[235] As a result, economic theory suggests there should be an under-provision of such information relevant to investors.

As discussed in Section IV.A, audit committees are already privy to certain information about their auditors beyond what is publicly available. In particular, audit committees could request the final metrics from their auditors or other tendering auditors. However, that information would not necessarily be comparable with other engagements or other firms. Requesting comparable information from multiple auditors could be burdensome or even impracticable. As a result, while the audit committee can use information from their auditor to better understand their current engagements, the audit committee likely has a limited view as to how other engagements—such as those of their peers—might be conducted. Furthermore, less effective audit committees may not be aware of the information and therefore would not request it in the first instance. If audit committees were aware of the information and made such a request, some audit firms may resist providing it to avoid the costs of gathering the information and potential negative reputational effects. Firms could also manipulate the information. As one commenter said, the audit committee's principal tool is that of inquiry, not observation, and inquiry, in audit parlance, is the weakest form of audit evidence.

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233 *See, e.g.*, Nickolay Gantchev, *The Costs of Shareholder Activism: Evidence from a Sequential Decision Model*, 107 Journal of Financial Economics 610 (2013).

234 *See* Regulation Fair Disclosure, 17 C.F.R. § 243.100(b)(1)(iv).

235 *See* Mankiw, *Principles of Economics* 220 and 222 ("A free rider is a person who receives the benefit of a good but avoids paying for it... A free-rider problem arises when the number of beneficiaries is large and exclusion of any one of them is impossible.").

*Evidence*

Due in part to the problems discussed above, there is currently limited information available to investors specifically related to audit engagements. Indeed, investors know the least about the audit engagement, as they are less involved in the issuer's operations compared to management, the board of directors, and the audit committee—and are even further removed from the audit process. Over the last decade and a half, there have been sustained requests from investors for increased transparency into the audit process. As discussed in Section II, investor-related groups have requested increased disclosures at the firm and engagement levels—notably in the form of easily accessible and quantifiable metrics, potentially with accompanying context provided by the auditor. Furthermore, the ACAP Final Report recommended that the PCAOB, in consultation with auditors, investors, public companies, audit committees, boards of directors, academics, and others, "determine the feasibility of developing key indicators of audit quality and effectiveness and requiring auditing firms to publicly disclose those indicators."[236]

There would likely be a significant cost to investors to conduct an exhaustive search of all existing publicly available information related to audit performance. For example, gathering the information could require an investor to process various types of data from various sources. Only the largest institutional investors likely have the economies of scale to profitably gather this information.[237] Further still, the presence of significant block holdings by diversified, passive investment-style funds, which often do not hold board seats, means that such information may not be provided by audit firms to a significant control group in cases where the fund managers do not hold a board seat.[238] Even proxy advisors rely upon relatively limited publicly available information in making voting recommendations, which investors may then rely upon in their own decision-making.[239] Due to the lack of information currently available, it may be several financial reporting cycles before audit committees and investors accumulate enough information (e.g., through restatements, CAMs, audit committee communications,

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[236] *See* ACAP Final Report, at VIII:14.

[237] Some research suggests that institutional investors are better-informed than retail investors. *See*, *e.g.*, Cory A. Cassell, Tyler J. Kleppe, and Jonathan E. Shipman, *Retail Shareholders and the Efficacy of Proxy Voting: Evidence from Auditor Ratification*, Review of Accounting Studies 75 (2022) and cites therein.

[238] *See, e.g.*, Amir Amel-Zadeh, Fiona Kasperk, and Martin C. Schmalz, *Mavericks, Universal, and Common Owners – The Largest Shareholders of U.S. Public Firms*, SSRN Electronic Journal (2022). We note that SSRN does not peer review its submissions.

[239] *See, e.g.*, Cunningham, *Auditor Ratification* 163.

other public events bearing on the auditor's reputation) to be able to effectively judge the auditor's performance and act accordingly. Compared to investors, audit committees are better able to accumulate information in less time due to their ability to more easily request and receive information from their auditor.

As described in the baseline, a small group of auditors voluntarily disclose some firm-level information through firm transparency reports.[240] However, many smaller firms do not voluntarily release transparency reports and for those that do provide such information, the metrics are not uniform or comparable across firms.[241] One commenter provided several examples of how firms' voluntary reporting is not comparable across firms. Furthermore, staff found that firms generally do not voluntarily report engagement-level metrics publicly. Some research on audit firm transparency reporting in foreign jurisdictions suggests that the information is not useful while other research finds that disclosure requirements improve audit quality for impacted firms.[242] Some academic studies find that, because the information contained in transparency reports is relatively unregulated, the disclosures and contextual

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[240] Audit firm transparency reports are voluntary and unregulated disclosures, as they are not required by PCAOB standards or applicable U.S. law. Consequently, audit firms can disclose metrics of their own choosing and construction. In practice, as discussed in Section II, audit firms that do publish transparency reports include the disclosure of metrics that are required in reports pursuant to disclosure rules in other jurisdictions, such as in the European Union (i.e., EU — No 537/2014 Article 13), or similarly adopted domestic requirements in the U.K. under the FRC's authority (i.e., the Companies Act of 2006, and Statutory Auditors and Third Country Auditors Regulations of 2016).

[241] Some research suggests that lack of comparability can be a problem even when disclosures are required. *See*, *e.g.*, Thomas Bourveau, Maliha Chowdhury, Anthony Le, and Ethan Rouen*, Human Capital Disclosures*, SSRN Electronic Journal (2023) (finding that, after the SEC adopted principles-based human capital disclosure requirements in 2020, the resulting human-capital disclosures lacked comparability). We note that SSRN does not peer review its submissions.

[242] *See, e.g.*, FRC, *Transparency Reporting: AQR Thematic Review*, (Sept. 2019) (finding that surveyed investors and audit committee chairs are either unaware of or perceive limited use in audit firm transparency reporting in the U.K.); Rogier Deumes, Caren Schelleman, Heidi V. Bauwhede, and Ann Vanstraelen, *Audit Firm Governance: Do Transparency Reports Reveal Audit Quality?*, 31 AUDITING: A Journal of Practice & Theory 193, 194 (2012) (finding that EU audit firm transparency reporting is not associated with proxies for audit quality); and Shireenjit K. Johl, Mohammad Badrul Muttakin, Dessalegn Getie Mihret, Samuel Chung, and Nathan Gioffre, *Audit Firm Transparency Disclosures and Audit Quality*, 25 International Journal of Auditing 508 (2021) (finding that a requirement for audit firm transparency reporting in Australia led to an improvement in audit quality for the impacted entities).

discussion lack uniformity and comparability across or within audit firms.[243] Pointedly, audit firms could alter the methodology and construction of any metric they voluntarily choose to disclose. A lack of uniformity means that the voluntary disclosures have limited comparative value, inhibiting their usefulness in allowing investors to evaluate the efficacy of their auditors.

Two commenters said that the proposal cited no studies demonstrating that there is a lack of information about auditors and their engagements or evidence that the market is seeking additional information. One commenter said that without sufficient dialogue with investors, audit committees, and firms, it is unclear whether there are information gaps in what is already provided and whether there is any opportunity to expand or enhance what is already done today to meet their expectations. The proposal discussed evidence related to the lack of information despite a market demand, including several studies related to the decision-relevance of current voluntary firm transparency reporting.[244] The proposal also discussed the demand from various investor groups for additional information related to the quality of firms and their engagements.[245] Investor-related groups' support for the proposal provides additional evidence that there is an information gap and demand for information like the final metrics. Indeed, one commenter said that existing information, including firms' transparency reports, is insufficient and largely unused by the investment community because it is seen as marketing material rather than substantive, actionable data. According to the commenter, the lack of information leads audit committee members to prefer Big 4 auditors to protect or validate their decision-making in an environment where the audit and auditor are credence goods. We note that transparency reports may also be unused because the information lacks standardization.

One commenter said that the proposal appeared to acknowledge that there is a lack of market demand for the proposed metrics. To the contrary, as discussed in the proposal and again above, given the considerations of benefits discussed in Sections IV.C.1 and IV.C.2 below, we believe the lack of incentive for firms to provide such information is likely the cause of the apparent undersupply of information rather than a lack of market demand.[246] That is, we believe the limited availability of information is more likely due to the supply and demand-side problems discussed above rather than a lack of market demand. By contrast, two commenters

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243 *See, e.g.*, Sakshi Girdhar and Kim Klarskov Jeppesen, *Practice Variation in Big-4 Transparency Reports*, 31 Accounting, Auditing & Accountability Journal 261 (2018) (finding that "the content of transparency reports is inconsistent and the transparency reporting practice is not uniform within the Big-4 networks").

244 *See* Proposing Release at 132-134.

245 *See* Proposing Release at Section IV.B.1.

246 *See* Proposing Release at n. 212.

agreed that certain aspects of the market create limited incentives to provide sufficient information to users of the financial statements regarding audit quality. One commenter said that some research suggests that investors want more information on the inputs to audit production.[247]

### 2. How the Final Rules Address the Need

#### i. Mandatory Disclosure of Metrics

The final rules address the need by requiring mandatory public disclosure of metrics relating to auditors and audit engagements. Under the final rules, auditors will have the opportunity to discuss the context of their metrics. The final rules could thus reduce opacity in the audit market and reduce frictions in the information market, thereby enhancing (i) audit committees' ability to efficiently and effectively monitor and select auditors as well as (ii) investors' ability to efficiently and effectively make decisions about ratifying the appointment of their auditors and allocating capital. The final metrics will quantify various aspects of firms' audit practice as a whole and engagements performed. As described in Section III.C, the collective history of these final metrics will be publicly available. Moreover, as noted in Section II.A.2.iii.a.(2), the final metrics will be subject to requirements designed to ensure their accuracy, including certification by the firm and specific quality control requirements.

Investors and audit committees could use the final metrics to better understand how their auditor has conducted their engagement and how that compares to how other engagements were conducted.[248] This should improve their decision-making. Some commenters agreed that the information about auditors and their engagements required by the metrics would provide value to the decision-making process for stakeholders. For example, the final metrics should help audit committees engage in active discussions with their current auditors regarding the audit process and interview candidate auditors when or if a replacement auditor is desired.[249] Audit committee disclosures indicate that some audit committees

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247 *See* Brant E. Christensen, Steven M. Glover, Thomas C. Omer, and Marjorie K. Shelley, *Understanding Audit Quality: Insights from Audit Professionals and Investors*, 33 Contemporary Accounting Research 1648 (2016).

248 *See*, *e.g.*, Christensen, et al. *Understanding Audit Quality* (finding that surveyed investors believe information similar to several of the final metrics [i.e., the sufficiency of engagement team staffing, having well-trained auditors on the engagement team, having auditors on the engagement team with appropriate expertise, and the lack of financial statement restatements] impacts audit quality).

249 *See, e.g.*, AICPA, *Hiring a Quality Auditor* 9, (2018) (discussing how audit committees should obtain all necessary information from the auditor).

consider a variety of public and nonpublic information when engaging their auditor.[250] We believe the information could also inform investors' auditor appointment ratification decisions. Research finds that investors are more likely to challenge auditor appointments when they have access to information that calls into question the quality or independence of the firm, which suggests that, in some cases, investors will use standardized information across firms and over time to make better decisions.[251] Referring to academic research, one commenter said that investors do react to audit outcomes, audit behavior, and regulatory-induced disclosures in the audit report. However, the commenter also noted that: (i) the results are nuanced and context-specific; and (ii) mixed for non-professional investors.[252] Furthermore, investor-related

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[250] *See*, *e.g.*, CAQ, *2023 Audit Committee Transparency Barometer*, 15-18 (2023) (presenting examples of audit committee disclosures that summarize the information the audit committee considered when appointing the auditor).

[251] *See*, *e.g.*, Paul Tanyi, Dasaratha Rama, and Kannan Raghunandan, *Shareholder Ratification of Auditors after PCAOB Censures*, SSRN Electronic Journal (2021) (finding that first-time PCAOB censures of the largest accounting firms are associated with a higher percentage of shareholders not voting to ratify the appointment of the firm after the censure); Suchismita Mishra, K. Raghunandan, and Dasaratha V. Rama, *Do Investors' Perceptions Vary with Types of Nonaudit Fees? Evidence from Auditor Ratification Voting*, 24 Auditing: A Journal of Practice and Theory 9 (2005) (finding that the SEC's requirement for companies to disclose partitioned information about tax and other non-audit fees paid to a company's independent audit firm had a positive association with the proportion of votes against ratifying the appointment of the firm in 2003); Paul N. Tanyi, Dasaratha V. Rama, and K. Raghunandan, *Auditor Tenure Disclosure and Shareholder Ratification Voting*, 35 Accounting Horizons 167 (2021) (finding that in the case of companies with long [short] auditor tenure, the proportion of shareholder votes against ratifying the appointment of the auditor increased [decreased] after PCAOB mandated public disclosure of auditor tenure). We note that research also indicates that retail investors may not necessarily use information regarding an audit firm in their decisions to vote on a proposal to ratify the appointment of the firm. *See, e.g.,* Cassell, et al., *Retail Shareholders* (finding that, on average, shareholder votes against ratifying the appointment of the firm are not associated with audit failures but are associated with investment performance). However, the same study also suggests that non-retail investors are relatively better informed. One commenter said it would be useful to know whether the PCAOB had found any evidence of shareholders responding to the persistently high rates of Part I.A deficiencies. One study finds some evidence that shareholders vote against auditor ratification when their auditors receive unfavorable PCAOB inspection reports. However, the study finds the relationship only for the subset of companies where corporate governance is weak. *See* Myungsoo Son, Hakjoon Song, and Youngkyun Park, *PCAOB Inspection Reports and Shareholder Ratification of the Auditor*, 17 Accounting and the Public Interest 107 (2017). We note that SSRN does not peer review its submissions.

[252] *See* Robert W. Knechel, Gopal V. Krishnan, Mikhail Pevzner, Lori B. Shefchik, and Uma K. Velury, *Audit Quality: Insights From the Academic Literature*, 32 Auditing: A Journal of Practice & Theory 385,

groups have indicated that they use the information contained in Form AP. This suggests that they are familiar with Form AP and may be interested in reviewing additional information provided there. However, citing academic research, one commenter noted that the influence of Form AP on investor decision-making is mixed.[253]

By making the final metrics public and therefore available to all potential beneficiaries, the final rules should help ameliorate the positive externality problem associated with public disclosure.[254] Moreover, because these final metrics will be public, the increased reputational risk they bring for auditors may, in turn, create incremental incentives for auditors that will be subject to the final requirements to maintain their reputation, or face a loss of business, thereby increasing accountability.[255] Public disclosure also addresses investors' free-rider problem by eliminating the need for a private actor to force firms to disclose.[256] One commenter said there are several mechanisms already in place to hold auditors accountable and questioned whether accountability could be further improved. We acknowledge that such

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387-388 (2013); DeFond and Zhang, *A Review of Archival Auditing Research*; Peter Carey and Roger Simnett, *Audit Partner Tenure and Audit Quality*, 81 The Accounting Review 653 (2006); Allison K. Beck, Robert M. Fuller, Leah Muriel, and Colin D. Reid, *Audit Fees and Investor Perceptions of Audit Characteristics*, 25 Behavioral Research in Accounting 71 (2013); W. Brooke Elliott, Jessen L. Hobson, and Brian J. White, *Earnings Metrics, Information Processing, and Price Efficiency in Laboratory Markets*, 53 Journal of Accounting Research 555 (2015); Christensen, et al., *Understanding Audit Quality*; Eric T. Rapley, Jesse C. Robertson, and Jason L. Smith, *The Effects of Disclosing Critical Audit Matters and Auditor Tenure on Nonprofessional Investors' Judgments*, 40 Journal of Accounting and Public Policy 106847 (2021); and Sarah Judge, Brian M. Goodson, and Chad M. Stefaniak, *Audit Firm Tenure Disclosure and Nonprofessional Investors' Perceptions of Auditor Independence: The Mitigating Effect of Partner Rotation Disclosure*, 41 Contemporary Accounting Research 1284 (2024).

253 *See* Jenna J. Burke, Rani Hoitash, and Udi Hoitash, *Audit Partner Identification and Characteristics: Evidence from US Form AP Filings*, 38 Auditing: A Journal of Practice & Theory 71 (2019); Lauren M. Cunningham, Chan Li, Sarah E. Stein, and Nicole S. Wright, *What's in a Name? Initial Evidence of US Audit Partner Identification Using Difference-in-Differences Analyses*, 94 The Accounting Review 139 (2019); Marcus M. Doxey, James G. Lawson, Thomas J. Lopez, and Quinn T. Swanquist, *Do Investors Care Who Did the Audit? Evidence from Form AP*, 59 Journal of Accounting Research 1741 (2021); Jeffrey Pittman, Sarah E. Stein, and Delia F. Valentine, *The Importance of Audit Partners' Risk Tolerance to Audit Quality*, 40 Contemporary Accounting Research 2512 (2023).

254 *See* Section IV.B.1.ii.

255 Two investor groups generally agreed with this benefit.

256 For additional discussion of the role of mandatory disclosure as a regulatory tool, *see, e.g.*, Admati and Pfleiderer, *Forcing Firms to Talk*; and John C. Coffee, Jr., *Market Failure and the Economic Case for a Mandatory Disclosure System*, 70 Virginia Law Review 717 (1984).

mechanisms are in place (e.g., PCAOB inspections). However, we believe the final rules will complement existing accountability mechanisms. For example, the final rules may enhance the PCAOB inspections approach.[257] Another commenter suggested that we consider firm incentives related to legal liability, damage to reputation through restatement and deficiencies, and PCAOB sanctions. We acknowledge that these forces create some incentive for firms to keep audit quality above a certain threshold. However, restatements are relatively rare events and PCAOB sanctions are sporadic. Furthermore, PCAOB inspections are constrained by existing PCAOB rules and standards. One commenter said that while enforcement actions and inspection reports provide valuable data, their extended delays often diminish their relevance for key stakeholders.

Several commenters said that investors are not making use of existing information that is similar to the proposed metrics, suggesting that they would not make use of the proposed metrics either. As support, two commenters referred to comments made during the November 2, 2022 meeting of the PCAOB SEIAG.[258] Citing a survey of institutional investors, another commenter said that most institutional investors are either unfamiliar with or unaware of firms' current audit quality reports.[259] Another commenter questioned whether investors who are not fully utilizing the information contained in inspection reports would also not use the proposed metrics. Citing a market research report, one commenter noted that shareholders play a limited role in practice when ratifying the appointment of the auditor.[260] At the September 2024 IAG meeting, one investor said that the average investor is not engaging with the audit process or audit committees.

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257 *See* Section IV.C.1.i.c for additional discussion on the benefits to the PCAOB's inspection program.

258 One commenter referred to a discussant on the panel who made the following statement: "My experience has been that investors don't read the firm-level [PCAOB inspection] report. A lot of them don't know they necessarily exist, right." Another commenter did not refer to a specific discussant and referred to the Nov. 2, 2023 meeting of the PCAOB SEIAG. However, we believe the commenter intended to refer to the Nov. 2, 2022 PCAOB SEIAG meeting because firm and engagement metrics were not a topic of discussion during the Nov. 2, 2023 meeting.

259 *See* CAQ 2023 Survey. The survey was comprised in interviews with 38 institutional investors working at companies with a minimum of $500M in assets under management. The participants were portfolio managers or investment analysts at buy side firms or research directors or similar roles at sell side firms. The survey did not describe how the participants were found or the questions that were asked.

260 *See* Glass Lewis, *2024 Benchmark Policy Guidelines – United States*, (2024).

We appreciate these statements and research findings and note that they are consistent with some of the research cited in the proposal and above.[261] However, we note that the CAQ 2023 Survey also finds that almost all surveyed institutional investors assess audit quality by considering the firm's reputation, years of experience, people, and technological resources. Apart from technological resources, the final metrics will provide investors with related information.[262] The surveyed institutional investors also expressed an interest in learning more about auditor communications to audit committees through disclosures. We believe audit committee members likely do occasionally request information like the final metrics from their auditor. Indeed, one audit committee chair said at the September 2024 IAG meeting that he requested information on industry specialization from his auditor. A majority of the surveyed institutional investors indicated that metrics related to the lead engagement partner's background, engagement team tenure, and specialist experience or related information would be useful. The survey also states that engagement-level metrics were of greater interest to the surveyed institutional investors than firm-level metrics because they are specific to a company, objective, and measurable. The final metrics will provide investors with engagement-level metrics. Collectively, we believe this information supports our view that investors, particularly institutional investors, will find the final metrics useful and indeed an improvement in the quality of information over the limited information currently available.

One commenter suggested that the PCAOB consider how much information investors will have about auditors compared to the amount of information they will have about issuers. We do not believe that such a comparison is relevant to the economic analysis and the commenter did not explain how it would be relevant. We acknowledge that, in some cases, the final metrics could provide investors information about certain aspects of audit firms and their engagements that they might not have about issuers. However, we note that, on balance, there is considerably more public disclosure available regarding issuers than audit firms.

Many commenters representing firm or industry groups were skeptical that investors could effectively use the information. One commenter said that publication of metrics alone does not guarantee that investors will use or be aware of them. Two commenters said that the metrics' relationship to audit quality may not be clear. Several commenters noted that, unlike audit committees, investors would not be able to have a two-way conversation directly with auditors to appreciate the full context of the firm and its audit. One commenter questioned whether investors or audit committees would find the information useful. One commenter noted some of the proposed firm-level metrics (e.g., Partner and Manager Involvement,

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261 *See* Proposing Release at Section IV.B.2.

262 *See* Section IV.D.3.iv.d for a discussion of alternative metrics considered related to the use of technical resources.

Workload) would be useful to audit committees but expressed doubt that others (e.g., Use of Auditor's Specialists, Allocation of Audit Hours, Experience of Audit Personnel) would be useful. However, the commenter believed some of the proposed metrics (e.g., Experience of Audit Personnel, Industry Experience) could be useful at the engagement level. Several commenters suggested that some or all of the proposed metrics would be useless without context. Citing academic research that was also cited in the proposal, one commenter said that retail investors would rely on the proposed metrics only if they were clearly trending over time.[263] One commenter expressed concern that investors and audit committees could have trouble utilizing the proposed metrics because there is a lack of benchmarks, and it will be unclear to them how the proposed metrics relate to audit quality. Two commenters said that tracking metrics would become a compliance exercise and therefore would not transmit useful information for stakeholders. One commenter said that there are qualitative benefits of being a part of a GNF that cannot be properly captured or measured through the proposed metrics.

While most investors will not have the same context as audit committees, we believe that many investors, particularly institutional investors, do have sufficient context to make effective use of the final metrics. Indeed, investors have access to much of the contextual information that some commenters felt was critical, such as the firm's size, the issuer's size, network membership, or the issuer's industry. Many companies have robust shareholder engagement programs, where managers and/or board members communicate directly with shareholders.[264] These programs could raise investors' awareness of the metrics, provide an opportunity for two-way conversation, and encourage them to vote on corporate governance matters or raise concerns outside of the voting process. Furthermore, even if investors decline to participate in outreach efforts or no shareholder engagement program exists, proxy advisory firms can use the information to inform their voting recommendations on both auditor ratification and audit committee members.[265] Thus, the final metrics can still inform

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263 *See* Brown and Popova, *How do Investors Respond*.

264 *See*, *e.g.*, Ali Kakhbod, Uliana Loginova, Andrey Malenko, and Nadya Malenko, *Advising the Management: A Theory of Shareholder Engagement*, 36 Review of Financial Studies 1319 4 (2023) and cites therein (discussing how communication between management and shareholders has become increasingly prevalent).

265 Proxy voting guidelines do not currently appear to reference audit quality, but do refer to poor accounting practices. *See*, *e.g.*, ISS, *United States Proxy Voting Guidelines Benchmark Policy Recommendations*, (Jan. 2024), 16 (listing "poor accounting practices" as a factor influencing its voting recommendations on members of the audit committee.)

shareholder voting.[266] Two investor groups agreed with our view that investors would use the proposed metrics to make better decisions about ratifying the appointment of their audit firm and allocating capital. Several other commenters said that the metrics would be beneficial to investors and other users of the audit report.

We also note that auditors will be able to provide investors with context through optional narrative disclosure. Commenters had mixed views on the usefulness of the proposed narrative disclosure. Some commenters believed the narrative disclosure would allow firms to provide context necessary for appropriate understanding and would allow firms to communicate critical context that may be beneficial. However, several commenters believed it would not be sufficient. We recognize that the optional narrative disclosures may not capture all relevant context. In such cases, firms could provide additional voluntary disclosure (e.g., through their transparency or quality reports).[267]

One commenter suggested we had ignored significant work conducted by the CAQ over the past decade regarding AQIs. The commenter referred specifically to three reports published by the CAQ (the "2014 CAQ Report,", "2016 CAQ Report," and "2023 CAQ Report").[268] We have reviewed each report. The 2014 CAQ Report and 2016 CAQ Report summarize the results of stakeholder outreach and therefore inform our understanding of the need for standard setting and how the final metrics address the need. The 2023 CAQ Report opines on transparency reporting best practices.

Based on outreach to various stakeholders, the 2014 CAQ Report expresses optimism that AQIs can be useful to audit committees and help promote audit quality. For example, the

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[266] Research shows that proxy advisor recommendations influence shareholder voting outcomes. *See*, *e.g.*, Nadya Malenko, and Yao Shen, *The Role of Proxy Advisory Firms: Evidence from a Regression-Discontinuity Design*, 29 Review of Financial Studies 3394 (2016) (finding "that the recommendations of proxy advisory firms are a major factor affecting shareholder votes.")

[267] *See* Section III.A.8 for a discussion on the optional narrative disclosure, including commenters' views and how the final rules address commenters' views.

[268] *See* Center for Audit Quality, *Approaches to Audit Quality Indicators*, (Apr. 2014) ("2014 CAQ Report"); Center for Audit Quality, *Audit Quality Indicators: The Journey and Path Ahead*, (Jan. 2016) ("2016 CAQ Report"); and Center for Audit Quality, *Audit Quality Disclosure Framework (Update)*, (June 2023) ("2023 CAQ Report"). By "AQI," the 2014 CAQ Report and 2016 CAQ Report are referring to measures that may provide further insight into audit quality, as outlined in a PCAOB briefing paper presented to the PCAOB's Standing Advisory Group Meeting on May 15-16, 2013. *See PCAOB, Discussion – Audit Quality Indicators* (May 15-16, 2013), *available at* https://pcaobus.org/news/events/documents/05152013_sagmeeting/audit_quality_indicators.pdf. Most of the final metrics are very similar to an AQI discussed therein.

report concludes that communication of engagement-level AQIs can help the audit committee evaluate the actions taken or untaken by their auditor and help maintain or increase audit quality. This is consistent with the benefits related to audit committee monitoring of their auditor discussed in Section IV.C.1.i.a. It also emphasizes the importance of context, which we acknowledged in the proposal and discuss below in this subsection. The report suggests a flexible approach to the communication of metrics. We acknowledge this suggestion is in tension with the adopted approach that specifies calculations for each metric.[269] However, for the reasons discussed in this subsection and highlighted below, we believe a voluntary or flexible approach would not sufficiently address the need for comparable information.

In the 2016 CAQ Report, the CAQ expressed a belief that reliable, quantitative metrics related to the audit can: (i) inform audit committees about matters that may contribute to the quality of an audit and (ii) help audit committees make decisions related to auditor appointment or reappointment as well as the selection of lead engagement partners. Based on the result of a pilot study with audit committees, and in addition to the findings summarized by the commenter, the report found that participants: (i) generally supported discussion of AQIs with the engagement team; (ii) felt that key aspects of audit quality cannot be quantified such as professional skepticism; (iii) acknowledge growing interest from investors regarding how audit committees are fulfilling their responsibilities; and (iv) recognized that AQIs can help audit committees oversee the quality of the external audit.

Our economic analysis is largely consistent with these views, in particular our discussion of improved monitoring of both the auditor and the audit committees in Section IV.C.1.i.a. However, participants in the CAQ's pilot study also: (i) expressed a preference for a flexible approach to AQI communication; (ii) noted that they already have access to the information they need; and (iii) cautioned that public disclosure of engagement-level metrics could lead to unintended consequences such as benchmarking behavior or excessive focus on measurable metrics. We acknowledge that there may be some benefits to a more flexible approach to audit committee communications. However, we believe a completely flexible approach could result in audit committees having insufficient information or information with limited utility, limit PCAOB oversight, limit comparability of metrics, and exacerbate other unintended effects (e.g., manipulation of the metrics).[270] The proposal acknowledged that audit committees can already seek to obtain information like the final metrics from their incumbent auditors and we acknowledge this again below in Section IV.C.1.i.a and Section IV.C.1.i.b. Several commenters

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269 *See* Section IV.B.2.ii for additional discussion on our decision to standardize the calculation of the metrics.

270 *See* Section IV.B.2.ii for additional discussion on our decision to standardize the calculation of the metrics. *See* Section IV.C.3.iv for discussion on the potential for auditors to manipulate their metrics.

agreed that audit committees already have access to information about auditors and their engagements. Finally, we note that the proposal also discussed the potential unintended consequences raised by participants in the pilot study, and we discuss them again below in Section IV.C.3.

Two factors limit the relevance of the 2014 CAQ Report and 2016 CAQ Report. First, the reports contemplate voluntary communications by auditors to audit committees rather than mandatory public disclosure. Second, the auditing environment has evolved significantly since then. For example, investors and audit committees now have access to Form AP information and CAMs.

One commenter suggested that audit committees have access to relevant comparable data by reference to information firms are already currently required to disclose pursuant to PCAOB rules (e.g., Form 2). The proposal acknowledged the availability of this information and we acknowledge it again in Section IV.A. However, as we have described above and discuss further in Section IV.B.2.ii, the final metrics will make new relevant information available in a way that is much more accessible and comparable than existing information sources. The commenter also said that audit committees can seek relevant data from potential new audit firms. The proposal acknowledged this and we discuss this topic again below in Section IV.C.1.a and Section IV.C.1.b. Importantly, we note that audit committees may have trouble obtaining comparable information from potential new auditors. One commenter suggested that audit committees would likely prefer to obtain information through conversation with their auditor directly rather than refer to a database of metrics. Under the final rules, audit committees will be free to request the final metrics or any other related information from their auditor directly.

One commenter performed a survey of audit committee chairs of large U.S. public companies. The commenter did not indicate the number of participants, how participants were selected, demographic information, or the questions they were asked. The participants said that they already receive or have access to most of the information in the proposal as part of the audit process and any other information would likely not be valuable to them. We discussed this limitation along with important caveats in the proposal and discuss it again in Section IV.C.1.i.a and Section IV.C.1.i.b. We also note that, at the same time, participants also expressed desire for additional information on artificial intelligence.[271] Participants also opined on the extent to which investors would use the information. First, some participants said information like the proposed metrics is rarely requested by or discussed with investors. We discussed in the proposal and in Section IV.B.1 above the challenges investors face obtaining information through this channel. We also discussed above how investors may be less vocal

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[271] Section IV.D.3.iv.d below and Section IV.D.3.iv.d of the proposal explain our decision not to include a metric related to the use of technical resources.

because they do not believe it is possible to obtain useful information in the current environment. We also note that commenters representing a broad array of investors, investment managers, investor advocates, and other financial reporting experts said that the metrics would be useful. Second, some participants noted that the information would only be available to investors annually and therefore would be stale. We acknowledge that investors will have access to the metrics on an annual basis. We believe that requiring firms to disclose the metrics on a more continuous basis would require a significantly greater investment in time and resources by the firms. We also note that a broad range of commenters generally agreed that audit committees will find most or all of the information useful, especially engagement-level metrics.

One commenter representing a firm-related group performed a survey of audit committee members by way of its member firms. The same commenter also commissioned a third party to perform an investor survey.[272] Each survey provides information related to the need for and potential benefit of the proposed metrics. We discuss each survey below.

The audit committee members survey involved 242 participants. The participating audit committee members sit on audit committees of a range of companies by size and industry sector. The commenter did not completely describe the basis on which audit committees were invited to participate in the survey. The commenter did provide the survey questions. Fifty-nine percent of participants said the information available to them to fulfill their external auditor oversight responsibilities meets all of their needs. Thirty-six percent said the information meets most of their needs and the remaining 5% said the information meets less than most of their needs. These results suggest that most audit committees believe the current information environment is sufficient. However, the results do not imply that additional information cannot be useful to audit committee members. Indeed, 27% of the surveyed audit committee members seek more information about how their audit engagement is being performed, about the audit firm, or about other audit firms. Furthermore, some participants may have been reluctant to say that the information available to them to fulfill their responsibilities does not meet most or all of their needs because it would imply they are not fulfilling their responsibilities. Other results of the survey are largely consistent with information presented in the proposal and in Section IV.A above. For example, 78% of participants agreed that there could be unintended consequences and 73% said there would be challenges interpreting the proposed metrics. Eighty-two percent of participants said they had concerns about data specific to their audit being available publicly; however, the specific concerns were not raised and, by contrast, only 40% were concerned that the proposed mandatory reporting could increase

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[272] *See* Letter from Center for Audit Quality (Aug. 1, 2024) *available at* https://pcaobus.org/about/rules-rulemaking/rulemaking-dockets/docket-041.

director liability. Fifty-nine percent of participants agreed that some standard information about auditors should be considered. Eighty percent of participants said they rarely or never use PCAOB Form AP and 78% said they rarely or never use PCAOB registrations data; rather, the quality of conversation with the auditor is the top way audit committees evaluate the quality and reliability of the audit. Finally, 90% of participants said that PCAOB standards and rules are well-suited or have mostly kept up with change. Use of technology in the audit was more commonly ranked than firm and engagement metrics as an area where the audit committee would like to see the PCAOB modernize its auditing standards. We note that the PCAOB recently adopted amendments to auditing standards related to auditors' use of technology-assisted analysis and recently proposed a standard related to auditors' use of substantive analytical procedures.[273] We also note that, while informative to the PCAOB generally, such comparisons are less relevant to the economic analysis of the final rules.

The investor survey involved 100 participants. Participants were screened to ensure they are professional institutional investors employed at companies that manage at least $500 million in assets and have at least five years of experience and serve at the director level or higher. Besides these requirements, the participating investors cover a variety of job levels, experience levels, and ages, cover both genders, and primarily (80%) focus on both large accelerated filers and accelerated filers. The commenter did not completely describe the basis on which investors were invited to participate in the survey. The commenter did provide the survey questions. Eighty-six percent of the participants work for banks or credit unions, 13% for other types of funds, and 1% for family offices.

Fifty-three percent of participating investors indicate they trust the audit of public company financial statements completely and 40% trust them a great deal. Furthermore, 57% of participating investors feel the information available to assess the quality of the audit meets all their needs and 35% feel it meets most of their needs. However, we believe the respondents may be focusing on whether information currently available permits them to fulfill their fiduciary responsibilities narrowly defined, similar to the audit committee members. First, just 17% of participating investors said they do not want to see any additional information about the audit to evaluate its quality. All others wanted additional information about the auditing process, team specifics, qualifications, and more generally, other information. The final metrics will provide such information. Second, almost all of the proposed metrics were indicated as

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[273] *See Amendments Related to Aspects of Designing and Performing Audit Procedures that Involve Technology-Assisted Analysis of Information in Electronic Form*, PCAOB Rel. No. 2024-007 (June 12, 2024); *Proposed Auditing Standard – Designing and Performing Substantive Analytical Procedures and Amendments to Other PCAOB Standards*, PCAOB Rel. No. 2024-006 (June 12, 2024). The SEC approved the PCAOB's amendments to auditing standards related to auditors' use of technology-assisted analysis on Aug. 20, 2024.

being extremely helpful by between 30% and 50% of participated investors. The commenter did not indicate whether the survey allowed less favorable responses and, if so, what the participants' responses were.

The commenter noted that there were variances between these percentages and the portion of participating investors who said they would likely seek out the information on the PCAOB website. The commenter interpreted these variances as being consistent with their view that understanding how investors would use the information is necessary. We agree that understanding how investors would use the information is important. Indeed, we discuss through the economic analysis how we believe investors will use the information. However, we believe these variances are difficult to interpret because it is unclear what the practical difference is between finding a metric helpful and being likely to proactively seek it out. Therefore, the variances may be driven by confusion among respondents.

Notably, despite broad agreement that engagement-level metrics would be helpful and 83% wanting some additional information about audit quality in the companies they invest in, 83% of surveyed investors somewhat or strongly agreed with the statement that mandated public disclosure of engagement-level performance metrics could lead to unintended consequences and as such should be voluntary. The survey did not indicate what unintended consequences the surveyed investors thought might occur or whether they were aware that the final rules would permit firms to provide an optional narrative disclosure along with each metric.[274]

Other results of the investor survey are largely consistent with information presented in the proposal and in Section IV.A above. For example, investors use a variety of publicly available information to assess audit quality (e.g., audit quality reports, inspection reports, reputation and the auditor's opinion and ICFR evaluation, PCAOB website). Investors also agree that context would be important for understanding the proposed metrics.

We note that the views of participating investors were different from the views of audit committee members in two important ways. First, investors are more optimistic that the proposed metrics would be useful to audit committees. Indeed, 30% of participating investors strongly agree that audit committees lack access to the information they need to make informed decisions about selecting an auditor (39% somewhat agree) and 34% strongly agree that mandatory and standardized firm and engagement metrics are necessary for company management and audit committees to uphold fiduciary responsibilities to shareholders (47% somewhat agree). Second, investors more strongly believe that PCAOB standards and rules are in need of updating. Where 90% of surveyed audit committee members said that PCAOB

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274 *See* Section IV.B.1 for a discussion on the limitations of voluntary auditor reporting.

standards and rules are well-suited or have mostly kept pace with change, just 26% of surveyed investors said PCAOB standards and regulations are well-suited for their intended purpose and 42% believed they had mostly kept up with change. More specifically, where 17% of surveyed audit committee chairs cited firm and engagement areas among the top three areas they would like to see the PCAOB modernize auditing standards, 28% of surveyed investors cited it among their top three areas.

A commenter representing an investor-related group pointed to another survey of investors.[275] This survey was conducted by the commenter in July 2017. The survey was limited to members of the commenter's group and targeted primarily buy-side portfolio managers and research analysts, sell-side analysts, credit analysts, and corporate financial analysts. There were 284 initial respondents. The commenter did not completely describe the basis on which investors were invited to participate in the survey. The commenter did provide the questions asked. The survey's finding, as highlighted by the commenter, underscores that (i) the quality of information communicated to investors, including AQIs, is very important to how investors perceive the value of an audit and (ii) developing and monitoring AQIs is a high standard-setting priority for investors.[276] According to the commenter, the results of the survey suggest that firm and engagement metrics are a priority for investors, a viewpoint with which we agree and that accords with other investor feedback we have received over the course of this project. We note that survey respondents rated information like the final metrics (e.g., restatement of company financials, industry expertise of audit personnel, training and accreditation of audit personnel, tenure of engagement partner, number of audit staff per audit partner, audit firm recruitment and retention practices) between 2.71 and 3.66 in importance (one being "not important" and four being "very important.")

While we believe the final metrics will help reduce opacity in the audit market and reduce frictions in the information market, we note that the final metrics will not be direct measures of audit quality. Audit quality is an abstract concept, and there is no single comprehensive measure of audit quality. Audit quality is a concept designed to describe the characteristics of, and participants in, audit engagements in which the auditors are more likely to identify and report material misstatements. Or, more broadly, audit quality reflects all of the

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275 *See* CFA Institute, *CFA Institute Member Survey Report: Audit Value, Quality, and Priorities*, (July 2017) ("2017 CFA Institute Survey"), *available at* https://rpc.cfainstitute.org/en/research/surveys/audit-value-quality-priorities-survey-report.

276 *Id.* at Table 1. We note that the 2017 CFA Institute Survey did not define "AQI."

components of the audit that align with desirable outcomes.[277] The desired outcomes of the framework depend (to some extent) upon the stakeholders involved, even if there are certain consistent areas of focus. As a result, the final metrics cannot directly *measure* audit quality. And they are not intended to do so, as—without additional context—it is unlikely they can be interpreted directly as measurements of audit quality. The final metrics are not intended to imply that an increase (decrease) in a particular metric, or a group of metrics, necessarily relates to an increase (decrease) in audit quality. Lastly, we do not believe that the final metrics, individually or taken together, could be appropriately used in isolation to ascertain audit quality at an audit firm or for an audit engagement. For example, some of the most important elements of a high-quality audit, such as application of due care and professional skepticism, are not capable of being entirely measured and quantified directly.

Two commenters agreed that no single metric can be viewed as having a causal relationship to audit quality. Several other commenters agreed that the correlation between the proposed metrics and audit quality is far from perfect. However, two commenters interpreted this caveat regarding the relationship between the proposed metrics and audit quality to imply that the proposed metrics cannot be decision-relevant to investors and audit committees. We do not believe this to be the case. We continue to believe that certain aspects of audit quality cannot be measured. However, we do not believe this implies that the final metrics will be irrelevant to investors and audit committees. To the contrary, as said by one commenter, we believe certain aspects of the audit can be measured.

One commenter said that the purpose and use of the metrics are not consistently correlated with stakeholders' needs because the proposal lacked an explicit definition of audit quality. We do not believe a definition of audit quality is necessary for the metrics to be correlated with stakeholders' needs. The preamble to Section IV.B above explicitly states investors' and audit committees' information needs. We believe the arguments made in this subsection, in conjunction with the discussion of benefits in Section IV.C.1, establish a correlation between the final metrics and stakeholders' needs.

#### ii. Uniform and Comparable Metrics

In addition to mandating disclosure, the final rules will also specify the data sources and calculations for each final metric and require their disclosure in PCAOB forms in an electronic, structured data format. Collecting and reporting information in this manner will likely enhance the usefulness of the information to investors and audit committees by allowing them to more

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[277] For a review of various definitions and discussions of the latent attributes of audit quality, *see*, Knechel, et al., *Audit Quality*.

easily access the information and compare firms and engagements. Regular annual reporting should also allow investors and audit committees to form judgments regarding the quality of their auditor sooner (e.g., compared to restatements which may take several years to occur or PCAOB inspection reports which may be released several years after an audit engagement was performed).

Section III.A.5 discusses commenters' views on comparability. Overall, commenters questioned whether the engagement-level metrics would be comparable due to the importance of company-specific context, which in their view is necessary for understanding the metrics. Two commenters suggested that even firm-level metrics are not comparable. One commenter said that differences in the centralization or complexity of issuers' IT infrastructures could be a reason for cross-sectional differences in the engagement-level metrics rather than differences in the audit. One commenter suggested that comparability would improve if the metrics would account for firm size, issuer size, and industry. One commenter suggested that the standardized calculations, rather than facilitate comparability, could reduce it because they would not be appropriate for every firm. Several commenters suggested that the standardized calculations would not be flexible enough to evolve over time as the auditing environment changes. Relatedly, one commenter suggested that the PCAOB revisit in the future the appropriate calculations. One commenter said the proposed metrics would be meaningless without sufficient context. By contrast, one commenter said that investors are aware that the metrics will not be perfectly comparable and that they are trained to analyze this type of information.

We agree that context could be important to understanding any individual metrics. As discussed above in this subsection, we believe that no set of metrics, individually or collectively, can completely measure audit quality. Accordingly, we have provided auditors the opportunity to disclose additional context for each metric. We acknowledge that firm size, issuer size, and industry could be important context when interpreting a metric. However, we note that this information about issuers is already available to the public, and we believe that stakeholders will be better served by a rule that permits them to consider this information alongside the metrics as they see fit rather than by prescribing how they should be accounted for. We also note that, under the final rules, firms will be free to provide additional information voluntarily to their stakeholders (e.g., through audit quality or firm transparency reporting) that they believe better captures the changing environment. We recognize that the standardized calculations will not explicitly account for all relevant facts and circumstances for each firm. However, notwithstanding the potential importance of context for understanding any individual metric, the comparability of information about firms and their engagements will be improved overall compared to the current largely voluntary state by mandating specific metrics and calculations. We discuss a potential post-implementation review (PIR) in Section IV.D.2 below.

## C. Economic Impacts

This section discusses the expected benefits, costs, and potential unintended consequences of the final rules. The magnitudes of the benefits and costs are likely to be affected by the degree to which firms have already voluntarily adopted disclosure practices that are similar to those required under the final rules or produce similar metrics for non-public purposes. As discussed in Section IV.A, as of the 2018 and 2019 inspection years, the U.S. GNFs already track some metrics like those being adopted. Though their practices may have evolved since then, we believe they will need to gather additional information or adjust their calculations. The magnitude of the impacts may also vary by stakeholder depending on how useful the metrics are for the decisions they face. Stakeholders who find the final metrics more useful will be more likely to incur the costs and benefits of integrating the final metrics into their decision-making. We believe the final rules will have a greater impact on smaller firms which likely have less developed practices in this area.

Several commenters suggested that the PCAOB should consider the cumulative effects of the reporting requirements in this rulemaking along with other rules and standards that have recently been proposed or adopted. One commenter reported results of a survey of audit committee member respondents in which 76 percent of 145 respondents indicated concern about the cumulative impact of PCAOB standard-setting and rulemaking on audit quality and 24 percent indicated no concern.[278] Consistent with long-standing practice and the PCAOB's staff guidance on economic analysis, the Board's economic analysis for each rulemaking considers the incremental benefit and costs for the specific rule—i.e., the benefits and costs stemming from that rule compared with the baseline.[279] There could be implementation activities for certain provisions of other rules and standards that overlap in time with implementation of the final rules, which may impose costs on resource constrained firms affected by multiple rules. This may be particularly true for smaller and mid-sized firms with more limited resources. In determining effective dates and implementation periods, the Board considers the benefits of rules as well as the costs of delayed implementation periods and potential overlapping implementation periods. The Board also considers that in some cases, overlapping implementation periods may have benefits because firms will not need to revise or redo previous process or system changes where rules interact with each other. For example, firms could benefit in this regard by implementing the final rules while also implementing QC 1000

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278 Section IV.B.2 above discusses the survey in greater detail.

279 *See Staff Guidance on Economic Analysis in PCAOB Standard-Setting* (Feb. 14, 2024) ("Staff Guidance on Economic Analysis"), *available at* https://pcaobus.org/oversight/standards/economic-analysis/05152014_guidance.

and, if approved by the SEC, the PCAOB's Firm Reporting rules because all three rulemakings address external reporting.

Several investor group commenters stated they believe the benefits of the proposal would exceed the costs. In contrast, other commenters stated they believe the costs of the proposed metrics will not be proportionate to the benefits. One commenter said there was a lack of academic evidence about whether the benefits exceed the costs. One reason that academic evidence related directly to whether the benefits of the proposal exceed the costs is limited is likely that, for the reasons discussed above, the necessary data do not exist. However, the economic analysis incorporates where appropriate academic evidence related to certain impacts of the proposal. Furthermore, as described above, we have quantified certain impacts to the extent feasible. One commenter suggested that a more complete economic analysis of the proposal would reveal that the costs exceed the potential benefits. The commenter did not indicate a data source or methodology that would allow for a quantitative analysis of all benefits and costs. The commenter also did not indicate how they know what the results of such an analysis would be. One commenter suggested that the PCAOB expand the proposal to consider whether the benefits outweigh the costs. Another commenter said that they saw no indication that the Board had addressed whether investors and other stakeholders would place greater weight on the asserted benefits against increased audit fees. The economic analysis separately analyzes benefits and costs, and as stated above, we are not able to quantify all relevant benefits and costs due to data limitations. However, we note that one commenter representing an investor-related group said that investors recognize they ultimately bear the cost of creating such information and metrics and are generally willing to pay for information and metrics.

### 1. Benefits

As discussed in Section IV.B.2, the final metrics could enhance (i) audit committees' ability to efficiently and effectively monitor and select auditors as well as (ii) investors' ability to efficiently and effectively make decisions about ratifying the appointment of their auditors and allocating capital. Moreover, there will likely be improvements to the PCAOB's oversight programs (i.e., selection of firms, engagements, and focus areas for review), as well as to policy research. As an important indirect benefit, the final rules could further spur competition to the benefit of investors. Thus, while the metrics do not represent a comprehensive measure of audit quality, stakeholders may use the metrics in ways that could improve audit quality.[280]

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[280] While some of the most important elements of high-quality audit, such as the application of due care and professional skepticism, cannot be fully measured or quantified, the final metrics provide

Several investor-related groups generally agreed with these benefits. One commenter said that reporting of proposed metrics would improve audit quality across the profession.

Auditors have a responsibility to obtain reasonable assurance about whether the financial statements are free of material misstatement. If use of the metrics leads to higher audit quality, it could increase the likelihood that the auditor will discover a material misstatement or will qualify its audit opinion when a material misstatement exists and is not corrected by management. The SEC does not consider the requirements for audited or certified financial statements in Rule 2-02(b) of Regulation S-X to be met when the auditor's report is qualified. Furthermore, a qualified audit opinion may evoke negative market reactions. For these reasons, higher audit quality could incentivize issuers to take steps to ensure their financial statements are free of material misstatement. Issuers could take these steps proactively, prior to the audit, or in response to adjustments requested by the auditor. Financial statements that are free of material misstatement are of higher quality and more useful to investors.[281] An investor-related group said that investors demand high-quality audits because reliable audited financial statement are critical to investors in making informed decisions.

In the following discussion, we discuss the direct benefits related to enhancing the information available to investors, audit committees, and other stakeholders and follow up

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proxies for certain aspects of audit quality, such as years of experience, auditor workload, and the percentage of audit hours attributable to senior members of the audit team. These proxies, while not a complete measure of audit quality, offer important information about auditors and the engagements they lead, which stakeholders can use to inform their decisions.

[281] We note several caveats. First, some theoretical research finds that changes to auditing standards can have counterintuitive effects on audit quality. For example, some research finds that increased precision in auditing standards can reduce audit quality. *See* Marleen Willekens and Dan A. Simunic, *Precision in Auditing Standards: Effects on Auditor and Director Liability and the Supply and Demand for Audit Services*, 37 Accounting and Business Research 217 (2007). Other research finds that setting a higher minimum bar can reduce audit quality. *See* Pingyang Gao and Gaoqing Zhang, *Auditing Standards, Professional Judgment, and Audit Quality*, 94 The Accounting Review 201 (2019). We acknowledge that these studies examine the impacts of audit performance standards. By contrast, we are adopting a disclosure standard. This may limit the relevance of these studies to the final rules. We are also unaware of empirical evidence that directly tests these theories. Second, the conclusion that financial statements that are free of material misstatement are more useful to investors hinges on the assumption that investors value compliance with the applicable financial reporting framework (e.g., U.S. GAAP). The various market reactions to restatements that have been documented in academic literature suggests that this is the case. Third, the conclusion that improved audit quality would improve financial reporting quality assumes that issuers would not switch to sufficiently lower quality auditors in sufficient number as a result of the final rules. Finally, one commenter said, and we agree, that the proposed metrics cannot be viewed as the only proxy for measuring financial reporting quality.

with a discussion of the potential indirect benefits. We then review the extant literature related to the final metrics and examine how each final metric could contribute to achieving the final rules' intended benefits.

### i. Direct Benefits to Investors, Audit Committees, and the PCAOB

The direct benefits of the final rules relate to (i) improved investor and audit committee monitoring, (ii) improved auditor selection, and (iii) improved PCAOB oversight and scholarly auditing research. We believe these benefits will arise because the final metrics will significantly augment the information set available to stakeholders and thereby enhance their decision-making.

Section III.B discusses in detail each of the final metrics and how they would enhance decision-making. To summarize, the final metrics relate broadly to audit personnel, allocation of audit hours, and audit outcomes. The final metrics related to audit personnel will provide information on the audit team's involvement and workload (i.e., Partner and Manager Involvement, and Workload), turnover (i.e., Retention of Audit Personnel), experience (i.e., Experience of Audit Personnel), industry specialization (i.e., Industry Experience), and training (i.e., Training Hours for Audit Personnel). The final metrics related to the allocation of audit hours will provide information on the allocation of audit hours prior to the issuer's year end (i.e., Allocation of Audit Hours). The final metrics related to outcomes will provide information on restatement trends (i.e., Restatement History).

These metrics could enhance decision-making by helping stakeholders assess whether auditors are appropriately staffing their engagements, budgeting their time, and achieving desirable outcomes. As the following examples illustrate, stakeholders will likely make these judgments based primarily on their experience and by comparison to similar firms or engagements and in conjunction with other information available to them (e.g., the other metrics, issuer's unique facts and circumstances, or research).[282] These examples are meant as illustrations only; investors and audit committee members may interpret the final metrics differently depending on specific circumstances.

- An investor may observe that one issuer's auditor has more industry experience than a comparable issuer's auditor. Depending on the magnitude of the difference and other information available to the investor, the investor may take this as a sign regarding the relative reliability of the audit and, consequently, the

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[282] Section IV.C.1.iv below summarizes academic literature on how various proxies for the final metrics relate to various proxies for audit quality.

issuer's financial statements. This could influence the investor's voting or capital allocation decisions.

- An audit committee member may observe that an engagement's partners and managers were more involved than the audit committee member expected based on their experience. While the audit committee member may believe partner and manager involvement is, as a general matter, a sign of good quality control, the audit committee member may, depending on the facts and circumstances, suspect there was a problem that required the partner's attention. As a result, the audit committee member may request additional information from the auditor.

- An investor may observe that the auditor's retention metric is a low outlier compared to prior years. This may lead the investor to question the auditor's ability to gather sufficient appropriate audit evidence and, depending on other information available, may inform the investor's vote on ratification of the auditor or re-election of audit committee members to the board of directors.

- An audit committee member may observe that the auditor's allocation of audit hours prior to the year's end indicates, based on academic research, an elevated risk of audit deficiency and restatement. As a result, the audit committee member may work with the auditor to find ways to improve the planning of a future audit.

We note that the benefits of mandatory disclosure are well-studied and have been measured in other markets such as credit ratings, health care, and financial reporting.[283]

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[283] For example, in the context of credit ratings, research has found that the introduction of additional credit ratings information into the market leads relatively higher quality borrowers to obtain lower borrowing costs by 20 basis points. *See* Tony Tang, *Information Asymmetry and Firms' Credit Market Access: Evidence from Moody's Credit Rating Format Refinement*, 92 Journal of Financial Economics 325 (2009). We note that the relevance of this finding is limited by the fact that the studied disclosure relates to the quantity of information provided by the credit rating agency rather than the quality of service provided by the credit ratings agency. In the context of nursing home care, one study finds that mandatory disclosure of quality indices leads to improvement in two of the five indices. *See* Dana B. Mukamel, David L. Weimer, William D. Spector, Heather Ladd, and Jacqueline S. Zinn, *Publication of Quality Report Cards and Trends in Reported Quality Measures in Nursing Homes*, 43 Health Services Research 1244 (2008). For a discussion of potential benefits of mandatory financial reporting quality as well as potential unintended consequences, *see* Christian Leuz and Peter D. Wysocki,

Likewise, the benefits of comparable information have been observed in financial reporting.[284] There are important similarities between the markets for credit ratings, health care, and financial reporting and the audit market. For example, credit ratings services, like audit services, are opaque and operate under an "issuer-pays" business model. Therefore, the impacts of disclosure observed in those markets provide some indication of the potential impacts the final rules could have on the audit market. However, there are also significant differences. For example, the quality of health care services may, in some cases, be more visible than the quality of audit services. These differences limit the relevance of these studies. The disclosures studied in these markets may also not be directly comparable to the final metrics and therefore are less relevant.

We also note that the benefits of prior PCAOB disclosure rules vary by rule and analysis.[285] Citing academic research, one commenter said studies show that, while the

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*The Economics of Disclosure and Financial Reporting Regulation: Evidence and Suggestions for Future Research,* 54 Journal of Accounting Research 525 (2016) and cites therein. However, some research also finds that mandatory disclosure can have little effect. For example, in the context of HMOs, one study finds that, following the introduction of public disclosure of six quality scores, only one—customer satisfaction—subsequently drove HMO market share and the effect was most pronounced in markets where true quality varied the most. *See* Leemore Dafny and David Dranove, *Do Report Cards Tell Consumers Anything They Don't Already Know? The Case of Medicare HMOs*, 39 The Rand Journal of Economics 790 (2008).

[284] *See, e.g.*, Mark L. DeFond, Xuesong Hu, Mingyu Hung, and Siqi Li, *The Impact of Mandatory IFRS Adoption on Foreign Mutual Fund Ownership: The Role of Comparability*, 51 Journal of Accounting and Economics 240, 241 (2011) (finding that greater financial reporting comparability leads to greater investment); Luigi Zingales, *The Future of Securities Regulation*, 47 Journal of Accounting Research 395 (2009) (concluding that a more subtle benefit of disclosure regulation is the standardization it entails); and Bingyi Chen, Ahmet C. Kurt, and Irene Gunnan Wang, *Accounting Comparability and the Value Relevance of Earnings and Book Value,* 31 Journal of Corporate Accounting & Finance 82 (2020) (finding that "accounting comparability increases the value relevance of earnings, but not book value").

[285] *See*, *e.g.*, Michael J. Gurbutt and Wei-Kang Shih, *Staff White Paper: Econometric Analysis on the Initial Implementation of CAM Requirements*, Public Company Accounting Oversight Board 4 (2020) (discussing how PCAOB staff did not find "systematic evidence that investors respond to the information contents in CAMs" but nevertheless did find that "some investors are reading CAMs and find the information beneficial."); Kose John and Min Liu, *Does the Disclosure of an Audit Engagement Partner's Name Improve the Audit Quality? A Difference-in-difference Analysis*, 14 Journal of Risk and Financial Management 1 (2021) (suggesting that there was an increase in audit quality and audits costs as a result of PCAOB Rule 3211); and Cunningham, et al., *What's in a Name?* (finding evidence that any immediate impact of PCAOB Rule 3211 on audit quality or audit fees is limited to specific dimensions of audit quality, specific control groups, and/or specific company characteristics).

information contained in Form AP may improve the perception of auditors and financial reporting, Form AP is not influencing investors' decision-making. Referring to research discussed above and in the proposal, the commenter also said that CAMs are not driving decision-making by investors.[286] By contrast, a recent survey finds that institutional investors generally rely on CAMs when making investment decisions and read the CAMs section in the Form 10-K.[287] Approximately half said that additional information would be even more beneficial. There are important similarities between these disclosure rules and the final rules. For example, CAM reporting and Form AP reporting requirements were significant changes in auditor reporting and the final engagement-level disclosures will be reported on Form AP. Therefore, the results of these studies provide some indication of how the final metrics could impact the audit market. However, there are also significant differences between prior PCAOB disclosure rules and the final rules. For example, the final rules will likely require firms to gather more engagement-level information than CAM and Form AP reporting requirements do. These differences limit the relevance of these studies.

One commenter suggested that the benefits of the proposed metrics would be limited by the fact that they are focused on the past and therefore may have limited value predicting future performance. We recognize that the metrics will be computed using historic data and we believe this is a natural limit. We also disagree with the premise that historic information, by definition, cannot have value predicting future performance. Historical metrics can inform future-oriented decisions by increasing the reliability of the data investors and audit committees use to form their expectations.

One commenter suggested that benefits would only accrue to data aggregators, the plaintiff's bar, and academics and not to investors. We agree that data aggregators may aggregate and resell the information. However, we note that the existence of such a market would be evidence that there is a market demand for the final metrics. Data aggregators may also allow retail investors to benefit more from the final metrics by making them even more accessible. Similarly, to the extent there is future reliance on the metrics by academics and plaintiffs' lawyers, it would serve as evidence of their information value and, by extension, their

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[286] *See* Doxey, et al., *Do Investors Care*; Candice T. Hux, *How Does Disclosure of Component Auditor Use Affect Nonprofessional Investors' Perceptions and Behavior?*, 40 Auditing: A Journal of Practice & Theory 35 (2021); Gurbutt and Shih, *Econometric Analysis on the Initial Implementation of CAM Requirements*; Jenna J. Burke, Rani Hoitash, Udi Hoitash, and Summer Xiao, *The Disclosure and Consequences of US Critical Audit Matters*, 98 The Accounting Review 59 (2023). Referring to a U.K. auditor disclosure requirement similar to CAMs, another commenter said that the extent and quality of dialogue between investors and audit committees was not as expected.

[287] *See* Center for Audit Quality, *Critical Audit Matters Survey*, (July 2024).

relevance to investors. Pointing to pages 135 and 168 of the proposal, the same commenter stated that the proposal acknowledges that the required metrics are not likely to be decision-useful to retail investors. In fact, the proposal states on page 135 that "[r]esearch also indicates that retail investors may not necessarily use information regarding an audit firm in their decisions to vote on a proposal to ratify the appointment of the firm." The proposal states at p. 168 that "[d]ue to economies of scale, we believe institutional investors would be more likely to incur these costs than retail investors." To be clear, we believe that institutional investors are more likely to use the final metrics than retail investors.

One commenter suggested that all the metrics must help retail investors make informed decisions. We consider the benefits and costs to all stakeholders, not just retail investors. As such, we do not believe that a metric should be excluded on the basis that it may not help retail investors make informed decisions because doing so could deprive other stakeholders of useful information. Subject to this caveat, we believe some retail investors will use the metrics, albeit likely less so than institutional investors. Furthermore, as discussed in Section IV.A, we believe more passive retail investors may indirectly benefit from the improved decision-making of more active institutional investors.

#### a. Improved Monitoring

The final rules will increase the set of information available to audit committees and investors regarding their auditor. This should improve both investors' and audit committees' ability to monitor their auditors.[288] For example, an audit committee could engage in more meaningful discussions with their auditor regarding the auditor's performance.[289] In response to improved monitoring, auditors may improve audit efficiency as well as audit outcomes as

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[288] For a discussion of the same principle, but in the context of issuer financial reporting, *see*, *e.g.*, Leuz and Wysocki, *The Economics of Disclosure and Financial Reporting Regulation* (explaining that the disclosure of operating performance and governance arrangements by public companies can lower the cost of monitoring by providing investors with useful benchmarks that help investors evaluate other companies' managerial efficiency or potential agency conflicts).

[289] One study reviewed the comment letters to the Concept Release and found that audit firms agreed with the notion that audit committees may benefit from enhanced dialog between the auditor and the audit committee. *See* Kathleen M. Harris, and L. Tyler Williams, *Audit Quality Indicators: Perspectives from Non-Big Four Audit Firms and Small Company Audit Committees*, 50 Advances in Accounting 1 (2020).

they become more responsive to investors' and audit committees' audit service needs.[290] The final rules could also reduce costs related to information gathering that are incurred by investors and audit committees when monitoring their auditor. Some of the cost reductions could reflect reductions in duplicative work to the extent that various investors or audit committees collect the same information.

One commenter suggested that the PCAOB should not focus on over-auditing or audit inefficiencies. Another commenter was concerned by the suggestion that investors should be expected to ratify auditor selection or make decisions related to capital allocation on the basis of auditor efficiency (e.g., by reviewing auditors' allocation of time or resources). Consistent with the PCAOB's staff guidance on economic analysis, we consider the most likely impacts. As discussed in the proposal, we believe that some reduction in over-auditing or some improvement in auditing efficiency could result from the final rules. However, we do not believe they will be central benefits and we have emphasized other benefits accordingly.

Two caveats could limit the extent to which improved investor and audit committee monitoring and reduced monitoring costs will lead to improved audit performance. First, we note that improvements in audit performance will be limited by the fact that audit committees are able to request information like the final metrics from their auditor. Indeed, one survey of audit committee members from smaller public companies, including audit committee members of accelerated filers, reports that most of the survey participants believed there were no "gaps"

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290 *See, e.g.*, Bengt Holmström, *Moral Hazard and Observability*, The Bell Journal of Economics 74 (1979) (finding that efficiency improves when contractable information about an agent's performance is available to the agent's principal) and Mai Dao, K. Raghunandan, and Dasaratha V. Rama, *Shareholder Voting on Auditor Selection, Audit Fees, and Audit Quality*, 87 The Accounting Review 168 (2012) (finding evidence that shareholder involvement in firm selection is associated with higher audit fees and improved audit quality). Some research suggests that audit committees with financial expertise are more effective monitors (i.e., financial reporting quality improves). To the extent that providing additional information to audit committees is analogous to increasing their expertise, this suggests that the final rules could lead to more effective audit committee monitoring. *See* Dina El Mahdy, Jia Hao, and Yu Cong, *Audit Committee Financial Expertise and Information Asymmetry*, Journal of Financial Reporting and Accounting (2022). In principle, improved monitoring could lead to a reduction in the overall quality of audit services. For example, some issuers may seek lower audit fees at the expense of audit quality. As the final disclosures will be public, we believe, in most cases, this would be less likely. *See* Section IV.C.1.ii for additional discussion. Some issuers may have very strong financial reporting quality independent of their auditor (e.g., they have a lender with strong oversight). In these cases, the most suitable auditor may not necessarily be the "highest quality" auditor and over-auditing may be more of a concern than under-auditing.

in the information they were receiving from their audit firms.[291] Furthermore, at the September 2024 IAG meeting, one audit committee chair said that he has unfettered access to his auditor, has requested information related to industry expertise from his auditor in the past, and has never been denied access to information requested. As discussed above, one commenter provided a survey suggesting that most audit committees believe the current information environment is sufficient. However, we believe that, by making these disclosures mandatory and standardized across firms and engagements, the final rules will increase the accessibility, reliability, and comparability of information about auditors and their engagements. For example, audit committees will be better able to compare their auditors to peers. Moreover, at the September 2024 IAG meeting one audit committee chair described how their auditor can be reluctant to provide information deemed confidential by the auditor. Second, the benefit of improved monitoring of auditors could also vary depending on the abilities of the audit committee. As one IAG member said, audit committee members that do not have a background in accounting may not know what questions to ask their auditor. For example, more proactive audit committees with greater financial or audit expertise may be able to make better use of the final metrics than other audit committees. However, under the final rules, investors considering votes for election to the board of audit committee members could consider whether they expect candidates to be able to effectively use the final metrics when executing their oversight responsibilities.

In addition to helping investors monitor the auditor's performance, the final metrics may assist investors in monitoring and evaluating the performance of the audit committee. For example, investors could observe audit committee performance and express any potential concerns through open dialogues with the board of directors or election of board and audit committee members. The audit committee is responsible for overseeing the auditor and the final metrics may assist investors in determining whether the audit committee was effective in this capacity (e.g., whether the audit committee continues to delay replacing the auditor despite the presence of metrics that suggest potential concerns about audit performance).[292] This improved monitoring could improve audit committee effectiveness (e.g., more effective monitoring of the auditors, better selection of auditors, etc.).[293]

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291 *See* Harris and Williams, *Audit Quality Indicators* Table 6.

292 *See* the preamble to Section IV.C.1.i for a discussion on how the final metrics could assist decision-making.

293 Some academic research suggests that audit committee effectiveness is associated with audit committee incentives. *See*, *e.g.*, Jeffrey Cohen, Ganesh Krishnamoorthy, and Arnold M. Wright, *The*

One commenter supported the view that the metrics will help investors hold audit committees accountable. However, another commenter suggested that audit committees that currently execute their statutory mandate with an insufficient level of interest and attention will continue to do so despite the availability of the final metrics. Another commenter suggested that metrics were an inappropriate way for investors to oversee audit committees and would override the gatekeeping function of audit committees. We acknowledge that the final rules' impact may vary by audit committee. However, for the reasons discussed above, we believe that the final rules will, on average, lead to a valuable improvement in investors' ability to monitor audit committees and, by extension, audit committee performance. We do not believe the final rules will supplant audit committees' gatekeeper function. Rather, audit committees will continue to play a critical corporate governance function. Indeed, by enabling investors to better monitor and evaluate audit committees, we believe the final metrics will enhance the audit committee's role and reinforce its effectiveness in overseeing auditors.

One commenter suggested that interaction between investors and directors is unlikely and directed us to industry research suggesting that engagement between directors of large issuers and their investors is decreasing.[294] We acknowledge that direct interaction may occur more for institutional investors. However, we note that the survey cited by the commenter

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*Corporate Governance Mosaic and Financial Reporting Quality*, 23 Journal of Accounting Literature 87 (2004) and cites therein. Some research suggests that investors are willing to pay for audit committee effectiveness and hold audit committees accountable for negative audit quality. *See, e.g.*, Ellen Engel, Rachel M. Hayes, and Xue Wang, *Audit Committee Compensation and the Demand for Monitoring of the Financial Reporting Process*, 49 Journal of Accounting and Economics 136, 138 (2010) (suggesting a willingness by companies to deviate from the historically prevalent one-size-fits-all approach to director pay in response to increased demands on audit committees and differential director expertise) and Suraj Srinivasan, *Consequences of Financial Reporting Failure for Outside Directors: Evidence from Accounting Restatements and Audit Committee Members*, 43 Journal of Accounting Research 291 (2005) (concluding that audit committee members bear reputational costs for financial reporting failure). Some research suggests that audit committee members without Big 4 audit experience are more likely to favor auditors that are rated as "attractive." *See*, *e.g.*, Baugh, Matthew, Nicholas J. Hallman, and Steven J. Kachelmeier, *A Matter of Appearances: How Does Auditing Expertise Benefit Audit Committees When Selecting Auditors?*, 39 Contemporary Accounting Research 234 (2022). Together, this research suggests that audit committee effectiveness could respond to improved investor monitoring. Other research suggests that audit committee effectiveness is positively associated with proxies for audit quality. *See*, *e.g.*, Brian Bratten, Monika Causholli, and Valbona Sulcaj, *Overseeing the External Audit Function: Evidence from Audit Committees' Reported Activities*, 41 Auditing: A Journal of Practice & Theory 1 (2022) (finding that the strength of audit committee oversight, as implied by audit committee disclosures, is positively associated with proxies for audit quality).

294 *See* PriceWaterhouseCoopers, *2023 Annual Corporate Directors Survey*.

notes that the decline between 2022 and 2023 was "slight" overall but larger for the largest companies (75% to 58%). The cited survey also says that "directors are regularly engaging with shareholders and the vast majority consider those interactions 'productive.'" Moreover, as discussed in greater detail above in Section IV.B.2.i, we note that many public companies have robust investor outreach programs, some of which target retail investors. Academic research on the frequency of shareholder outreach programs shows they are increasing over time.[295] Therefore, we believe there is no strong evidence supporting the comment that director engagement with shareholders is unlikely to occur.

Mandatory disclosure of the final metrics could also improve audit firms' internal monitoring of their (i) audit practices and related system of quality control, and (ii) individual engagements. This could improve governance, accountability, and overall quality control within the audit firm. The final metrics may also help auditors identify efficiencies or room for improvement in their audit approach by comparing their final metrics to their competitors. One commenter noted that the proposal recognized that firms may not find the certain metrics useful in monitoring their quality control systems. While we continue to believe that the final metrics could improve audit firms' internal monitoring, we acknowledge that some firms, due to their unique facts and circumstances, may find some metrics less useful than others.

#### b. Improved Selection

The final rules may also enhance auditor selection to the extent that the rules improve the ability of investors and audit committees to compare their current auditor to an alternative auditor.[296] When considering an alternative auditor, audit committees may find the auditor's engagement-level metrics for similar engagements (e.g., an issuer of similar size and/or within the same industry to the audit committee's issuer) most useful. As discussed in Section III.C, investors and audit committees could electronically search for firm-level metrics and download engagement-level metrics when constructing rosters of candidate auditors. Moreover, audit committees will benefit to the extent that they are able to engage in more meaningful discussions and interviews with candidate auditors during the selection process—improving the

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[295] *See* Dey et al., *Proxy Advisory Firms and Corporate Shareholder Engagement*, Figure 2 (showing a monotonic increase in the proportion of sampled firms reporting shareholder engagement in their proxy statement from 5.5% in 2011 to 36.3% in 2019.)

[296] One recent experimental study finds that participants playing the role of CFO, director, or individual investors strongly prefer auditors that have stronger metrics and are willing to pay more for those auditors. *See* Dennis Ahn, Radhika Lunawat, and Patricia Wellmeyer, *Firm and Engagement Performance Metrics and Auditor Contracting Decisions*, SSRN Electronic Journal, at Table 1 and Table 2 (2024). We note that SSRN does not peer review its submissions.

efficiency of auditor-issuer matching.[297] For example, the final metrics (e.g., Industry Experience and Workload) could help audit committees select an auditor that has the capacity to perform the audit.[298] Requiring mandatory, comparable, and uniform disclosure of the final metrics—across engagement teams and audit firms, and over time—should further enhance this benefit by helping audit committees to compare auditors on a common basis.[299] The final rules may also improve investors' decision-making regarding auditor ratification and appointment of board members.[300] For instance, investors may decide that a particular final metric is especially important to their views on the auditor's efficacy and the quality of the financial statements.[301] Investors that rely on proxy advisors for these decisions may also benefit from the final disclosures because proxy advisors could use the information in their recommendations.

Improved auditor selection could improve audit efficiency as well as audit outcomes as incoming auditors may be better equipped to meet investors' and audit committees' audit service needs.[302] The final rules could also reduce costs related to information gathering incurred by audit committees when selecting their auditor and by investors when voting to

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297 *See, e.g.*, Gene M. Grossman and Carl Shapiro, *Informative Advertising with Differentiated Products*, 51 The Review of Economic Studies 63 (1984) (finding that reduced information frictions (i.e., decreased informational advertising costs) could result in improved matching between sellers and buyers).

298 Some academic research finds that audit committees do select auditors based on observable aspects of the quality of their services. *See, e.g.*, Vivek Mande and Myungsoo Son, *Do Financial Restatements Lead to Auditor Changes?*, 32 Auditing: A Journal of Practice & Theory 119 (2013).

299 *See* preamble to Section IV.C.1.i for discussion of academic literature related to the benefits of comparability in financial reporting.

300 Some research suggests that more informed shareholders make better audit ratification decisions (e.g., auditor ratification decisions are more closely associated with public signals of audit failure). *See*, *e.g.*, Cassell, et al., *Retail Shareholders* and cites therein.

301 Some experimental research suggests that investors are less likely to support auditor ratification if metrics like those discussed in the Concept Release are trending downward. *See, e.g.*, Brown and Popova, *How do Investors Respond*.

302 In principle, improved auditor selection could lead to a reduction in the overall quality of audit services. For example, some issuers may seek lower audit fees at the expense of audit quality. Due to the fact that the final disclosures will be public, we believe, in most cases, this would be less likely. *See* Section IV.C.1.ii for additional discussion. Some issuers may have very strong financial reporting quality independent of their auditor (e.g., they have a lender with strong oversight). In these cases, the most suitable auditor may not necessarily be the "highest quality."

ratify the appointment of the auditor.[303] Some of the cost reductions could reflect reductions in duplicative work to the extent that various investors or audit committees collect the same information. Improved investor decision-making regarding voting for members of the board of directors, including directors who serve on the audit committee, could improve audit committee performance as incoming board members may be better equipped to meet investors' expectations regarding auditor oversight. One commenter said that the proposed metrics have the capacity to make investors' vote on ratification of the auditor and the vote on audit committee members substantially more meaningful.

Two caveats could limit the potential benefit of improved auditor selection and the reduction in the associated information gathering costs. First, we note that the impact will be limited by the fact that audit committees could in principle request information like the final metrics from alternative auditors. However, auditors may not be willing to voluntarily provide an audit committee with engagement-level metrics regarding their engagements with other issuers, information that may be particularly useful to audit committees in selecting an auditor. Furthermore, while audit committees can currently request tailored metrics, this approach imposes substantial collective costs and limits comparability across firms. We believe that, by making these disclosures mandatory and standardized, the final rules will increase the accessibility, reliability, and comparability of information available and therefore help audit committees. Second, we note that, to the extent that benefits are derived from the ability to readily switch between auditors based on an evaluation of the auditors' metrics, those benefits could be limited due to stickiness in existing auditor-audited company relationships which creates switching costs. Furthermore, large multinational issuers may, as a practical matter, need a GNF auditor, which limits the pool of available alternatives—which may be in turn further limited by auditor geographic/industry specialization (e.g., a need for financial services expertise in a particular office/city), or by auditor independence rules (e.g., the existence of an independence-impairing financial or consulting relationship between the issuer and a potential alternative auditor).[304] Therefore, the benefit of improved auditor selection could be more limited for the largest issuers. However, we believe that the final metrics could also help the audit committees of the largest issuers select specific engagement partners within the larger audit firms.

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303 Although investor voting on auditor ratification is non-binding, it could be a meaningful mechanism for expressing views on audit-related issues. If investors are dissatisfied with auditor selection, they can also vote against the re-election of board members, including those who serve on the audit committee, to potentially influence future auditor oversight.

304 *See* United States Government Accountability Office, *Continued Concentration in Audit Market for Large Public Companies Does Not Call for Immediate Action* 21 (Jan. 8, 2008).

### c. Benefits to the PCAOB's Inspection and Enforcement Programs and Scholarly Auditing Research

The final metrics are expected to provide direct benefits to the PCAOB's internal operating effectiveness. In the PCAOB's oversight capacity, it engages in inspection and enforcement activities for audits of issuers and, in the course of doing so, it uses data from issuers and audit firms. The final metrics will expand the basis on which selections may be made. For example, the final metrics could improve the selection models used to aid in predicting negative audit outcomes, such as restatements or the potential for audit deficiencies. As discussed in Section II.A.2.iii.a, QC 1000 will help to ensure that the final metrics will be reliable. Greater insight into audit risks could improve the PCAOB's ability to select potential enforcement matters. Overall, improved PCAOB oversight may give auditors additional incentive to comply with PCAOB professional standards and rules.[305]

Moreover, the PCAOB actively engages in policy research related to the market for assurance services to further the PCAOB's mission by informing the standard-setting and rulemaking agendas among other purposes. The additional data provided by the final rules could enhance the PCAOB's ability to produce impactful research and recirculate that gained knowledge into improved standards and rules. Relatedly, the additional data could also provide valuable information sources for the public, including academic research. Commenters agreed that academics could benefit from the metrics. Improved research quality is an important element of the PCAOB's standard-setting and rulemaking projects.

One commenter said it was unclear how the PCAOB would use the information. As described in the proposal and above, we expect that the metrics will at least inform the PCAOB selection of engagements and focus areas for review and future academic research that utilizes the metrics could inform PCAOB rulemaking projects. Several commenters agreed that the information would be useful to the PCAOB.

One commenter suggested that the PCAOB should be able to articulate which of the final metrics provide critical insights for effective monitoring by inspection teams using information obtained through PCAOB inspections. The PCAOB uses information like the final metric in various ways as part of its inspections approach. However, we believe the final metrics will on the whole provide additional value because they will be more comparable

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[305] Some academic research suggests that PCAOB oversight is beneficial. For example, one study of audit firms in foreign jurisdictions finds that PCAOB inspections access is positively associated with proxies for audit quality. *See* Phillip T. Lamoreaux, *Does PCAOB inspection Access Improve Audit Quality? An Examination of Foreign Firms Listed in the United States*, 61 Journal of Accounting and Economics 313 (2016).

across firms, engagements, and time and the engagement-level metrics will be available to staff at an earlier point in time than engagement-specific information provided pursuant to the review of an engagement. The same commenter said that public disclosure of the proposed metrics would not be necessary for the PCAOB to benefit from them. We agree that some of the benefits to the PCAOB do not derive specifically from the public nature of the reporting. However, the PCAOB expects that it will benefit from academic research that we believe will be conducted using the publicly reported final metrics and broader stakeholder engagement. Public availability of the final metrics could also improve the quality of other stakeholder input received by the PCAOB (e.g., public comment or roundtable discussions).

One commenter suggested that reliance on the metrics by PCAOB oversight could create a risk of enforcement for minor, unintentional errors in reporting. The commenter said this risk could manifest as a cost to smaller and mid-sized firms. We believe the commenter may have misinterpreted the benefit to PCAOB oversight as a suggestion that the PCAOB intends to make reporting of the final metrics an inspection focus area. While PCAOB inspectors may do so in the future, we are not suggesting this will benefit PCAOB oversight per se. Rather, we are suggesting that the final metrics themselves may help PCAOB inspections staff select firms, engagements, or focus areas for review. However, we acknowledge that, by relying on the final metrics, potential deficiencies in how firms are reporting them may become apparent to PCAOB staff. To the extent PCAOB oversight does consider firms' compliance with the final rules, we believe the PCAOB would exercise appropriate discretion.

Overall, the benefit to the PCAOB is difficult to quantify, as the social and economic benefits of enhanced regulatory oversight that is more efficient in its allocation of resources are difficult to monetize. The benefits of additional scholarly research are also difficult to quantify because there are a broad set of beneficiaries.

#### ii. Indirect Benefits Linked to Competition

*Capital Market Effects*

Assuming that the additional information, context, and perspective on auditors and audit engagements helps investors assess audit performance, it may help investors assess financial reporting quality.[306] For example, investors may incorporate the metrics into their

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[306] The IAG indicated in their comment letter regarding proposed QC 1000 that information related to audit quality would provide investors with "a level of confidence in the financial statements of companies in which they invest. Their level of confidence in the financial statements has a bearing on the prices they will be willing to pay or demand for investments." The comment letters received in

portfolio selection decisions.[307] One commenter said that the final metrics were necessary for auditors to have their work judged as something other than a commodity (i.e., competition on price alone).

Issuers audited by auditors whose metrics capital markets associate with greater financial reporting quality may experience reduced cost of capital or other capital market benefits and investors may reallocate their capital accordingly. Taken in isolation, this would tend to result in a reallocation of capital from issuers with less reliable financial reporting quality to issuers with higher financial reporting quality. These capital market reactions could provide audit committees with a stronger incentive to appoint an auditor whose final metrics capital markets associate with greater financial reporting quality. These effects could lead to changes in audit fees as auditors respond to changing demand for their services. Facing capacity constraints, some audit firms may turn down engagements or recruit additional staff to expand capacity.

*Auditor Competition*

Against the backdrop of capital market reactions to the final metrics and as auditors become better able to monetize their reputations, auditors could have an incentive to compete on the final metrics.[308] For example, to win engagements, auditors may seek to manage their final metrics by redeploying staff resources or providing additional training. This competitive dynamic could improve audit quality and, by extension, financial reporting quality.[309] Reduced

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response to proposed QC 1000 are available on the Board's website in Docket 046. *See* comment No. 4 on the proposed rule from the IAG, *available at* https://assets.pcaobus.org/pcaob-dev/docs/default-source/rulemaking/docket046/4_iag.pdf?sfvrsn=1941e7c0_4. *See* the preamble to Section IV.C.1 for a discussion on the association between audit quality and financial reporting quality.

307 There is an extensive body of academic literature suggesting that financial markets incorporate information into securities prices. *See, e.g.,* Eugene F. Fama, *Efficient Capital Markets: A Review of Theory and Empirical Work,* 25 The Journal of Finance 383 (1970).

308 Improved competition following mandatory disclosure regimes has been observed in other markets. *See* preamble to Section IV.C.1.i for additional discussion. One study finds that non-U.S. auditors inspected by the PCAOB gain market share from competing auditors after PCAOB inspection reports are made public, more so when the PCAOB inspection report has fewer engagement-level deficiencies. *See* Daniel Aobdia and Nemit Shroff, *Regulatory Oversight and Auditor Market Share*, 63 Journal of Accounting and Economics 262, (2017).

309 *See* the preamble to Section IV.C.1 for a discussion on the relationship between audit quality and financial reporting quality.

search costs could increase auditor competition.[310] In addition to facilitating issuers' selection of a preferred auditor, the increase in competition could potentially reduce audit fees.[311]

We note that the benefits linked to competition between audit firms could be reduced for the larger issuer segment of the market because larger issuers have fewer audit firms available to choose from that are able to perform large, complex audits, without violating independence rules and other constraints. However, the final metrics could help promote competition between partners within the larger firms.[312] One commenter suggested that the ability of the proposed metrics to spark competition between firms is an important condition for rulemaking and one which the proposal abandons because the proposed metrics are divorced from audit quality and excessively burdensome. We agree that the effect on competition is an important impact for us to consider, but we disagree with the commenter's assertions that the proposal abandoned it. To the contrary, our economic analysis considers all potential impacts of the final rules, competition among them. Indeed, based on our careful consideration of academic research, public comment, and our experience, we believe the final metrics could enhance competition and our economic analysis reflects this view.

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[310] Economic theory suggests that a reduction in search costs helps to make markets more competitive. *See, e.g.*, Helmut Bester, *Bargaining, Search Costs and Equilibrium Price Distributions,* 55 The Review of Economic Studies 201 (1988). There is an extensive literature in industrial organization economics studying the impact of search and advertising costs on competition. For example, Jean Tirole, *The Theory of Industrial Organization*, MIT Press 294 (1988) studies informative advertising (i.e., costs borne by sellers to inform buyers of the seller's existence, product quality, and pricing) in a model involving differentiated sellers, and finds that prices fall as information costs fall. *See also* Grossman and Shapiro, *Informative Advertising*; and Glenn Ellison and Alexander Wolitzky, *A Search Cost Model of Obfuscation*, 43 The RAND Journal of Economics 417 (2012). Glenn Ellison and Sarah F. Ellison, *Search, Obfuscation, and Price Elasticities on the Internet*, 77 Econometrica 427 (2009) also show that reductions in search costs increase the price-sensitivity of demand, resulting in decreased prices for near-substitute goods, and that sellers may attempt to engage in obfuscation strategies to reduce competitive pressure.

[311] The positive relationship between increased competition and lower audit fees is well-established, *see*, e.g., Wieteke Numan and Marleen Willekens, *An Empirical Test of Spatial Competition in the Audit Market,* 53 Journal of Accounting and Economics 450 (2012); and Andrew R. Kitto, *The Effects of Non-Big 4 Mergers on Audit Efficiency and Audit Market Competition*, 77 Journal of Accounting and Economics 101618 (2024). *See* Section IV.C.3.1 below for discussion on other potential unintended impacts the proposal may have on competition.

[312] *See* Ahrum Choi, Sunhwa Choi, and Jaeyoon Yu, *Does Internal Competition among Audit Partners Affect Audit Pricing Decisions?*, Auditing: A Journal of Practice & Theory 1 (2024) (finding that U.S. audit partners compete for clients with other partners within their office who perform audits in the same industry).

One commenter questioned whether firms' management of their metrics to win market share would improve audit quality. As discussed in the proposal and Section IV.C.3 below, we acknowledge that management of the final metrics may not always lead firms to improve their audit approach. However, economic theory suggests that if management of the metrics is entirely manipulatory, then users of the information will entirely discount it as "cheap talk."[313] We believe this extreme "cheap talk" outcome is unlikely, in part, because the final rules will be subject to PCAOB oversight as well as firms' QC systems, which are in turn subject to QC 1000.[314]

### iii. Indirect Benefits of Improved Financial Reporting Quality

As described above, to the extent the final rules improve audit performance, the final rules will also improve financial reporting quality. More reliable financial information would allow investors to improve the efficiency of their capital allocation decisions (e.g., investors may more accurately identify companies with the strongest prospects for generating future risk-adjusted returns and reallocate their capital accordingly).[315] Investors may also perceive less risk in capital markets generally, leading to an increase in the supply of capital.[316] An increase in the supply of capital could increase capital formation while also reducing the cost of capital to companies.[317] A reduction in the cost of capital reflects a welfare gain because it implies investors perceive less risk in the capital markets.

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313 *See* Vincent P. Crawford and Joel Sobel, *Strategic Information Transmission*, Econometrica: Journal of the Econometric Society 1431 (1982).

314 *See* Section IV.C.3.iv for additional discussion on how PCAOB oversight would mitigate potential manipulation of the final metrics.

315 *See*, *e.g.*, Acito, et al., *Market-Based Incentives for Optimal Audit Quality*.

316 *See*, *e.g.*, Hanwen Chen, Jeff Zeyun Chen, Gerald J. Lobo, and Yanyan Wang, *Effects of Audit Quality on Earnings Management and Cost of Equity Capital: Evidence from China*, 28 Contemporary Accounting Research 892 (2011); Richard Lambert, Christian Leuz, and Robert E. Verrecchia, *Accounting Information, Disclosure, and the Cost of Capital*, 45 Journal of Accounting Research 385 (2007) (concluding that improving the quality of accounting disclosures can influence the cost of capital and under certain conditions can unambiguously lower the cost of capital).

317 Cost of capital is the rate of return investors require to compensate them for the lost opportunity to deploy their capital elsewhere. Equivalently, cost of capital is the discount rate investors apply to future cash flows. Cost of capital depends, among others, on the riskiness of the underlying investment. Accordingly, the rate of return required by equity holders—cost of equity capital—and the

We are unaware of any literature that would provide a basis for quantifying the magnitude of financial reporting quality improvement associated with the final rules. However, academic literature has attempted to quantify the impact of improved financial reporting quality on cost of capital by measuring the association between various quantitative proxies for financial reporting quality and cost of capital after controlling for other potential drivers of cost of capital. Subject to the caveats discussed below, this literature suggests, overall, that even small improvements in financial reporting quality can result in reductions in issuers' cost of capital of multiple basis points in magnitude. Due to the size of the U.S. capital markets, even a single basis point reduction in the cost of capital implies substantial welfare gains.

Some studies examine the relationship between improved financial reporting quality and companies' cost of equity capital. For example, one study quantified the relationship between earnings transparency and cost of equity capital.[318] The study found that, compared to a baseline of no transparency, companies with an average level of earnings transparency had between 1.7 and 3.4 percentage points lower cost of equity capital, depending on the estimation methodology. Using restatements as a proxy for financial reporting quality, another study found that a restatement increases the cost of equity capital by between six and 15 percent in the longer term.[319] Assuming a 10 percent cost of capital, this result corresponds to between a 60 and 150 basis point increase in the cost of equity capital. One study found that companies with the highest accruals quality had a 210 basis point lower cost of equity capital compared to companies with the lowest accruals quality.[320] Using disclosure quality ratings (determined by an index prepared by analysts) as a proxy for financial reporting quality,

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rate of return required by debt holders—cost of debt capital—may differ to the extent equity and debt securities expose investors to different levels of risks. In the context of a particular company or portfolio of companies, the weighted average cost of capital is the average of the cost of equity capital and the cost of debt capital, weighted by the market values of the underlying equity and debt securities, respectively. *See, e.g.,* R. A. Brealey, S. C. Myers, and F. Allen, *Principles of Corporate Finance*, 10th Edition McGraw-Hill 8, 90, and Chapter 7, (2011). For theoretical discussion on the link between financial reporting quality and cost of capital, *see*, *e.g.*, Richard A. Lambert, Christian Leuz, and Robert E. Verrecchia, *Information Asymmetry, Information Precision, and the Cost of Capital*, 16 Review of Finance 1, 16–18 (2012); and David Easley and Maureen O'Hara, *Information and the Cost of Capital*, 59 Journal of Finance 1553, 1571 (2005).

318 *See* Mary E. Barth, Yaniv Konchitchki, and Wayne R. Landsman, *Cost of Capital and Earnings Transparency*, 55 Journal of Accounting and Economics 206, 216–217 (2013).

319 *See* Paul Hribar and Nicole Thorne Jenkins, *The Effect of Accounting Restatements on Earnings Revisions and the Estimated Cost of Capital*, 8 Review of Accounting Studies 337, 337 (2004).

320 *See* Jennifer Francis, Ryan LaFond, Per Olsson, and Katherine Schipper, *The Market Pricing of Accruals Quality*, 39 Journal of Accounting and Economics 295, 297 (2005).

another study found that companies with the highest disclosure quality ratings had roughly a 0.7 percentage point lower cost of equity capital compared to companies with the lowest.[321] From an international perspective, one study found that companies in countries in the 75th percentile of strength of disclosure rules and associated enforcement had roughly a 200 basis point lower costs of equity capital than countries at the 25th percentile (i.e., countries with weaker disclosure rules and enforcement).[322] Another study found that, compared to companies in countries at the 75th percentile of earnings opacity, the cost of equity capital for companies in the 25th percentile (i.e., countries with less opaque earnings) had a 2.8 percentage point lower cost of equity capital.[323]

While the above studies examine the impact of improved financial reporting quality on companies' cost of equity capital, several studies examine instead the impact of improved financial reporting quality on companies' cost of debt capital. For example, one study found that companies with the highest disclosure quality ratings (determined by an index prepared by analysts) have roughly 1.1 percentage points lower cost of debt capital than companies with the lowest disclosure quality ratings.[324] Another study found that companies in the highest decile of accruals quality had a 126-basis point lower cost of debt capital than companies in the lowest decile of accruals quality.[325]

While we believe these studies are indicative of the potential impacts improved financial reporting quality may have on capital markets, we acknowledge that the studies are subject to certain caveats.[326] First, the studies do not indicate the degree to which the disclosure of firm and engagement metrics could impact financial reporting quality in the first instance. Therefore, the magnitudes must be treated as illustrative examples, rather than point estimates, of the potential benefits of the final rules.

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321 *See* Christine A. Botosan and Marlene A. Plumlee, *A Re-examination of Disclosure Level and the Expected Cost of Equity Capital*, 40 Journal of Accounting Research 21, 22 (2002).

322 *See* Luzi Hail and Christian Leuz, *International Differences in the Cost of Equity Capital: Do Legal Institutions and Securities Regulation Matter?*, 44 Journal of Accounting Research 485, 488 (2006).

323 *See* Utpal Bhattacharya, Hazem Daouk, and Michael Welker, *The World Price of Earnings Opacity*, 78 Journal of Accounting and Economics 641, 643 (2003).

324 *See* Partha Sengupta, *Corporate Disclosure Quality and the Cost of Debt*, 73 The Accounting Review 459 (1998).

325 *See* Francis, et al., *The Market Pricing* 297.

326 For a more general discussion of challenges identifying causal relationships in financial reporting research, *see* Leuz and Wysocki, *The Economics of Disclosure and Financial Reporting Regulation*.

Second, some of the studies may be subject to some endogeneity bias.[327] For example, companies with high financial reporting quality may also be well-managed, a form of omitted variable bias. Similarly, companies that voluntarily provide higher quality information may do so because they are in a stronger financial position already, a form of self-selection bias. Due to these potential biases, some of the studies may overestimate the extent to which improved financial reporting quality reduces companies' cost of capital. Controlling for endogeneity bias is challenging and the results of any one methodology may be sensitive to the methodology's assumptions.[328] Indeed, after attempting to statistically control for endogeneity bias, one study found that the association between financial reporting quality and cost of equity capital remains while another found that it disappears.[329]

Third, while most research tends to find positive associations between financial reporting quality and the cost of capital, some studies have found counterintuitive or unexpected associations. For example, one study found that the timeliness of disclosures is negatively associated with the cost of equity capital.[330] The results of another study suggest that the association between improved financial reporting quality and reduced cost of capital may apply only to companies with low analyst following.[331]

Despite these caveats, we believe that the academic literature suggests overall that improved financial reporting quality results in lower costs of capital and, moreover, that even small improvements can reduce the cost of capital by one or more basis points. The studies discussed above found multiple percentage point reductions in cost of capital when companies (or countries) with the weakest financial reporting proxies are compared to the companies (or

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327 Endogeneity occurs when an explanatory variable in a multiple regression model is correlated with unobserved factors that affect the dependent variable. *See* Jeffrey M. Wooldridge, *Introductory Econometrics: A Modern Approach*, South-Western Cengage Learning, 4th edition 838 (2008).

328 *See* David F. Larcker and Tjomme O. Rusticus, *On the Use of Instrumental Variables in Accounting Research*, 49 Journal of Accounting and Economics 186, 203 (2010).

329 *See, e.g.,* Christian Leuz and Robert E. Verrecchia, *The Economic Consequences of Increased Disclosure*, 38 Journal of Accounting Research 91, 121 (2000) (using bid-ask spreads for German companies as a proxy for cost of capital) and David A. Cohen, *Does Information Risk Really Matter? An Analysis of the Determinants and Economic Consequences of Financial Reporting Quality*, 15 Asia-Pacific Journal of Accounting & Economics 69, 70 (2010).

330 The authors suggest that the result may be attributable to increased stock price volatility arising from excessive focus on short-term profits. *See* Botosan and Plumlee, *A Re-examination* 21 and 37.

331 *See* Christine A. Botosan, *Disclosure Level and the Cost of Equity Capital*, 72 The Accounting Review 323 (1997).

countries) with the strongest financial reporting proxies. As such, just one hundredth of the improvement in those measures could result in reductions in the cost of capital by multiple basis points. Due to the size of U.S. capital markets, even small reductions in the cost of capital, on the order of multiple basis points, can generate significant welfare gains. For example, using recent data on the size of the U.S. equity and debt capital markets, a single basis point reduction in the weighted average cost of capital would imply at least $99.0 billion in welfare gains.[332]

One commenter suggested that a review of the academic literature on cost of capital should allow us to quantify the impact of the final metrics on cost of capital decisions. The proposal provided a review of academic literature on cost of capital. That review appears here in Section IV.C.1.iii in essentially the same form. As discussed above, we believe this literature does provide evidence of the quantitative benefits of improved financial reporting quality generally. However, we are unaware of any literature that would provide a basis for quantifying the magnitude of financial reporting quality improvement (and thus the magnitude of cost of capital reduction) associated with the final rules and the commenter did not identify such literature.

One commenter said that the proposal assumed that investors have homogenized interests when in fact there will always be a buyer and a seller with conflicting objectives. We recognize that, with respect to secondary trading of issuer securities, buyers and sellers have conflicting objectives. To the extent the final metrics inform traders' perceptions of the value of issuer securities or otherwise improve financial reporting quality, the final metrics could in the

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[332] (1 basis point / (8% average cost of capital – 1 basis point)) × ($68.1 trillion in equity market capitalization + $11.0 trillion in debt market capitalization) = $99.0 billion. Source: S&P Capital IQ and SIFMA. The debt market capitalization figure reflects U.S. corporate bonds outstanding as of 2024 Q2. It does not include private debt. We note several key assumptions and limitations of the calculation. The calculation assumes that debt and equity capital comprise all forms of capital (i.e., the calculation disregards other potential forms of capital) and that their total value is equal to the sum of all future cash flows discounted by the weighted average cost of capital. It assumes a weighted average cost of capital of 8% based on historic averages for the Russell 3000. *See* Michael J. Mauboussin and Dan Callahan, *Cost of Capital: A Practical Guide to Measuring Opportunity Cost*, Morgan Stanely Investment Management Counterpoint Global Insights, Exhibit 16 (2023). The calculation does not account for the potential beneficial impact of changes in the quantity of capital supplied nor does it account for potential general equilibrium effects in other markets. As discussed above, the calculation pertains to weighted average cost of capital reductions only. It does not capture potential increases in total market capitalization arising from improved management or improved capital allocation. We acknowledge that some issuers that contribute to our market capitalization figures are not audited by firms that will be subject to the final requirements and therefore will not be impacted by the final requirements. However, we believe they make up a small share of total market capitalization.

short run benefit one trading counterparty at the expense of the other. However, for the reasons discussed above, we believe that more reliable financial reporting quality benefits capital markets overall in the long run.

#### iv. Academic Literature and Comments Related to Specific Final Firm and Engagement Metrics

In the following discussion we review the extant literature related to the final metrics. In doing so, we separate the final metrics into three categories: (i) metrics related to audit personnel; (ii) metrics related to the allocation of audit hours; and (iii) metrics related to audit outcomes.

We note three important caveats. First, as most of the final metrics are not currently publicly available, academic studies principally rely on information obtained from audit firms directly, surveys, or foreign jurisdictions. Their relevance is thus limited by the fact that the metrics they study are not equivalent to the final metrics and their results may not be directly applicable to the U.S. audit market more generally. Second, while the extant literature may draw conclusions regarding a particular metric's relationship to publicly available proxies for audit quality, this does not imply that a final metric will provide any new insights to investors and audit committees incremental to the insights already provided by the publicly available proxies for audit quality. Finally, those relationships may be non-linear or difficult to fully evaluate.

One commenter said that some studies cited in the proposal feature investors or investor groups who may not be representative of the broader population of investors. The commenter did not refer to any specific study. We acknowledge that the samples featured in some of the empirical studies discussed below may not be perfectly representative of the population of stakeholders that will be impacted by the final rules. While this fact limits their relevance, we believe their samples are similar enough to the impacted population that their results inform the economic analysis of the final rules. Consistent with the PCAOB's staff guidance on economic analysis, we highlighted key aspects of the studies (e.g., the representativeness of their data sample) that may limit their relevance.

Several commenters suggested that the PCAOB should, as a starting point, demonstrate that any final metric has an unambiguous impact on audit quality. One commenter suggested that the PCAOB obtain research suggesting that any behavioral change produced by a final metric should not harm audit quality. The commenter also suggested that the univariate disclosures should provide a complete picture of the engagement and firm. As the commenter acknowledged, we performed an extensive literature review, the substance of which the commenter did not dispute. We also considered all academic research provided by commenters. While we have considered the potential effects of the metrics on audit quality

and auditor behavior, we do not believe that the rigid criteria suggested by commenters are necessary or appropriate. As we stated above, and as many commenters affirmed including this commenter, audit quality is complex and requires significant context to fully appreciate. As such, no metric taken in isolation can provide a complete picture of a firm and its engagements and thus have an unambiguous impact on audit quality. Furthermore, research cannot prove that any future behavioral changes would not harm audit quality. However, in selecting each of the final metrics, we have considered the evidence on its relationship to the quality of firms and their engagements, which we believe reflects the spirit of the selection approach suggested by the commenter.

The same commenter also suggested that we consider whether the disclosures would meet the SEC's goals for required disclosures. The SEC's goals on required disclosures have traditionally focused on corporate disclosure, although they may include auditor disclosure in certain contexts. We have carefully considered whether the required disclosures would help the PCAOB achieve its objectives in furtherance of its statutory mandate.

The same commenter also questioned whether many of the academic studies surveyed in the academic literature review supported the proposal because they use statistical methods to identify causal relationship that hold other elements of the audit process fixed. We assume that the commenter intended to contrast this standard statistical approach with the fact that, in practice, investors and audit committees will be comparing firms and engagements where other elements of the audit process are not fixed. We agree that no single academic study that we reviewed provides dispositive proof that investors or audit committees will be able to interpret any individual metric in practice without also understanding the full context. Indeed, we have acknowledged that no individual metric can measure audit quality and a fuller appreciation of audit quality requires consideration of a broad array of factors, many of which are unquantifiable (e.g., professional skepticism). However, we do not believe this implies that the academic studies surveyed provide no support for the final rules.

One commenter said that the proposal did not provide sufficient evidence that public disclosure of the proposed metrics would meaningfully impact audit quality. Given that data using the specific final metrics is not currently available, evidence of their effects on audit quality is necessarily limited. Nevertheless, we believe the academic literature discussed below and the analysis discussed throughout Section IV.C.1, provide evidence that the final metrics, taken as a whole, could have meaningful impacts to audit quality which we believe could lead to significant benefits to investors, audit committees, and other stakeholders.

### a. Metrics Related to Audit Personnel

The Partner and Manager Involvement metrics will indicate the hours worked by senior professionals relative to more junior staff across the firm's large accelerated and accelerated

filer engagements and on the specific engagement. Investors and audit committees could use this information to evaluate whether partners and managers are giving their engagement appropriate attention. Although the academic literature related to audit partner and manager involvement is limited, one study using Korean data suggests that audit partner involvement is positively associated with audit quality.[333] Another study finds that the offices of U.S. Big 4 audit firms with relatively more CPAs tend to provide higher audit quality.[334] While the number of staff with CPAs is not equivalent to the share of senior staff hours reflected in the metric, the finding does suggest that greater involvement of experienced staff is beneficial to audit quality.[335] Another study using Chinese data finds that a greater partner to staff ratio is positively associated with audit quality.[336] However, using U.S. data, another study finds partner time spent concurrently on other audits is not associated with audit quality.[337]

The Workload metrics will indicate the average weekly hours worked on a quarterly basis by senior professionals, including time attributable to engagements, administrative duties, and all other matters, both firm-wide and on the core engagement team. Investors and audit committees could use this information to evaluate whether partners and managers are overworked or potentially distracted by other responsibilities. In certain circumstances, higher workloads could indicate that partners and managers are working longer to ensure audit quality is high. While there is no established optimal workload level for audit teams or their staffing components, academic literature suggests that auditors have high workloads, particularly during the busy season.[338] Furthermore, several academic studies, primarily using international data, find that high workload levels (e.g., workloads that exceed 60 hours per week),

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333 *See, e.g.*, Suyon Kim, *Engagement Partners' Effort*, 9 Risks 1 (2021).

334 *See*, *e.g.*, Albert L. Nagy, Matthew G. Sherwood, and Aleksandra B. Zimmerman, *CPAs and Big 4 Office Audit Quality*, 42 Journal of Accounting and Public Policy 107018 (2023).

335 Another study using Japanese data finds that the number of CPA holders staffed to an audit engagement is positively associated with audit quality while the number of non-CPA holders is not. *See* Hossain, et al., *The Relationship*.

336 *See, e.g.*, Lo, et al., *Does Availability of Audit Partners*.

337 *See*, *e.g.*, Christensen, et al., *Team Workloads*.

338 *See*, *e.g.*, Persellin, et al., *Auditor Perceptions* Table 2; Dana R. Hermanson, Richard W. Houston, Chad M. Stefaniak, and Anne M. Wilkins, *The Work Environment in Large Audit Firms: Current Perceptions*, 10 Current Issues in Auditing A38 (2016); and John T. Sweeney and Scott L. Summers, *The Effect of the Busy Season Workload on Public Accountants' Job Burnout*, 14 Behavioral Research in Accounting 223 (2002).

particularly during the busy season, negatively impact audit quality.[339] Auditors that work on multiple engagements in different environments and scopes may also experience issues with memory-related errors.[340] However, the impacts of workload may depend on the auditor's ability to handle such normal workloads.[341] Furthermore, one study finds that audit partner busyness is not related to audit quality under equilibrium market conditions.[342]

The Retention of Audit Personnel metrics will indicate the continuity of senior professionals (through departures, reassignments, etc.) across the firm. Discontinuity of senior professionals at the firm could be a signal of dysfunction within the firm and a loss of valuable issuer and firm-specific human capital. Some research suggests that excessive levels of turnover, particularly at the staff level, could lead to a deterioration in audit quality.[343] One study finds that auditor turnover at U.S. Big 4 firms has a significant negative effect on audit quality as measured by the prevalence of restatements.[344] Using Belgian data collected from private and public companies, another study finds that abnormal turnover is more likely to affect audit quality than expected (i.e., normal or average) levels of turnover, and the negative consequences of turnover impact existing clients more than new clients.[345] Firms with larger internal labor pools may be better positioned to mitigate the negative consequences of turnover. For example, using data from Chinese audit firms on auditor departure from public

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339 *See*, *e.g.*, Christensen, et al., *Team Workloads*; Jun Chen, Wang Dong, Hongling Han, and Nan Zhou, *Does Audit Partner Workload Compression Affect Audit Quality?*, 29 European Accounting Review 1021 (2020); Jin Suk Heo, Soo Young Kwon, and Hun-Tong Tan, *Auditors' Responses to Workload Imbalance and the Impact on Audit Quality*, 38 Contemporary Accounting Research 338 (2021); Hwang and Hong, *Auditors' Workload*; Dennis M. Lopez and Gary F. Peters, *The Effect of Workload Compression on Audit Quality*, 31 Auditing: A Journal of Practice & Theory 139 (2012); Persellin, et al., *Auditor Perceptions*; and Ferdinand A. Gul, Shuai Mark Ma, and Karen Lai, *Busy Auditors, Partner-Client Tenure, and Audit Quality: Evidence from an Emerging Market*, 16 Journal of International Accounting Research 83 (2017).

340 *See, e.g.*, Sudip Bhattacharjee, Mario J. Maletta, and Kimberly K. Moreno, *The Cascading of Contrast Effects on Auditors' Judgments in Multiple Client Audit Environments*, 82 The Accounting Review 1097 (2007).

341 *See,* Persellin, et al., *Auditor Perceptions*.

342 *See* Goodwin and Wu, *What is the Relationship*.

343 *See, e.g.*, Khavis and Szerwo, *Audit-Employee Turnover, Audit Quality, and the Auditor-Client Relationship* 27; and Christensen, et al., *Team Workloads.*

344 *See* Tao Ma, Chi Wan, Yakun Wang, and Yuping Zhao, *Individual Auditor Turnover and Audit Quality—Large Sample Evidence from US Audit Offices*, 99 The Accounting Review 297 (2024).

345 *See, e.g.*, Linden, et al., *Audit Firm Employee Turnover and Audit Quality* 4.

accounting, one study finds that the negative effect of departure on audit quality is stronger for non-Big 4 firms.[346]

The Experience of Audit Personnel metrics will indicate the average number of years worked at a public accounting firm (whether or not PCAOB-registered) by senior professionals across the firm and on the engagement. Greater experience of audit personnel metrics may indicate to investors and audit committee members that senior professionals are more effective and efficient auditors. The extant academic literature shows mixed results regarding the association between auditor experience and audit quality. One study of U.S. audit partners finds that absolute discretionary accruals, a proxy for audit quality, is increasing (decreasing) in the number of years the partner has been a CPA licensee early (late) in their career.[347] One experimental study from the United States found that less-experienced auditors may be less willing to request additional evidence from company controllers.[348] However, another U.S. study finds that audit partner experience is not associated with audit quality.[349] Using data from Taiwan, one study finds that an auditor's experience is positively associated with proxies for audit quality.[350] One study on Chinese audit firms finds that the number of years that the partner has been engaged in audit work is negatively associated with absolute discretionary accruals, a proxy for audit quality.[351] However, another study using data from Chinese audit firms finds that the an auditor's birth year, a proxy for total experience, is not associated with several proxies for audit quality.[352]

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346 *See, e.g.*, W. Robert Knechel, Juan Mao, Baolei Qi, and Zili Zhuang, *Is There a Brain Drain in Auditing? The Determinants and Consequences of Auditors Leaving Public Accounting*, 38 Contemporary Accounting Research 2461 (2021).

347 See Chenyong Liu and Chunhao Xu, *The Effect of Audit Engagement Partner Professional Experience on Audit Quality and Audit Fees: Early Evidence from Form AP Disclosure*, 29 Asian Review of Accounting 128 (2021).

348 *See*, *e.g.*, Bennett and Hatfield, *The Effect of the Social Mismatch* 46–47.

349 *See*, *e.g.*, Hye Seung Lee, Albert L. Nagy, and Aleksandra B. Zimmerman, *Audit Partner Assignments and Audit Quality in the United States*, 94 The Accounting Review 297 (2019).

350 *See*, *e.g.*, Chi, et al., *The Effects of Audit Partner* 363.

351 *See* Steven F. Cahan and Jerry Sun, *The Effect of Audit Experience on Audit Fees and Audit Quality*, 30 Journal of Accounting, Auditing & Finance 78 (2015).

352 *See*, *e.g.*, Ferdinand A. Gul, Donghui Wu, and Zhifeng Yang, *Do Individual Auditors Affect Audit Quality? Evidence from Archival Data*, 88 The Accounting Review 1993, Table 6 (2013).

The Industry Experience metrics will indicate the average years of career experience of senior professionals in key industries audited by the firm at the firm level and the audited company's primary industry at the engagement level. The academic literature shows that industry experience, primarily using market share proxies, are related to audit quality.[353] One study of U.S. Big 4 firms finds that audit quality is positively associated with the number of years that the auditor is an industry specialist (i.e., it has the largest market share in an industry and at least 10% more market share than the next-largest competitor).[354] One experimental study finds that auditor participants that have experience in an industry are more likely to understand the specific financial reporting requirements and risks that issuers in those industries face.[355] However, some research suggests that the impact of industry specialization on audit quality may depend on other contextual factors (e.g., whether the auditor is local to the client or the difficulty of the audit).[356] We also note that some studies indicate that research on experience and industry specialization may be sensitive to design, proxy, and stratification

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353 *See, e.g.*, Craswell, et al., *Auditor Brand Name* (finding, using a sample of Australian firms, that industries that require greater specialization are associated with greater audit fees, consistent with "demand for audit quality"); Mark L. DeFond, Jere R. Francis, and T. J. Wong, *Auditor Industry Specialization and Market Segmentation: Evidence from Hong Kong*, 19 AUDITING: A Journal of Practice & Theory 49 (2000) (finding, using a sample of publicly listed Hong Kong companies, that industry specialization, as proxied by being among the top three firms in an industry by market share, is associated with greater audit fees among Big 6 auditors but lower audit fees among non-Big 6 auditors); Balsam, et al., *Auditor Industry Specialization and Earnings Quality* 95 (finding audit quality proxies are positively associated with the auditor being the largest auditor in an industry); Gopal V. Krishnan, *Does Big 6 Auditor Industry Expertise Constrain Earnings Management?*, 17 Accounting Horizons 1, 3 (2003) (finding that a firm's audit fee share within an industry is associated with higher audit quality [lower absolute discretionary accruals]); and Knechel, et al., *Does Auditor Industry Specialization Matter?* (finding that issuers that switch to auditors that have at least a 30% market share in the issuer's industry experience significant positive anormal returns).

354 *See* Jennifer J. Gaver and Steven Utke, *Audit Quality and Specialist Tenure*, 94 The Accounting Review 113 (2019).

355 *See, e.g.*, Low, *The Effects of Industry Specialization* 202.

356 *See*, *e.g.*, Jere R. Francis, Kenneth Reichelt, and Dechun Wang, *The Pricing of National and City-Specific Reputations for Industry Expertise in the U.S. Audit Market*, 80 The Accounting Review 113, 114 (2005) and Aobdia et al., , *Heterogeneity in Expertise in a Credence Goods Setting*.

level (i.e., office-level and national-level). However, as one of the studies notes, we believe these findings do not imply that industry expertise is unrelated to audit quality.[357]

The Training Hours for Audit Personnel metrics would indicate average annual training hours for partners, managers, and staff of the firm, combined, both firm-wide and on the core engagement team. Overall, the academic literature provides mixed evidence regarding how auditor training relates to audit quality, but provides some evidence to support the association between specialized training and audit quality. Some studies find that certain proxies for auditor training are positively associated with some proxies for audit quality. For example, one survey of junior auditors at large U.S. public accounting firms found that the perceived effectiveness of training was associated with lower turnover intentions.[358] A study on Norwegian audit partners found that CPE hours were positively associated with audit effort and going concern opinion accuracy.[359] A survey of auditors working in small audit firms in Sweden found that participation in four or more training activities or 50 or more hours of education per year were negatively associated with self-reported "dysfunctional" behaviors.[360] However, other studies suggest that the benefits of training are driven primarily by specialized training. For example, one study on the Spanish audit market found that only partners' specialized, or non-generic audit knowledge (as proxied by industry-specific experience), was significantly

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357 *See*, *e.g.*, Terry L. Neal and Richard R. Riley, *Auditor Industry Specialist Research Design*, 23 AUDITING: A Journal of Practice & Theory 169 (2004); Steven F. Cahan, Debra C. Jeter, and Vic Naiker, *Are All Industry Specialist Auditors the Same?*, 30 AUDITING: A Journal of Practice & Theory 191 (2011); and Miguel Minutti-Meza, *Does Auditor Industry Specialization Improve Audit Quality?*, 51 Journal of Accounting Research 779, 813 (2013) (finding that "auditor industry specialization, measured using the auditor's within-industry market share, is not a reliable indicator of audit quality" and that "these findings do not imply that industry knowledge is not important for auditors").

358 *See* Hossein Nouri and Robert J. Parker, *Career Growth Opportunities and Employee Turnover Intentions in Public Accounting Firms*, 45 The British Accounting Review 138 (2013).

359 *See* Limei Che, John Christian Langli, and Tobias Svanström, *Education, Experience, and Audit Effort*, 37 Auditing: A Journal of Practice & Theory 91 (2018). The study judged the accuracy of the auditor's going concern evaluation by reference to subsequent bankruptcy of the audited company. We note that there are several limitations to this proxy. *See* Marshall A. Geiger, Anna Gold, and Phillip Wallage, *Auditor Going Concern Reporting: A Review of Global Research and Future Research Opportunities* (2021).

360 *See* Tobias Svanström, *Time Pressure, Training Activities and Dysfunctional Auditor Behaviour: Evidence from Small Audit Firms*, 20 International Journal of Auditing 42 (2016). The study defines "dysfunctional behaviors" as: (1) making superficial reviews of client documents; (2) incorrectly signing off on an audit step; (3) prematurely signing-off on an audit step; (4) accepting weak client explanations; or (5) putting a greater level of trust in the audit client than is reasonable.

positively associated with audit quality.[361] An older experimental study found that specialized indirect experience (i.e., training), resulted in a stronger understanding for the auditor, but had a greater impact of knowledge unrelated to financial statement errors.[362] Another experimental study found that specialized training and experience were more strongly associated with improved audit outcomes than general knowledge.[363]

By requiring auditors to disclose these personnel related metrics, investors and audit committees could, for example, identify auditors with sustainable workloads, with the implicit outcome that sustainable workloads could improve auditor attentiveness and reduce error rates. Additionally, investors and audit committees may find the final metrics to be useful in evaluating the risk that the auditor has overlooked errors or material misstatements due to overworked partners or managers or that the engagement team was not sufficiently qualified or specialized. Moreover, investors may find the final metrics beneficial in understanding whether the engagement, and therefore the issuer, had significant risks or the issuer's operations were particularly complex compared to peer issuers. For example, if there was a significantly higher workload across partners, managers, and staff—or excessive turnover—compared to another investment opportunity of similar issuer size, the investor may then infer that the issuer had unique risks that necessitated increased audit effort. Such a signal may be particularly useful if the investor could ascertain whether peer issuers were more, or less, complex compared to the issuer under consideration. The investor may also be reasonably assured if there were positive audit outcomes as it may signal to the investor that the auditor exerted considerable or appropriate effort in obtaining a reasonable level of assurance on the issuer's financial statements in the context of their peers for that issuer's complexity and risk level.

Audit committees may also find these final metrics to be beneficial, as the audit committee may view them as confirming that the auditor is appropriately staffing the engagement. In addition, during the selection process for a new auditor, the audit committee may review the final metrics of potential candidate auditors in the context of peer-group engagements, thereby using the final metrics to make auditor selection decisions more effectively. By selecting an auditor based on their experience or industry-specific knowledge,

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361 *See* Josep García-Blandon, Josep María Argilés-Bosch, and Diego Ravenda, *Learning by Doing? Partners Audit Experience and the Quality of Audit Services*, 23 Revista de Contabilidad (Spanish Accounting Review) 197 (2020).

362 *See* Ira Solomon, Michael D. Shields, O. Ray Whittington, *What Do Industry-Specialist Auditors Know?*, 37 Journal of Accounting Research 191 (1999).

363 *See* Sarah E. Bonner and Barry L. Lewis, *Determinants of Auditor Expertise*, 28 Studies on Judgment Issues in Accounting and Auditing 1 (1990) 16.

audit committees could be better able to choose the preferred candidate auditor for their engagement—thereby improving the matching efficiency of human capital within and across firms by helping to align the demand for resources with the supply.

Audit firms may find the final metrics beneficial as they may be better able to monitor whether they are unintentionally over- or under-auditing, as they will be able to compare their audit personnel metrics to other firms' metrics. Audit firms may also benefit from identifying lead industry-specialist auditors and improve their own audit services to compete with these industry specialists on the quality of those services. Importantly, incumbent auditors (i.e., current auditors of an issuer) know more about the issuer's operations than rival competitor auditors.[364] The disclosure of the final metrics could provide these competitor auditors with the ability to observe signals regarding the effort and experience required on the engagement, and those auditors may be able to use that information to compete against the incumbent auditor for the issuer's prospective engagement more effectively.[365]

Section III.B.3 discusses the final metrics related to audit personnel and summarizes commenters' views. Here we highlight the comments that are most relevant to the economic analysis. Citing academic research, one commenter said that human capital inputs to audit production are crucial to audit quality.[366] The same comment letter referred to a working paper written by the letter's authors which finds the manager-to-employee ratio at the audit office level is positively associated with audit quality.[367] The commenter cited two academic studies that suggest audit offices are core functional units.[368] Several commenters expressed concern that the benefits to reporting partner and manager involvement may be dampened by the fact that greater partner and manager involvement is not necessarily correlated with greater audit quality. Some of these commenters pointed out that partner and manager involvement is likely to vary with the complexity of the audit. For example, one commenter suggested that a less

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364 *See, e.g.*, Monika Causholli, W. Robert Knechel, and Haijin Lin, and David E. M. Sappington, *Competitive Procurement of Auditing Services with Limited Information*, 22 European Accounting Review 573, 576–578 (2013).

365 *Id.*

366 *See* Jeffrey L. Hoopes, Kenneth J. Merkley, Joseph Pacelli, and Joseph H. Schroeder, *Audit Personnel Salaries and Audit Quality*, 23 Review of Accounting Studies 1096 (2018); Brandon Gipper, Luzi Hail, and Christian Leuz, *On the Economics of Mandatory Audit Partner Rotation and Tenure: Evidence from PCAOB Data*, 96 The Accounting Review 303 (2021); Christensen, et al., *Team Workloads*.

367 *See* Joshua Khavis et al., *Manager Staffing Leverage*.

368 *See* Kenneth L. Bills, Quinn T. Swanquist, and Robert L. Whited, *Growing Pains: Audit Quality and Office Growth*, 33 Contemporary Accounting Research 288 (2016); Christensen, et al., *Team Workloads*.

complex audit may require little additional supervision while a more complicated audit may require more supervision. One commenter said that the firm-level workload metric would not be comparable across firms due to variation in the size of each firm's issuer practice. Another commenter suggested that presenting firm-level average experience will be difficult to interpret because the distribution of personnel experience varies vastly. Several commenters agreed that defining a training metric that would provide decision-useful information would be challenging. One commenter said they think training increases technical competence. Another said that training builds awareness and on-the-job training is invaluable. However, the same commenter said that on-the-job-training could not be quantified. Another commenter supported a training metric but preferred an alternative calculation.

We acknowledge that the final metrics are imperfect proxies for audit quality.[369] For example, we recognize that average experience only partially describes the distribution of experience within a firm and, by extension, two firms with the same average experience could have quite different experience distributions. However, we believe that the final metrics will, on average, improve investors' decision-making.[370] We agree that the partner and manager involvement metric may vary with the complexity of the audit. We also agree that the firm-level workload metric may vary by the size of the firm's issuer practice. However, the size of the firm's issuer practice and other proxies for complexity of the audit are public information so stakeholders can adjust for any systematic variation in the partner and manger involvement and workload metrics. We also agree that stakeholders may misinterpret the experience of audit personnel or training metrics. While some misunderstanding may reduce the usefulness of the final metrics, we believe that reporting the experience of audit personnel and training metrics will likely still be beneficial to investors.[371]

### b. Metrics Related to the Allocation of Audit Hours

The Allocation of Audit Hours metric would indicate the percentage of hours incurred prior to and following an issuer's year end across the firm's large accelerated and accelerated filer engagements and on the specific engagement. This metric may provide insight into whether the audit team is being efficiently and effectively deployed. Generally, the academic literature related to the allocation of audit hours is limited, as information pertinent to studying

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369 Section IV.B.2.ii provides a more general discussion of commenters' concerns regarding comparability of the final metrics.

370 Section IV.B.2.i provides a more general discussion of commenters' concerns regarding the relationship between the proposed metrics and audit quality.

371 Section IV.C.3.iii provides a more general discussion of commenters' concerns regarding potential misinterpretation by investors, audit committees, and auditors.

this topic is non-public. However, one recent study used PCAOB inspections data and found that audit engagements in which relatively more audit effort was spent prior to the issuer's fiscal year end had overall improvements in audit effectiveness and a lower likelihood of negative audit outcomes.[372] As noted in that study, other researchers have identified that work conducted earlier in the audit process may lead to an earlier identification of issues that could improve the possibility those issues would then be corrected.[373] Another study, using data from one global accounting firm, also finds that a greater proportion of audit work performed earlier in the audit is associated with improved audit outcomes.[374]

The final Allocation of Audit Hours metric could allow investors and audit committees to better evaluate how their auditor plans its audit and compare their audit and auditor to peers. For example, it could indicate that their auditor has left substantial issues to the end of the engagement. The effective deployment of resources is of critical importance to a well-planned audit.[375] The final metric may also help auditors understand whether they are effectively planning their audit. Auditors may compare their allocations of audit hours to those of other firms and adjust accordingly. The final Allocation of Audits Hours metric could also provide supplemental value to the final Workload and Partner and Manager Involvement metrics.

Section III.B discusses the final metrics related to allocation of audit hours and summarizes commenters' views. Here we highlight the comments that are most relevant to the economic analysis. Several commenters cautioned that allocation of audit hours may not be a useful signal of audit quality because circumstances outside of the auditor's control may influence it (e.g., significant unusual, and unanticipated, transactions near the balance sheet date, going concern issues that arise after the balance sheet date, other unforeseen company delays). One commenter said that for the largest firms, individual issuer circumstances may not be significant enough to move the firm-level metric, but for smaller firms, individual issuer circumstances could impact the overall results. We recognize that the allocation of audit hours will be an imperfect proxy for audit quality. However, we believe the academic literature

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372 *See, e.g.*, Aobdia, et al., *The Economics of Audit Production* 1, 6 and 11.

373 *See id*. at 12.

374 *See* Christensen, et al., *Archival Evidence*.

375 *See, e.g.*, Causholli, et al., *Competitive Procurement* (for an economic model describing the intersection of efficiency, quality, and competition in the market for audit services). *See also* Aobdia, et al., *The Economics of Audit Production*.

provides evidence that the final metrics will likely be associated with audit effectiveness and audit outcomes and thus aid decision-making.[376]

### c. Metrics Related to Audit Outcomes

The Restatement History metrics will summarize restatements of financial statements and management reports on internal control over financial reporting ("ICFR") that were audited by the firm over the past three years. In the academic literature, restatements are widely regarded as the strongest indicator of poor audit quality.[377] Restatements have been shown to result in auditor dismissal or increased resources committed by the auditor to the issuer.[378] Using data from Japanese audit firms, one study finds that auditors devote additional resources to companies the year they restate their financial statements.[379] However, it is important to note that restatements are often observed after a significant lag following the restatement event—which causes a reduction in the informativeness of the restatement event, if such information is viewed as stale by investors and audit committees. Furthermore, the absence of a restatement does not imply audit quality was high and the occurrence of a restatement identified by a successor auditor may signal improved audit quality when the auditor increases

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376 Section IV.B.2.i provides a more general discussion of commenters' concerns regarding the relationship between the proposed metrics and audit quality.

377 *See, e.g.*, DeFond and Zhang, *A Review of Archival Auditing Research* (specifically, the discussion marked *Section 2.3.1 Output-based audit quality measures*). We note that "little r" restatements are a less-widely used proxy for audit quality than "Big R" restatements. *See* Jayanthi Krishnan and Mengtian Li, *Are Referred-to Auditors Associated with Lower Audit Quality and Efficiency?*, 42 Auditing: A Journal of Practice & Theory 101 (2023) for one study that uses "little r" restatements as a proxy for audit quality. By contrast to "Big R" restatements, one study found muted or absent market reactions to "little r" restatements. *See* Daniel Aobdia, Vincent Castellani, and Paul Richardson, *Do Investors Care Who Led the Audit in the U.S.? Evidence from Announcements of Accounting Restatements*, SSRN Electronic Journal (2024). We note that SSRN does not peer review its submissions.

378 *See, e.g.*, Karen M. Hennes, Andrew J. Leone, and Brian P. Miller, *Determinants and Market Consequences of Auditor Dismissals after Accounting Restatements*, 89 The Accounting Review 1051 (2014); and Li-Lin Liu, K. Raghunandan, and Dasaratha Rama, *Financial Restatements and Shareholder Ratifications of the Auditor*, 28 Auditing: A Journal of Practice & Theory 225 (2009).

379 *See*, *e.g.*, Chi, Wuchun and Chien-min Kevin Pan, *How Do Auditors Respond to Accounting Restatements? Evidence on Audit Staff Allocation*, 58 Review of Quantitative Finance and Accounting 1 (2022).

audit effort to identify errors in the work of prior auditors.[380] We acknowledge that the incremental value of the final metric will be limited by the fact that restatements are public information already (e.g., U.S. issuers must file Form 8-K when they materially restate their financial statements and the public financial statements themselves indicate when a restatement has occurred). However, we believe that there is value in having the restatements aggregated and presented along with the other metrics.

Section III.B discusses the final metrics related to restatement history and summarizes commenters' views. Overall, commenters were supportive of the proposed metrics related to restatement history. Two non-U.S. firm-related groups suggested that financial reporting quality is complex, and restatements are not a perfect proxy for audit quality. We agree that it is not a perfect indicator. However, as we noted in the proposal, restatements are a widely-used proxy for audit quality. We agree that context will be important to understand the final metrics, including the final Restatement History metric.[381] Two commenters said that restatements are already publicly available and therefore the metric would not be useful. We noted this in the proposal. We continue to believe that providing information on restatement history in Form FM would make the information more accessible to stakeholders.

### 2. Costs

In the following discussion, we consider direct and indirect costs related to the final rules. We have attempted to quantify certain costs where possible. However, most of the costs are intractable to quantify, particularly the indirect costs.

- First, auditors may incur direct costs building an appropriate reporting infrastructure or updating existing infrastructure.
- Second, auditors may incur direct costs producing the firm and engagement metrics.
- Third, auditors, investors, and audit committees may incur indirect costs understanding and integrating the final metrics into their current decision-making frameworks.

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380 *See, e.g.,* Stephen P. Rowe and Padmakumar Sivadasan, *Higher Audit Quality and Higher Restatement Rates: An Examination of Big Four Auditee Restatements*, SSRN Electronic Journal (2021). We note that SSRN does not peer review its submissions.

381 Section IV.B.2.i provides a more general discussion of commenters' concerns regarding the relationship between the proposed metrics and audit quality.

- Fourth, auditors may incur indirect costs revising their audit approaches.

- Fifth, investors, audit committees, and auditors may incur indirect costs to the extent that issuers switch auditors more frequently as a result of the final rules.

- Sixth, issuers and investors may bear indirect costs to the extent that costs incurred by auditors are passed on in the form of higher audit fees.

Larger firms should be able to take advantage of economies of scale by distributing any fixed costs over a higher number of audit engagements. Smaller firms will likely distribute any fixed costs over a lower number of audit engagements, which, taking fixed costs as given, would make implementation relatively more costly for smaller firms.[382] Many commenters agreed that smaller firms, including non-U.S. firms, could be disproportionately impacted. However, the fixed costs may also be less for smaller firms than for larger firms (e.g., they may not require significant IT systems if they need to track only a few engagements).[383]

Referring to research from the SEC, one commenter noted that 99.9% of businesses are small businesses, 43.5% of the U.S. GDP is created by small businesses, and 63% of net new jobs are created by small businesses.[384] The commenter did not discuss what portion of these figures would be impacted by the proposal. We note that the final rules will apply only to the auditors and audits of accelerated filers and large accelerated filers. However, we recognize that some accelerated filers and larger accelerated filers may not be audited by the largest audit firms. For example, 24.0% of accelerated filers (representing 19.3% of total accelerated

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382 *See, e.g.,* Michael Minnis and Nemit Shroff, *Why Regulate Private Firm Disclosure and Auditing?*, 47 Accounting and Business Research 473, 498-499 (2017) (explaining that increased financial reporting regulation is disproportionately costly for smaller companies because complying with regulation has large fixed costs, and unlike larger companies, smaller companies do not benefit from economies of scale).

383 Among the firms that will be impacted by the final rules, approximately 41%, 19%, and 11% had a total of one, two, or three accelerated filer or large accelerated filer engagements, respectively, during the 12-month period ending September 30, 2023.

384 *See* U.S. Securities and Exchange Commission, Office of the Advocate for Small Business Capital Formation, *Annual Report Fiscal Year 2023*.

filer market capitalization) and 4.5% of large accelerated filers (representing 0.3% of total large accelerated filer market capitalization) are audited by non-affiliated firms.[385]

Several commenters said that the proposal did not fully consider the costs and complexities associated with complying with the proposed rules. Two commenters said that the proposal's economic analysis largely disregards costs and does not attempt to quantify the related costs of some requirements. To the contrary, the proposal's economic analysis included both a discussion of the available evidence about costs and staff's attempt to quantify costs of the proposal to the extent feasible. We have carefully reviewed stakeholders' input regarding the potential costs of the proposal. Based on outreach to audit firms, one commenter agreed that firms' processes and systems would need to be established or updated.

One commenter suggested that the PCAOB should, as a starting point, consider whether the metrics would require additional systems, processes, or procedures. We considered these costs and quantified several of them in the proposal and, with modification to account for stakeholder feedback, address them again below.

One commenter suggested that it would be helpful if we could match each cost to each benefit. We do not believe such an analysis is feasible or reasonable. For example, it is not possible to match fixed costs (e.g., IT investments) to a particular benefit because they do not drive the benefit alone. Furthermore, the variable cost categories (e.g., gathering, calculating, and disclosing the metrics) cannot be matched to specific benefit categories (e.g., competition). Rather, these variable cost categories are each associated with producing the metrics, while disclosing the metrics drives the benefits. Where feasible and reasonable, we highlighted in the proposal and below connections between certain qualitative cost categories and certain qualitative benefit categories. For example, we have highlighted that audit switching costs may arise from improved competition. We also acknowledged how certain metrics may be more costly or beneficial than others to allow the Board and commenters to consider each metric individually (e.g., by surveying academic literature by metric and highlighting challenges gathering data required for certain metrics).

One commenter noted that the use of data analytics at firms should enable them to more efficiently implement the final rules. We have observed that firms are increasingly using

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[385] Source: S&P and Audit Analytics. Our calculations use market capitalization data as of the second quarter of 2024. "Non-affiliated firms" are firms not affiliated with BDO International Limited, Deloitte Touche Tohmatsu Limited, Ernst & Young Global Limited, Grant Thornton International Limited, KPMG International Cooperative, or PricewaterhouseCoopers International Limited.

data analytics in their audits.[386] However, the extent to which these capabilities lend themselves to regulatory compliance and management of the audit practice itself is less clear.

#### i. Direct Costs to Comply with the Final Rules

##### a. Modifying or Building a System to Produce the Final Metrics

Auditors may incur certain initial fixed costs (i.e., costs that are generally independent of the number of audits performed) related to modifying existing systems or building new systems that could collect the relevant data that is needed to generate the final metrics and produce compliant filings. We believe most firms will likely modify existing systems rather than build entirely new systems. These costs may include acquiring necessary IT infrastructure, establishing an appropriate system of controls, creating system documentation, and conducting system testing (e.g., with historical data or by conducting dry runs before the effective date of the final requirements). There could also be costs related to training personnel in how to use the new or modified system. This could include training: (i) engagement-level personnel on how to collect and document information relevant to the final metrics; (ii) centralized personnel on how to aggregate and produce the final metrics; and (iii) administrative personnel on how to create filings and ensure proper control over the system; all in compliance with QC 1000.[387]

The fixed costs associated with these efforts will likely depend on the extent to which firms already have automated systems in place that may be adapted to comply with the final requirements. As discussed in Section IV.A, we believe many firms track much of the information that would be required to calculate the final metrics. In particular, information gathered by staff in 2018 and 2019 pursuant to PCAOB oversight activities indicates that U.S. GNFs generally track some metrics similar to the final metrics and voluntarily provide quantitative information that is similar to many of the final metrics. With respect to roughly half of the engagements that will be subject to the final engagement-level reporting requirements, firms are already gathering total audit hours information from other auditors pursuant to Form AP reporting requirements. Furthermore, firms should be tracking CPE credits pursuant to licensing requirements and restatements pursuant to QC 1000. We believe firms likely have systems in place to help them track this information. As a result, these firms may be able to leverage their existing internal systems to comply with the final rules. Moreover, firms may be able to leverage existing systems related to their compliance with other PCAOB

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386 *See* PCAOB Rel. No. 2024-007, 35 and cites therein for additional discussion on this topic.

387 *See* Michael J. Gurbutt, Wei-Kang Shih, Carrie von Bose, and Tasneem Raihan, *Staff White Paper: Second Stakeholder Outreach on the Initial Implementation of CAM Requirements*, Public Company Accounting Oversight Board 11 (2022).

reporting requirements (e.g., QC 1000 and Form AP). Indeed, one GNF commenter, in response to the Concept Release, noted that some of the metrics discussed therein and included in the final rules, would be "easy to compute."

However, we have also considered that existing systems may not be functionally joined together, and that systems designed and operated for internal monitoring or informal reporting purposes may need to be enhanced to meet the needs of public reporting. There are, therefore, likely to be costs associated with integrating the various reporting systems and enhancing or updating current systems to comply with the final requirements. One GNF commenter on the Concept Release suggested that this would likely be especially true for NAFs. The required changes would depend on a firm's size and the nature of their engagements.

Depending on their facts and circumstances, some firms may avoid the costs associated with modifying or building an automated system by opting for a more manual approach . Larger firms are more likely to build automated systems, or increase automation in existing systems, given the scale of their operations and the scope of data that will need to be collected to calculate the final metrics (i.e., they have a larger number of employees and engagements). Smaller firms may choose to build or expand upon existing manual systems (e.g., collecting information in spreadsheets or simple databases) because, for these firms, the scope of information to be collected and processed may be effectively collated in a spreadsheet-based tool. Firms may also opt for automated systems to the extent that the final metrics will require a larger number of individual components, a broader pool of individuals, or more complicated calculations (e.g., the final metrics related to audit-team retention, auditor experience, or industry expertise). The fixed costs to build or modify existing automated systems are likely to be greater than manual systems. However, automated systems should reduce variable costs in the long run.

We are unaware of any data or research relevant to the potential costs of modifying firms' existing automated systems, which we believe would be the most likely scenario for many firms, particularly the largest firms which audit a significant majority of the audit market.[388] However, the costs to build an automated system from the ground up – that is, if a firm did not have any existing systems that track the inputs to the final metrics – could be comparable to the costs to implement an enterprise resources planning (ERP) system (but such costs are not exactly analogous). Using surveys of companies that have implemented ERP systems, some studies find that ERP system implementation costs scale with the company's revenues and staff count. Using audit fees as a proxy for revenue and number of accountants as a proxy for staff count, an illustrative calculation suggests that the total costs (e.g., adding over

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388 *See*, *e.g.*, Ideagen Audit Analytics, *20-Year Review of Audit Fee Trends 2003-2022*, (July 2023) at 2.

all impacted firms), if every such firm were to implement an automated system from the ground up, could range from approximately $371 million to $512 million.[389] This would represent a one-time cost of approximately 2% to 3% of audit fees paid by issuers to covered firms in a year. However, as discussed in more detail below, the fixed costs associated with modifying or building a system to produce the final metrics are likely to be a fraction of this amount given that we expect most firms would modify existing systems rather than build entirely new systems. For this reason, this range likely represents an upper bound of the potential costs.

There are several reasons to expect the implementation costs will be substantially less than the cost of building a new ERP system. First, as noted above, we believe it is likely that firms, particularly the largest firms with the greatest market share, are already gathering much of the information that would be required to calculate the final metrics. For example, roughly half of the engagements that will be subject to the final engagement-level reporting requirements are already gathering total audit hours information from other auditors pursuant to Form AP reporting requirements. Furthermore, firms should be tracking CPE credits pursuant to licensing requirements and restatements pursuant to QC 1000. Second, we believe most larger firms have automated systems in place that could be leveraged to comply with the final

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[389] We identified two publicly available reports related to the costs of implementing ERP systems. Referring to the experiences of over 1,000 client and non-client companies that had implemented a digital transformation effort in the past twenty years, one consulting firm estimated that implementation costs for companies with revenues under $1 billion were approximately 3–5% of annual revenue, and implementation costs for companies with revenues over $1 billion were approximately 2–3% of annual revenue (*The 2020 ERP Report*, Third-Stage Consulting Group, (2020)). Each of the U.S. Big 4 firms had over $1 billion of revenue for the 2023 issuer fiscal year, while all other firms that will be impacted had less than $1 billion. Using the midpoint of the ranges, 2.5% for U.S. Big 4 firms and 4% for all other firms, implementation costs related to building a new system to produce the final metrics will be approximately $12.7 billion × 2.5% + $4.8 billion × 4% = $512 million. We note that 13 firms, which had a combined $22 million in audit fees in 2022, had zero audit fees in 2023. Using information on client implementation projects active between January 2021 and December 2021, another consulting firm reported that companies having over 500, between 50 and 499, or less than 50 employees project spent $11,000, $9,000, or $8,571 per ERP system user over a 5-year ERP implementation period and that 7.27%, 20.13%, and 34.8% of employees used the ERP system, respectively (*2022 ERP Software Report*, Software Path, (2022)). Information provided by registered firms that will be impacted by the final requirements on Form 2 indicates that, for the 2023 reporting year, 130, 58, and 19 firms employed over 500, between 50 and 499, or less than 50 accountants, employing a total of 431,680, 14,274, and 474 accountants, respectively. Using the number of accountants employed by a registered firm as a proxy for the number of employees, implementation costs related to building a new system to produce the final metrics would be approximately 430,074 × 7.27% × $11,000 + 14,142 × 20.13% × $9,000 + 444 × 34.8% × $8,571 = $371 million. Source: Audit Analytics and RASR.

rules. Third, smaller firms could opt for a manual approach. Indeed, firms are only expected to invest in an automated system if it would be efficient to do so. Fourth, ERP systems possess many features that would not be necessary in an automated system for compliance. Finally, audit firms are likely to need to make similar investments in their internal systems in the near term, owing to the rapid pace of technological advancement and other rules and standards currently being adopted, thus potentially reducing the incremental costs attributable to the final rules. However, at the same time, and as suggested by commenters, we recognize that implementing new systems may be especially costly for audit firms if staff resources are strained due to the need to comply with other standards being implemented in the same time period, such as QC 1000.[390] Our estimate does not account for these capacity constraints. Overall, for these reasons, we believe these figures likely reflect an upper bound on the potential implementation costs and the actual implementation costs will likely be significantly less.

One commenter suggested that our cost estimates are strawmen because they have too many caveats. The PCAOB's staff guidance on economic analysis recommends quantifying impacts to the extent feasible. However, it also notes that reliably quantifying impacts can be difficult. The SEC's current guidance on economic analysis in SEC rulemakings recommends "identify[ing] and discuss[ing] uncertainties underlying the estimates of benefits and costs."[391] Consistent with these recommendations, we have provided an exhaustive discussion of uncertainties in our cost estimates because we believe it provides commenters with important context necessary to understand the economic analysis.

One commenter apportioned our quantitative estimate of the cost to implement an automated system from the ground up to their firm by market share. Using this approach, the commenter estimated the cost would be between $7 million and $10 million. The commenter said that they believe their estimate is low because larger firms have greater economies of scale. The commenter also said that this cost could increase the audit fees they charge their issuer clients by between $50,000 and $70,000 per issuer assuming they pass through the entire implementation cost and raise each issuer's audit fee by the same amount. We note some limitations to applying our numerical illustration in this way. First, as discussed in the

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390 The preamble to Section IV.C discusses commenters' concerns about the cumulative impacts of multiple PCAOB standards and rules with overlapping implementation periods including potential benefits.

391 *See* Memorandum from Division of Risk, Strategy, and Financial Innovation (now, Division of Economic and Risk Analysis) and Office of the General Counsel to Staff of the Rulewriting Divisions and Offices re: Current Guidance on Economic Analysis in SEC Rulemakings (Mar. 16, 2012) (SEC Staff Guidance), 12.

proposal and again above, our methodology assumes costs are a non-linear function of revenue which the commenter did not account for. Second, we note that the commenter's estimate is subject to the same caveats described above regarding our quantification methodology. Finally, we also note that we would not expect that the cost of implementing a new system would be passed through to issuers in the form of a permanent audit fee increase, both because it is a one-time cost and because it is a fixed rather than a variable cost. It also overestimates the true pass through to the extent the commenter is unable to pass through 100% of the implementation cost.

One commenter provided academic research that finds the costs to implement new systems is proportionally lower for larger firms.[392] We agree, and our quantification methodology reflects this. The same commenter also noted that the press has reported that larger firms have already invested significantly into their IT systems. As discussed above, we recognize that larger firms likely already have systems in place that they would be able to leverage when implementing the final rules.

Finally, we also note the implementation costs could be offset in part by benefits to auditors. For example, technological enhancements to auditors' systems may, in the long run, increase operational efficiency and profitability.

### b. Producing the Final Metrics

Auditors may incur engagement-level and firm-level variable costs related to producing the final metrics. For example, the final rules may lead auditors to spend additional time recording, collating, and reporting information for relevant engagement-level, and then aggregated firm-level, metrics. As discussed in Section III.A, the final rules do not impose new performance requirements other than the calculation and disclosure of metrics. In addition, reviews by others, such as the engagement quality reviewer or the national office, may result in additional recurring costs. Audit firms are also likely to experience costs, or administrative time, related to legal review and quality control for the final metrics.

Specifically, variable costs may arise from the following activities related to producing the final metrics:

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392 *See* Kathleen M. Bakarich and Patrick E. O'Brien, *The Robots are Coming… But Aren't Here Yet: The Use of Artificial Intelligence Technologies in the Public Accounting Profession*, 18 Journal of Emerging Technologies in Accounting 27 (2021) and Dereck Barr-Pulliam and Amanda Carlson, *Breaking Barriers to Change: The COVID-19 Pandemic's Impact on Attitudes Toward and Willingness to Pay for Audit Innovation*, SSRN Electronic Journal (2024). We note that SSRN does not peer review its submissions.

*Recording & collecting information*

Audit firms may incur variable costs recording the necessary information and collecting it in a centralized location. The magnitude of the costs will likely depend on the extent to which existing practice differs from the final requirements. As discussed in Section IV.A, we believe many firms already internally track information related to the final metrics. This will reduce the variable costs attributable to the final rules.

The magnitude of the variable costs may also depend on the size of the firm. As discussed, based on information obtained through inspections and oversight activities, we believe that the final rules will likely affect engagements performed by all firms but may have a greater impact on engagements performed by NAFs. However, NAFs that choose to use a manual recording system may face recurring costs associated with the continued collection of data and reporting of the final metrics. These costs likely will vary with the size of the audit team.

Finally, the magnitude of the variable costs to record and collect information may depend on the final metric. For example, collecting the information needed to calculate the final Workload metrics will likely be relatively straightforward as such information is likely already stored in firms' extant timekeeping systems. One commenter said that the proposed engagement-level Workload metric would take considerable effort to compile and calculate. The commenter did not articulate a basis for their conclusion. To the contrary, we believe the final Workload metric area will not be burdensome to calculate for several reasons. First, based on commenters' views, we decided to exclude staff from the final Workload metric calculations. We believe this should reduce the effort required by firms to compile and calculate the metrics. Second, firms that use other auditors or serve as an other auditor should already be tracking partner and manager hours in order to calculate total audit hours pursuant to Form AP reporting. Staff analysis of AuditorSearch data finds that approximately 48% of audits of accelerated filers or large accelerated filers involved other auditors. Third, firms that track time electronically should be able to access hours information by staffing level and time period and make the required calculations electronically. We believe most larger firms track their time electronically already. However, we recognize that some of the smaller firms may not. Indeed, one commenter said that many firms have moved away from the burden of time reporting. As discussed above, some of these smaller firms may choose to build a system that would track the information needed to efficiently produce the final metrics, including in the final Workload metric area. Finally, we also note that firms will be permitted to use a reasonable method to estimate the components of a calculation when actual amounts are unavailable.

One commenter said that there could be costs associated with coordinating data collection efforts across firms. We recognize that such costs would likely arise. However, we note that the adjustments we have made to the set of required metrics and their calculations

should alleviate this burden. Furthermore, firms should generally already be coordinating data collection efforts for Form AP reporting purposes and this data will be subject to quality controls over firm reporting. To the extent such coordination is necessary, academic research finds that 94% of component auditors identified on Form AP are associated with the lead auditor.[393] This provides additional evidence there is a strong existing relationship between these firms which should facilitate any additional transfer of information required to implement the final rules.

*Aggregating & calculating firm and engagement metrics*

Once the information is collected, it will need to be aggregated and the final metrics will need to be derived following the calculation requirements discussed above in Section III.B. Costs will likely be incurred to make those calculations and to make and validate the filing. Moreover, these costs will be greater for firms that will use manual systems than firms that will use automated systems.

*Making the filing*

Once collected, aggregated, and calculated, the final metrics will then need to be filed with the PCAOB. There will be costs associated with developing the filing, validating the information, and drafting any voluntary textual disclosures. This could entail administrative costs such as legal review of the textual disclosures. Firms may also need to extend their existing quality control processes around PCAOB filings to cover these new filings.

Overall, it is difficult to estimate the potential costs that audit firms will incur to produce the final metrics owing in part to the variability in firms' current systems (e.g., automated versus manual) and the extent to which firms already produce similar metrics for internal reporting to national offices or external reporting in firm transparency reports. However, we may extrapolate from the economic impacts of prior PCAOB disclosure rules. For example, as a result of the implementation of AS 3101 in 2019, the largest four audit firms surveyed through the PCAOB's outreach activities indicated they incurred, on average, 23,000 hours to develop the processes and procedures to support the implementation of CAMs. The PCAOB staff monetized the economic impact to those largest four audit firms to be approximately $4.4 million dollars each.[394] Those audit firms also each reported 14,600 hours of training, estimated

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393 *See* William M. Docimo, Joshua L. Gunn, Chan Li, and Paul N. Nichas, *Do Foreign Component Auditors Harm Financial Reporting Quality? A Subsidiary-Level Analysis of Foreign Component Auditor Use*, 38 Contemporary Accounting Research 3113 (2021).

394 *See, e.g.*, Michael J. Gurbutt, Wei-Kang Shih, Carrie von Bose, *Staff White Paper: Stakeholder Outreach on the Initial Implementation of CAM Requirements,* PCAOB 1, 8 (2020).

at $2.1 million dollars. The next four largest audit firms reportedly incurred 3,700 hours, on average, to develop processes and procedures, and 3,100 hours in training their personnel to support the implementation of CAMs—estimated at $610,000 and $435,000, respectively, on average for each firm.[395] As estimated through April 2021, the smallest of audit firms, after excluding outliers, reported only 400 hours implementing the CAM requirements, with 600 hours associated with CAM related training. The average implementation costs for these smallest of firms was estimated to be approximately $185,000 per firm.[396] Extrapolating these data points to the population of firms expected to be impacted by the final requirements implies a total cost of approximately $67 million.[397]

Following the implementation of processes, procedures, and training, surveyed audit partners report that 1% of total audit engagement hours were spent identifying, developing, and communicating CAMs.[398] Staff research found no systematic evidence of increased engagement hours for audits of large accelerated filers[399] and a statistically significant 6.6% increase in engagement hours for audits of non-large accelerated filers.[400] The findings suggest that there could potentially be variable costs associated with the final requirements that persist after the implementation phase.

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395 *Id.* The "next four largest firms" refers to BDO USA LLP, Crowe LLP, Grant Thornton LLP, and RSM US LLP. *See* Gurbutt et al., *Stakeholder Outreach* at n. 4.

396 *See* Gurbutt, et al., *Staff White Paper: Second Stakeholder Outreach on the Initial Implementation of CAM Requirements* 1, 13. "Smaller audit firms" refers to Marcum LLP; Moss Adams LLP; Baker Tilly US LLP; BKD LLP; CohnReznick LLP; Dixon Hughes Goodman LLP (DHG); EisnerAmper LLP; Mayer Hoffman McCann P.C. (MHM); Plante & Moran, PLLC; and WithumSmith + Brown, PC.

397 As an example, aggregating these costs across active firms in the market implies roughly $6.5 million in procedures and training for the largest four audit firms ($4.4 million for processes and procedures and $2.1 million for training), $1.045 million for the next four largest firms, and $185,000 for 202 smaller impacted firms, would amount to a combined $67.0 million in costs to produce the final metrics outside of implementation costs associated with the systems ($6.5 million × 4 larger firms + $1.045 million × 4 next-largest firms + $0.185 × 199 smaller firms = $67.0 million).

398 *See* Gurbutt and Shih, *Econometric Analysis on the Initial Implementation of CAM Requirements* 4.

399 *See* Gurbutt and Shih, *Econometric Analysis on the Initial Implementation of CAM Requirements* 4.

400 *See* Jonathan T. Fluharty-Jaidee, Michael J. Gurbutt, and Wei-Kang Shih, *Staff White Paper: Second Econometric Analysis on the Initial Implementation of CAM Requirements*, Public Company Accounting Oversight Board, (2022).

Auditors of large accelerated filers realized efficiencies in developing and communicating critical audit matters in the second year of implementation, reporting that they generally spent the same or less time on critical audit matters compared to the initial year of implementation.[401] Accordingly, we expect that the costs to produce the final metrics will be most significant for the initial filings under the final rules because firm personnel will need to familiarize themselves with new reporting requirements and forms. In subsequent reporting periods, we anticipate that firms will incur lower costs as personnel become more familiar with the reporting requirements.

As noted above, AS 3101 and the final rules are different in ways that may limit the relevance of the costs of AS 3101 to the potential costs of the final rules. For example, as discussed in Section IV.C.1.i, the final metrics will require the collection of a broader array of engagement-level information whereas CAM requirements focus more on narrative description. However, the processes, procedures, and training aspects are likely more comparable.

One commenter agreed with our caveat that the CAMs requirements are not a perfect analogy for the proposed metrics. More specifically, the commenter said that the proposal would require significantly more effort to implement than AS 3101 due, in part, to the need to update QC policies and procedures. Furthermore, commenters pointed to specific facts and circumstances that could exacerbate the costs of the final metrics (e.g., coincidence with other new PCAOB standards). One commenter asserted, incorrectly, that the proposal included no quantification of costs associated with reporting.

One commenter suggested that we perform further analysis of the firms' current data collection efforts and the data collection efforts that will be required under the final requirements. As part of our economic analysis, we have considered all relevant information available to us including information gathered through our oversight activities, academic research, and comments received on the proposing release.

Commenters agreed that firms will incur some costs to report the final metrics. Two commenters said validating personnel's total experience prior to joining the firm will be challenging and expensive because firms do not generally track this information. Another commenter said that reporting industry experience of audit personal would be costly because sufficient information to report this metric is not usually held in the human resources administration of firms. One commenter said the proposed engagement-level Workload metrics were very complicated and would take considerable effort to prepare. One commenter said

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401 *See, e.g.*, *Interim Analysis Report: Further Evidence on the Initial Impact of Critical Audit Matter Requirements*, PCAOB Rel. No. 2022-007 (Dec. 7, 2022).

that many firms do not track non-chargeable hours. Commenters also said that they do not usually track restatements of former clients' financial statements. We have considered these costs and have made several modifications to the required calculations which we believe will help mitigate them. We also note that, under the final rules, firms would be permitted to use a reasonable method to estimate the components of a calculation for which data are unavailable.

One commenter said that producing some of the proposed firm-level metrics (e.g., Partner and Manager Involvement and Allocation of Audit Hours) would be challenging because it would require aggregation of engagement-level data, including data from other auditors, for a period different from that required for the corresponding proposed engagement-level metrics. We agree there could be some incremental costs associated with collecting and validating data from other auditors. However, when producing the final firm-level metrics, firms would be able to leverage the audit hours information they already collected and validated pursuant to Form AP reporting for audit reports issued during the 12-month period ended September 30. Therefore, we do not believe the difference between the period covered by the firm-level metric and the period covered by Form AP presents unique challenges. To the contrary, we believe that adopted approach is an efficient way to provide information to stakeholders while minimizing costs to firms. The adjustments we have made to the calculations (e.g., reducing the scope of the Partner and Management Involvement, Workload, and Allocation of Audit Hours calculation to large accelerated and accelerated filers only) and our decision not to adopt the proposed Use of Shared Service Centers metric should attenuate any concerns like those raised by this commenter.

Several commenters said that there could be costs associated with correcting immaterial errors, particularly with regard to engagement-level metric reporting on Form AP. We agree cost related to this aspect of the final rules could arise, either though extra up-front quality control costs or costs associated with amending an inaccurate Form AP. However, we believe investors and audit committees need reliable information, and correction of errors is an important part of ensuring the reliability of the information.

#### ii. Indirect Costs Arising from Market Reactions to the Final Metrics

We also reviewed and considered costs that could arise from how investors, audit committees, and auditors may react to the final metrics. For example, improved decision-making on the part of audit committees could lead to costs from switching auditors. Most of these costs are not feasible to quantify. However, they are likely to be incurred only to the extent that they are deemed reasonable from a business perspective.

### a. Understanding the Final Metrics

Investors that use the metrics will incur costs to understand the final metrics and incorporate them into their decision making. Investors will choose to bear these costs only if they anticipate that the costs are outweighed by the benefits of using the metrics. Due to economies of scale, we believe institutional investors will be more likely to incur these costs than retail investors. Audit committees may incur costs to understand the final metrics because their fiduciary duties may prompt them to do so. Moreover, audit committees may spend additional time discussing the final metrics with their auditor, which would require both audit committees' and auditors' time.[402] Auditors may spend time and resources developing materials to explain or contextualize their metrics for the audit committee (e.g., presentations and decision aids).

Furthermore, investors and audit committees may incur costs in monitoring the final metrics and learning to extract decision-making information from them. Investors may incur costs incorporating the final metrics into their investment decisions or exercising oversight over issuers and audit committees. Audit committees may incur costs to review the final metrics in support of their auditor oversight responsibilities.

There may also be costs associated with interpreting certain final metrics in relation to final metrics across other firms and engagements. For example, partner and manager involvement on an engagement may be more informative when considered in the context of the firm's overall partner and manager involvement or other firms' partner and manger involvement metrics. Moreover, investors and audit committees may spend time researching the state of the market for assurance services to provide more context to the final metrics.[403]

Auditors may also incur costs to monitor how their final metrics compare to those of their competitors. GNFs, in particular, could deploy significant resources in this way. NAFs may have less ability to fully evaluate the information contained in the final metrics and choose instead to retain outside experts to provide such research. Firms may also use the final engagement-level metrics to inform their acceptance and continuance policies (e.g., by considering industry experience).

Referring to academic research on information processing costs, one commenter incorrectly stated that we had not considered the costs incurred understanding the proposed

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402 *See* Section IV.C.3.ix for additional discussion of attention diversion of audit committees.

403 For example, some literature suggests that the implications of staff turnover are better understood in the context of accounting labor supply. *See* Khavis and Szerwo, *Audit-Employee Turnover, Audit Quality, and the Auditor-Client Relationship* 2.

metrics.[404] The commenter also said there would be costs associated with misunderstanding the metrics. We discussed such costs in the proposal and again in Section IV.C.3.iii below.

#### b. Revising Audit Approaches

Armed with the new information discussed above, audit committees may question their auditor's audit approach. This may prompt auditors to make changes to their audit approaches. For example, an audit committee may come to the belief that the audit partners have too many other duties and may express this concern to the auditor. This may prompt auditors to adjust how they are staffing the audit. Similarly, audit firms could incur costs making those changes. Some of these costs may be greater than others. For example, reducing excessive turnover and workloads, to the extent they exist, could require a significant investment in resources.

As discussed in Section IV.C.1.ii, the final rules may lead audit firms to compete on the final metrics. This could lead some firms to update their audit approaches, provide additional training, or increase their specialization. For example, auditors may increase training in industry-specific areas or hire additional individuals with specialized knowledge. As another example, to the extent issuer preferences show an increased demand for auditors with lower workloads, firms may increase staffing. Such an increase in human-capital investment will likely increase labor and overhead costs for audit firms. Auditors may also increase the quality review of their work to reduce the likelihood of restatements or enhance their audit procedures to compete on the basis of higher-quality audit services.

#### c. Switching Auditors

As discussed above in Section IV.C.1.i.b, the final rules could result in increased auditor switching as investors and audit committees compare and evaluate current and alternative auditors. Should audit committees ultimately choose to change auditors, there may be switching costs, both to the issuer and the auditor. For example, an auditor's work may be less efficient or less effective in the first years of auditing a new issuer as the auditor works to build an understanding of the issuer's business and financial reporting risks. There would likely be a transitory period of increased auditor switching, after which auditor switching would stabilize as the audit market reaches a new equilibrium.

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404 *See*, *e.g.*, Charles M.C. Lee and Qinlin Zhong, *Shall We Talk? The Role of Interactive Investor Platforms in Corporate Communication*, 74 Journal of Accounting and Economics 101524 (2022).

### iii. Other Indirect Costs

Economic theory suggests that auditors may pass on to issuers costs incurred as a result of the final rules in the form of higher audit fees.[405] In addition, the degree to which increases in variable costs, such as certain firm compliance costs, are expected to be passed on will vary based on how widespread the costs are across competitors. Increases in variable costs that impact all sellers in an imperfectly competitive market are more likely to be passed on than cost increases that impact only a subset of sellers.[406] If compliance costs have a greater impact on a subset of firms, such as smaller firms, those firms may be less inclined to pass on the incremental costs in order to stay competitive with larger firms. Accelerated filers and large accelerated filers may be disproportionately impacted by a cost passthrough because (i) auditors that do not audit accelerated filers or large accelerated filers would be out of scope and (ii) accelerated filer and large accelerated filer engagements would require additional data collection efforts.

Evidence from the PCAOB's PIR of AS 3101 suggests that there was no statistically significant increase in audit fees for the audits of large accelerated filers but a statistically significant 3.0% increase for the audits of non-large accelerated filers.[407] Financial statement preparers and audit committees interviewed during the PCAOB's investor outreach efforts indicated that there were minimal or immaterial costs.[408] One academic study found a small, statistically insignificant audit fee increases as a result of PCAOB Rule 3211.[409] Another study found that audit fees increased by a statistically significant 7.9 percentage points.[410]

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405 Economic theory suggests that fixed costs are less likely to be passed on. Only changes to variable costs are generally expected to impact sellers' pricing decisions. *See, e.g.*, Mankiw, *Principles of Economics* 284 and 307 (showing that the profit-maximizing price is a function of marginal cost rather than fixed costs).

406 *See, e.g.*, Erich Muehlegger and Richard L. Sweeney, *Pass-Through of Own and Rival Cost Shocks: Evidence from the U.S. Fracking Boom*, 104 Review of Economics & Statistics 1361 (2022).

407 *See* Gurbutt and Shih, *Econometric Analysis on the Initial Implementation of CAM Requirements*; and Fluharty-Jaidee, et al., *Staff White Paper: Second Econometric Analysis on the Initial Implementation of CAM Requirements.*

408 *See* Gurbutt, et al., *Staff White Paper: Second Stakeholder Outreach on the Initial Implementation of CAM Requirements* 21.

409 *See* Cunningham, et al., *What's in a Name?* 141 and 156 (finding no statistically significant increase in fees following the implementation of AS 3211, Form AP, in 2017).

410 *See, e.g.*, John and Liu, *Disclosure of an Audit Engagement Partner's Name*.

One commenter noted that the proposal failed to consider impacts on entities that are neither issuers nor broker dealers but are required or may be required under SEC rules to use a PCAOB-registered and inspected firm. We note that the commenter provided just two examples of such SEC rules. One rule was recently vacated and the other is a proposal.[411] We acknowledge that, to the extent any such entities are required under SEC rules to obtain an audit from a PCAOB-registered firm, they could be indirectly impacted by the final rules if their auditor is both (i) subject to the final requirements and either (ii) chooses to pass on to these entities any part of the costs associated with the final rules or (iii) exits the market as a result of the final rules.[412] Any passthrough of cost will likely be limited by the fact that the engagement-level reporting requirements will not apply to the audits of these entities and most of the firm-level metrics will not require information from their audits. This means that the final rules should have little or no effect on the cost of their audits. Furthermore, we note that any costs to such entities could be offset by benefits. For example, stakeholders in the audit of these entities may use the final metrics to inform their decision-making.

### 3. Unintended Consequences

In addition to the benefits and costs discussed above, the final rules could have unintended consequences. The following discussion describes potential unintended consequences we have considered and, where applicable, any mitigating or countervailing factors.

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411 *See SEC Final Rules on Private Fund Advisers: Documentation of Registered Investment Advisers Compliance Reviews*, SEC Rel. No. IA-6383 (Aug. 23, 2023). *See also SEC Proposed Rule on Safeguarding Advisory Client Assets*, SEC Rel. No. IA-6384, (Mar. 9, 2023).

412 SEC rules require the use of PCAOB-registered or PCAOB-registered and inspected audit firms by entities other than issuers and registered broker-dealers, including certain investment advisers, pooled investment vehicles, security-based swap data repositories, and clearing agencies. *See*, *e.g.*, 17 C.F.R. 275.206(4)-2 (custody of funds or securities of clients by investment advisors); 17 C.F.R. 240.13n-11 (chief compliance officer of security-based swap data repository; compliance reports and financial reports); 17 C.F.R. 240.17ad-22 (standards and clearing agencies); 17 C.F.R. 240.15c3-1g (conditions for ultimate holding companies of certain brokers and dealers, Appendix G to 17 C.F.R. 240.15c3-1); and 17 C.F.R. 240.18a-1 (net capital requirements for security-based swap dealers for which there is not a prudential regulator).

### i. Auditors May Exit the Market for Accelerated Filers and Large Accelerated Filers Due to Increased Competition and Costs

The final rules may lead auditors to compete on the final metrics. We believe this new competitive dynamic will be beneficial.[413] However, firms that are less able to compete on the final metrics could lose market share or be forced to lower their audit fees, resulting in strains on their profitability. Profitability could also be negatively impacted by the costs of the final rules. In some cases, these auditors may exit the public audit market for accelerated filer and large accelerated filer audits. This could reduce the number of potential auditors some accelerated filers or large accelerated filers may consider thereby reducing competition. One commenter noted that (i) the Big 4 firms already audit over 88% of the large accelerated filers and (ii) research shows that the population of firms with less than 100 clients has decreased by over 50% in recent years.[414]

Many commenters said that the proposal could lead smaller firms to exit the market for accelerated filer or large accelerated filer audits and increase concentration. One commenter said that the proposed reporting requirements would be particularly onerous on non-U.S. firms that carry out only one or a small number of relevant PCAOB engagements. One commenter suggested that smaller firms may exit the public company audit market as a result of the proposed requirements, in conjunction with other standards recently issued and proposed by the PCAOB, and this could negatively impact smaller public companies that are seeking a smaller audit firm. The commenter referred to a working paper on smaller firm exits to support their view. However, the cited paper finds the opposite result, namely that changes in PCAOB regulations play little if any role in a firm's decision to deregister.[415] One commenter noted that smaller firm exit could also reduce the benefits associated with firms competing on the proposed metrics. One mid-sized firm said that smaller firms would have fewer issuers to spread their fixed costs over. The same commenter said the proposal would put considerable strain on firms that provide audit services to the 40% of issuers that represent the remaining, at

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413 *See* Section IV.C.1.ii for a discussion on the benefits linked to competition.

414 *See* Xiaohong Liu and Dan A. Simunic, *Profit Sharing in an Auditing Oligopoly*, 80 The Accounting Review 677 (2005); Mark L. DeFond and Clive S. Lennox, *The Effect of SOX on Small Auditor Exits and Audit Quality*, 52 Journal of Accounting and Economics 21 (2011); Vincent Rylan, *The Big Four Continue to Dominate Auditing: Weekly Stat*, CFO Magazine, (June 29, 2022) *available at* https://www.cfo.com/news/the-big-four-continue-to-dominate-auditing-weekly-stat/; Brant Christensen, Kecia Williams Smith, Dechun Wang, and Devin Williams, *The Audit Quality Effects of Small Audit Firm Mergers in the United States*, 42 Auditing: A Journal of Practice & Theory 75 (2023).

415 *See* Michael Ettredge, Juan Mao, and Mary S. Stone, *Small Audit Firm De-Registrations From the PCAOB-Regulated Audit Market: Strategic Considerations and Consequences*.

most, 2% of capital markets. The commenter did not indicate how they believe these issuers would be impacted by the proposal.

One commenter who represents CPAs said that the costs of the proposal could disproportionately impact smaller firms which could lead to the exit of some of the smaller firms. The commenter provided additional comments based on the results of a survey of small and mid-sized firms administered by the commenter. The commenter's survey was distributed to the 500 largest CPA firms in the United States. Eighty-eight firms responded. The respondent firms' revenues range from less than $10 million to greater than $500 million. The commenter provided the survey questions. All respondents that perform U.S. public company audits reported that the proposal would require a very heavy or substantial effort and would strain resources, driven in part by economies of scale. We note that this data point is based on 36 survey participants, some of whom do not perform audits of accelerated filers or larger accelerated filers and therefore would not be subject to the final requirements. The survey reports that 23% of respondents (approximately eight or nine respondents) would definitely or strongly consider exiting the public company audit market entirely.[416] However, the survey provides no information that would help us assess the significance of these firms to the overall audit market or whether they even audit accelerated filers or large accelerated filers, and therefore would be impacted by the final requirements. The survey also reports that another 25% of respondents (9 respondents) that perform U.S. public company audits would eliminate or manage their client base of accelerated filers. However, in addition to the lack of information that would help us assess the significance of these firms to the overall audit market, the relevance of this result is obscured by the conflation of "elimination" and "management" of accelerated filers. Finally, the commenter provided little detail on how the survey was performed (e.g., how the proposal was described to the survey participants).

The potential negative consequences of firm exit could be mitigated by several factors. First, exit may be limited primarily to the smaller firms among those that would be impacted by the final rules, since smaller firms may be disproportionately impacted by the fixed costs of complying with the final rules. Reduced competition will thus tend to impact smaller accelerated filers rather than larger large accelerated filers, which typically require larger auditors. Second, there is little reason to expect exit from the market for non-accelerated filer audits. In fact, competition may increase in the non-accelerated filer issuer audit market to the extent firms exiting the accelerated filer and large accelerated filer issuer markets redeploy capacity to the non-accelerated filer issuer audit market. Finally, firms that remain profitable in

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[416] Citing the result of the survey provided by this commenter, another commenter said that nearly 75% of respondents would consider eliminating their public company audit process as a result of the proposal. However, this is not what the survey found. Rather, the survey found that 50% of respondents would at least consider getting out of the public company market.

the accelerated filer and large accelerated filer issuer audit markets could expand their market share, perhaps by acquiring additional capacity from exiting firms.

One commenter provided research suggesting that firms that exited the market following the Sarbanes-Oxley Act were not of lower quality than firms that remained.[417] We believe the commenter implied that issuers or broker-dealers may not necessarily obtain a higher quality audit after switching to a new auditor that has remained in the market. The study acknowledges that prior research using other audit quality proxies finds the opposite result, namely, that exiting firms indeed have lower audit quality.[418] Firm size is a widely accepted proxy for audit quality.[419] Our oversight activities indicate that noncompliance with auditing standards is higher among smaller firms.[420] Therefore, to the extent smaller firms tend to exit rather than larger firms, as commenters contended, then audit quality could improve on average as issuers switch to larger firms. We recognize there is currently some debate on the extent to which the large-firm audit quality effect is driven by correlated issuer characteristics rather than auditor effects.[421] We believe compliance with auditing standards is less sensitive to issuer characteristics than other audit quality proxies (e.g., absolute discretionary accruals). After assessing the available evidence, we believe it is likely that the firms that any issuers or broker-dealers would switch to would likely not provide lower quality audits.

Two commenters said that the final rules would disproportionately impact smaller firms, leading them to increase their audit fees. Several commenters suggested that regulatory burdens incentivize companies to go or remain private. Referring to the SEC Office of the Advocate for Small Business Capital Formation Fiscal Year 2023 annual report as support ("SEC

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417 *See* Neil L. Fargher, Alicia Jiang, and Yangxin Yu, *Further Evidence on the Effect of Regulation on the Exit of Small Auditors from the Audit Market and Resulting Audit Quality*, 37 Auditing: A Journal of Practice & Theory 95 (2018).

418 *See* DeFond and Lennox, *The Effect of SOX on Small Auditor Exits and Audit Quality*.

419 *See* DeFond and Zhang, *A Review of Archival Auditing Research*. Though firm size is widely accepted as a proxy for audit quality, it is not a perfect predictor of audit quality. Some large firms may provide low quality audits and some small firms may provide high quality audits.

420 *See*, *e.g.*, *Spotlight Staff Update on 2023 Inspection Activities* (Aug. 2024), *available at* https://pcaobus.org/resources/staff-publications and PCAOB Rel. No. 2024-005 at Figure 1.

421 *See* Alastair Lawrence, Miguel Minutti-Meza, and Ping Zhang, *Can Big 4 Versus non-Big 4 Differences in Audit-Quality Proxies be Attributed to Client Characteristics?*, 86 The Accounting Review 259 (2011); Mark DeFond, David H. Erkens, and Jieying Zhang, *Do Client Characteristics Really Drive the Big N Audit Quality Effect? New Evidence from Propensity Score Matching*, 63 Management Science 3628 (2017).

Small Business Advocate Annual Report"), one commenter highlighted that: (i) in 2022, the number of exchange-listed IPOs dropped to its lowest point since 2009; (ii) small exchange-listed companies accounted for the vast majority of the decline; and (iii) smaller companies are disproportionately impacted by regulatory costs because a large portion of regulatory costs are fixed.[422] We agree that the final rules could disproportionately impact the smaller in-scope firms. However, smaller issuers—those that the commenter contended are most sensitive to regulatory burden and at greatest risk of eschewing the capital markets—would be minimally impacted by the final rules for several reasons. First, firms that do not audit accelerated filers or large accelerated filers (that is, all but approximately 207 firms) would be out of scope and therefore there would be no effect on audit fees for their non-accelerated filer issuers. Second, to the extent in-scope firms choose to pass through all or part of the cost of the final rules, they would be less likely to do so for their non-accelerated filer issuers because their audits will not be subject to the engagement-level reporting requirements. Third, we do not believe issuers will incur any significant fixed costs, which the commenter asserted disproportionately impact smaller companies. Therefore, any disincentive among smaller companies to participate in capital markets arising from increased audit fees would likely be minimal. Among accelerated filer and large accelerated filer issuers, we note that audit fees, on average, comprise roughly 0.15% to 0.2% of issuer revenue and any increase in audit fees attributable to the final rules would be a fraction of this.[423] Therefore, any disincentive among larger companies to participate in capital markets arising from increased audit fees would also likely be minimal. Fourth, while the SEC Small Business Advocate Annual Report demonstrates that smaller exchange-listed companies accounted for the vast majority of the decline in exchange-listed companies, the report also cites a paper that concludes regulatory cost itself is unlikely to explain the full magnitude of IPO decline in the United States over the past two decades.[424] Indeed, staff analysis finds that accounting fees typically comprise roughly 4.5% of the costs of

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422 *See* U.S. Securities and Exchange Commission, Office of the Advocate for Small Business Capital Formation, *Annual Report Fiscal Year 2023* citing an earlier working paper version of Michael Ewens, Kairong Xiao, and Ting Xu, *Regulatory Costs of Being Public: Evidence from Bunching Estimation*, 153 Journal of Financial Economics 103775 (2024).

423 *See* Ideagen Audit Analytics, *20-Year Review of Audit Fee Trends 2003-2022*, (July 2023) at 16.

424 *See* Ewens, et al., *Regulatory Costs of Being Public* (explaining that non-regulatory factors—such as decline in business dynamism, shifting investment to intangibles, abundant private equity financing, changing economies of scale and scope, and changing acquisition behavior—are likely to play a more important role than regulatory cost in the decline of IPOs).

an initial public offering (0.3% of the proceeds).[425] With respect to the recurring costs of remaining a public company, one market research report indicates that accounting fees comprise 32% of the costs.[426] Any incremental costs associated with IPOs or remaining a public company attributable to the final rules would be a fraction of these costs.

In connection with their concerns regarding potential disproportionate costs to smaller firms, one commenter said the PCAOB should evaluate and identify the characteristics of investors in smaller companies and determine if the needs of investors in those companies are the same as the potential needs of investors in large companies. We note that one recent working paper finds that institutional ownership is, on average, lower for smaller companies.[427] Since institutional investors may be more likely to use the metrics, these data suggest that investors in smaller public companies may, on average, be less likely to use the metrics. However, we believe that investors in smaller companies could still benefit from the metrics because: (i) retail investors could benefit from the improved accessibility and comparability of information about firms and their engagements; and (ii) institutional ownership in smaller companies, though less than larger companies, is not trivial (41.6% for the lowest quintile of companies by market capitalization).[428] Furthermore, as we discuss in Section V below, financial reporting quality may be relatively more important for smaller companies. Finally, we note that the final rules require engagement-level reporting only for accelerated filers and large accelerated filers and firm-level reporting only for firms that audit at least one accelerated filer or large accelerated filer. This should help mitigate any concern that investors in smaller companies do not have a need for the final metrics.

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425 Staff obtained data on accounting fees and legal fees from Audit Analytics and investment bank underwriting fees from a PwC market research report. *See* PwC, *Considering an IPO? First, Understand the Costs*, *available at* https://www.pwc.com/us/en/services/consulting/deals/library/cost-of-an-ipo.html and Audit Analytics, *2018-2019 IPO Accounting and Legal Fees*, (Feb. 20, 2020). Staff calculated deal proceeds by multiplying the quantity of shares issued by their price at issue. Staff calculated the accounting fee share of proceeds as the proceeds-weighted average accounting fee share of proceeds across all deals in our sample. We note that the accounting fee share of proceeds is decreasing in deal proceeds. Staff calculated the accounting fee share of IPO costs as the ratio of all accounting fees to all IPO costs across all deals in our sample. The staff's analysis assumes IPO costs are equal to the sum of accounting, legal, and investment bank underwriting fees. The PwC market research report indicates that there are other IPO cost categories, but they are relatively small.

426 *See* PwC, *Considering an IPO?*.

427 *See* Jonathan Lewellen and Katharina Lewellen, *The Ownership Structure of U.S. Corporations*, SSRN Electronic Journal (2022), at Table 3. We note that SSRN does not peer review its submissions.

428 *Id.*

### ii. Some Auditors May Strategically Manage their Issuer Portfolios

As discussed in Section III.C.1, auditors that do not audit accelerated filers or large accelerated filers will not be subject to the final reporting requirements. Some auditors may strategically seek to audit only non-accelerated filers to avoid disclosure of the final metrics, either to avoid costs of complying or out of concern that disclosing the metrics could potentially damage their reputation.[429] As a result, there could be a separating equilibrium in the audit market.[430] One commenter agreed that smaller firms may manage their engagement portfolios to avoid being required to comply with the final requirements and one commenter provided the results of a survey indicating that some firms may eliminate or manage their client base of accelerated filers. Assuming that lower-quality auditors are more likely to avoid accelerated filers in this way, this would increase the supply of low-quality auditors to non-accelerated filers and decrease the supply of low-quality auditors to accelerated filers. For non-accelerated filers, this supply shock could increase competition among audit firms for non-accelerated filers and therefore reduce audit fees. However, because the supply shock would consist primarily of low-quality auditors, it could also lower audit quality for non-accelerated filers. For accelerated filers, the opposite would occur. Reduced availability of auditors would tend to reduce competition and therefore increase audit fees. However, because higher-quality auditors would remain, audit quality could increase. As a result of these complex and countervailing influences, it is unclear whether this unintended consequence would have a net positive or negative impact.

Auditors may also attempt to manage their metrics via their acceptance and continuance policies. Reputation risks to the auditor associated with individual engagements may start to play a greater role in firms' acceptance and continuance decisions as well as their audit fee decisions because new engagements could impact firms' metrics and hence their ability to charge audit fees on existing engagements. For example, a prospective issuer engagement may present a higher risk of restatement. Since restatements will be reported on

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[429] Commenters on proposed QC 1000 said that mid-sized firms would deliberately manage their portfolios to avoid the proposed scalability requirements that apply only to annually inspected firms. Therefore, we believe that such portfolio management is possible in relation to the final rules. Among the firms that will be impacted by the final rules, approximately 41%, 19%, and 11% had one, two, or three accelerated filer or large accelerated filer engagements during the 12-month period ending September 30, 2023.

[430] Contextually, a separating equilibrium occurs when incentives cause a division in the market in which one type of auditor gravitates towards a particular market segment. *See*, *e.g.*, Michael Rothschild and Joseph E. Stiglitz, *Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information,* 90 The Quarterly Journal of Economics 629, 634 (1976) (specifically, the discussion marked *I.6 Imperfect Information: Equilibrium with Two Classes of Customers*).

Form FM in a uniform and comparable way, auditors may require a fee premium for this issuer to offset any negative effect the issuer may have on the auditor's metrics. In extreme cases, risky issuers may not be able to find an auditor, may be forced to hire a low-quality auditor, or may be forced to delist.

To avoid such adverse outcomes, issuers may take steps to reduce their contribution to audit risk.[431] For example, issuers may become more forthcoming with information or opt for less aggressive financial reporting. This potential unintended consequence would also be mitigated to the extent capital markets recognize that an auditor's metrics are driven in part by the riskiness of the auditor's client portfolio rather than the quality of the auditor.[432] Indeed, auditors will have the opportunity to explain important context like this in the qualitative portion of the final disclosures.

#### iii. Investors, Audit Committees, and Auditors May Misinterpret or Misuse the Final Metrics

As discussed in Section IV.B, it is possible that the final metrics may not relate to audit quality in a straightforward way. As a result, there is a risk that investors, audit committees, and auditors could misinterpret, or misuse, the final metrics (e.g., by assuming they are strongly related to audit quality). The outcomes of misinterpretation or misuse are difficult to predict because they would be rooted in complex aspects of human psychology.[433] As one example, investors and audit committees could rely too heavily on a final metric (e.g., when making capital allocation or auditor selection decisions). In response to market forces or requests from audit committees, some auditors could make changes to their audit approach that could negatively impact audit quality. As another example, auditors could mistakenly attribute other firms' competitiveness to one final metric and adjust their audit approach in a way that compromises the quality of their services.

Many commenters agreed that there would be a risk that users, particularly investors, of the proposed metrics would misunderstand the metrics. One commenter said the proposed metrics would be misinterpreted. The commenter suggested that this may undermine the benefits of the proposal. Another commenter said that users would not understand some of

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431 Economic theory suggests that private negotiations yield efficient allocations of decision rights. *See* Ronald Coase, *The Problem of Social Cost*, 3 The Journal of Law and Economics 1 (1960).

432 Some research finds that poor financial reporting outcomes are attributable to client risk rather than poor audit quality. *See* Minutti-Meza, *Does Auditor Industry Specialization Improve Audit Quality?*.

433 *See, e.g.*, Loewenstein et al., *Disclosure* (discussing how "[p]sychological factors severely complicate the standard arguments for the efficacy of disclosure requirements.").

the proposed metrics. One commenter suggested that this potential unintended consequence should be acknowledged as a cost because the negative effects would be borne by investors. One commenter performed a survey of audit committee chairs.[434] Some survey participants agreed that the proposed metrics could lead to inappropriate conclusions. One commenter said that the risk of misusing the proposed metrics by audit committees could lead to increased director insurance costs. One commenter said investors or other stakeholders could pressure audit committees to only appoint auditors whose metrics fall within a certain range without considering other aspects of the firm's audit quality. One commenter said that overemphasis on metrics by auditors could commoditize the profession and reduce incentives to innovate the audit approach.

We agree that, as with other financial information made available to investors, some investors may misunderstand the metrics and make poor decisions as a result. If so, this could negatively impact them. However, we believe that the final metrics will likely, on average, improve investors' decision-making and therefore have chosen to acknowledge improved decision-making as a benefit. We acknowledge that some misunderstanding could also reduce the magnitude of this benefit. However, we believe this unintended consequence, should it arise, would diminish over time as investors learn how to effectively integrate the final metrics into their decision-making. Though we believe the metrics will spur competition on quality by allowing firms to credibly differentiate themselves, we recognize it is possible that some firms would coordinate their metrics. We discuss this potential unintended consequence in Section IV.C.3.vii below.

Commenters described specific ways the proposed metrics could create confusion. Several commenters said that some of the definitions in the proposal conflict with other definitions in PCAOB standards or otherwise lead to confusion. We do not believe there are any direct conflicts with other PCAOB standards. We have attempted to draft the definitions in the proposal as precisely and clearly as possible. Commenters suggest that the ICB industry classification used for the industry specialization metric could create confusion because the SEC uses the SIC system. One commenter agreed that it is appropriate to use the ICB for industry classification. We acknowledge that a taxonomy based on the ICB industry classification could create some confusion. However, crosswalks between the ICB system, the SIC system, and other industry classification systems are available. The proposal and Section III.B.3.v above describe why we based our taxonomy on the ICB system rather than the SIC system. One commenter said that the proposed restatements metrics would be difficult to compare with public data because Audit Analytics categorizes restatements in a different way than the proposed requirements would require firms to categorize them. The commenter did not explain

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434 *See* Section IV.B.2.i above for more discussion on the survey.

what Audit Analytics categorization they are referring to. We do not believe a user of the final metrics who is also familiar with Audit Analytics data and wishes to reconcile the two data sources would find it challenging to do so.

One commenter pointed to research that suggests more information, including via mandatory financial disclosure, is not always better for investors.[435] Several other commenters also suggested information overload would be a concern. We appreciate this research and agree that there will be opportunity costs to understand the final metrics. However, we note that investors will be free to disregard the final metrics if they find the costs to understand them exceed their benefits. Furthermore, we agree with one commenter who said that technology would obviate this potential unintended consequence.

Several commenters were concerned that certain calculations would drive misinterpretation. Section III.B.3 discussed these comments. For example, one commenter suggested that users may misinterpret the proposed headcount changes as turnover. One commenter said industry experience of audit personnel could be misleading because it does not distinguish between recent and past experience. We also acknowledge that some investors may misunderstand this metric and make poor decisions as a result that will negatively impact them.

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[435] *See* Allen G. Schick, Lawrence A. Gordon, and Susan Haka, *Information Overload: A Temporal Approach*, 15 Accounting, Organizations and Society 199 (1990); Eugene G. Chewning Jr and Adrian M. Harrell, *The Effect of Information Load on Decision Makers' Cue Utilization Levels and Decision Quality in a Financial Distress Decision Task*, 15 Accounting, Organizations and Society 527 (1990); Herbert A. Simon, *Rationality in Psychology and Economics*, 59 Journal of Business S209 (1986); J. Richard Dietrich, Steven J. Kachelmeier, Don N. Kleinmuntz, and Thomas J. Linsmeier, *Market Efficiency, Bounded Rationality, and Supplemental Business Reporting Disclosures*, 39 Journal of Accounting Research 243 (2001); Morris H. Stocks and Adrian Harrell, *The Impact of an Increase in Accounting Information Level on the Judgment Quality of Individuals and Groups*, 20 Accounting, Organizations and Society 685 (1995); Knechel, et al., *Audit Quality*; DeFond and Zhang, *A Review of Archival Auditing Research;* Joost Impink, Mari Paananen, and Annelies Renders, *Regulation-Induced Disclosures: Evidence of Information Overload?*, 58 Abacus 432 (2022); Cornelius J. Casey Jr, *Variation in Accounting Information Load: The Effect on Loan Officers' Predictions of Bankruptcy*, 55 Accounting Review 36 (1980); Brad Tuttle and F. Greg Burton, *The Effects of a Modest Incentive on Information Overload in an Investment Analysis Task*, 24 Accounting, Organizations and Society 673 (1999); Michael B. Clement, *Analyst Forecast Accuracy: Do Ability, Resources, and Portfolio Complexity Matter?*, 27 Journal of Accounting and Economics 285 (1999); Brian P. Miller, *The Effects of Reporting Complexity on Small and Large Investor Trading*, 85 The Accounting Review 2107 (2010); Christine A. Botosan and Mary S. Harris, *Motivations for a Change in Disclosure Frequency and its Consequences: An Examination of Voluntary Quarterly Segment Disclosures*, 38 Journal of Accounting Research 329 (2000); and John L. Campbell, Hsinchun Chen, Dan S. Dhaliwal, Hsin-min Lu, and Logan B. Steele, *The Information Content of Mandatory Risk Factor Disclosures in Corporate Filings*, 19 Review of Accounting Studies 396 (2014).

However, we believe that the final requirements would, on average, improve investors' decision-making and therefore have chosen to acknowledge improved decision-making as a benefit. In the final rules, we have modified some of the scoping and calculations, which likely will reduce some of the potential for confusion.

**iv. Auditors May Attempt to Manipulate the Final Metrics**

As discussed above, the final rules could lead firms to compete on the final metrics. As a result, we believe some firms will take steps to provide higher service quality. However, it is possible that some firms could instead manipulate the final metrics in ways that create an impression of providing higher service quality when in fact this is not the case. For example, firms could increase training hours by introducing training that has little benefit for audit quality, or could adjust staffing in ways that they believe make their metrics look better but that do not improve audit quality. This unintended consequence will be analogous, in some regards, to earnings management by financial statement preparers.[436]

Some final metrics will be more difficult to manage than others. To the extent firms are able to manage a final metric, management of the final metric will tend to reduce the overall informativeness of the corresponding disclosures and could lead investors and audit committees to doubt the quality of other firms' disclosures as well. This could degrade existing empirical relationships between the final metrics and audit quality that have been found in the literature discussed in Section IV.C.1.iv.[437]

Referring to academic research, one commenter agreed that firms could try to manipulate their metrics, comparing this incentive to the incentive companies face to manage

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[436] *See*, *e.g.*, Graham, John R., Campbell R. Harvey, and Shiva Rajgopal, *The Economic Implications of Corporate Financial Reporting*, 40 Journal of Accounting and Economics 3, 4 (discussing how "[a] surprising 78% of our sample admits to sacrificing long-term value to smooth earnings"). Firms could manipulate the final metrics in ways analogous to both accounting-based earnings management and real earnings management. For example, they might adjust training hours or reported experience levels without substantive improvements (analogous to accounting-based earnings management) or make operational changes, such as altering client portfolios, solely to improve metrics (analogous to real earnings management).

[437] Such behavior can be ascribed to Goodhart's law in that, once the final metrics are disclosed and market participants act upon them, previously defined relationships change, and the final metrics may become unrelated to the alignments previously discussed.

earnings.[438] The same commenter agreed that firms' attempts to manipulate could be detrimental to audit quality. The commenter also suggested that oversight by the PCAOB would create an incentive to intentionally manage the metrics. While we agree that PCAOB oversight could put pressure on firms, we note that, in addition to informing our selection of firms, engagements, and focus areas for review, PCAOB oversight will be focused on compliance with the final rules which should deter any efforts to manipulate the final metrics. The commenter also suggested that disclosure of the metrics may change behavior in ways that are harmful to audit quality. The commenter provided specific examples of how this could occur for the proposed internal monitoring and compensation metrics. We are not adopting these metrics. As discussed in Section IV.C.1.ii, we believe behavioral responses to the metrics by firms would be largely beneficial.

Referring to the evolution of CAMs, one commenter suggested that the metrics could become boilerplate. We agree that the narrative discussion could potentially become boilerplate to some extent. However, as the quantitative calculations are not boilerplate, we believe the corresponding optional narrative discussion will be less susceptible to boilerplate.

In general, QC 1000 should help mitigate this potential unintended consequence by explicitly subjecting the final metrics to firms' QC systems. Furthermore, firms' QC systems and their disclosure practices, including compliance with the final rules, will be subject to PCAOB oversight.[439] The required documentation will also constrain firms' ability to manipulate their metrics because it will allow PCAOB inspections staff to understand how the metrics were calculated.[440] We believe the PCAOB will exercise appropriate discretion in its oversight. Furthermore, firms will also be constrained by the fact that manipulations may be detected by

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438 *See* Mark S. Beasley, Joseph V. Carcello, Dana R. Hermanson, *Fraudulent Financial Reporting: 1987-1997: An Analysis of US Public Companies*, Committee of Sponsoring Organizations of the Treadway Commission (1999); Mark S. Beasley, Dana R. Hermanson, Joseph V. Carcello, and Terry L. Neal, *Fraudulent Financial Reporting: 1998-2007: An Analysis of US Public Companies*, Committee of Sponsoring Organizations of the Treadway Commission (2010); Ilia D. Dichev, John R. Graham, Campbell R. Harvey, and Shiva Rajgopal, *Earnings Quality: Evidence from the Field*, 56 Journal of Accounting and Economics 1 (2013); Graham et al., *The Economic Implications*; and Jaime L. Grandstaff and Lori L. Solsma, *Financial Statement Fraud: A Review from the Era Surrounding the Financial Crisis*, 13 Journal of Forensic and Investigative Accounting 421 (2021).

439 Some research finds that SEC oversight reduces some forms of earnings management. *See*, *e.g.*, Lauren M. Cunningham, Bret A. Johnson, E. Scott Johnson, and Ling Lei Lisic, *The Switch-Up: An Examination of Changes in Earnings Management after Receiving SEC Comment Letters*, 37 Contemporary Accounting Research 917 (2020).

440 See Section III.D for a discussion on the final documentation requirements.

comparison to peers. Indeed, academic research on earnings management suggests that peer comparisons help stakeholders identify deceptive reporting practices, serving as a disincentive to manage earnings.[441] Finally, the final rules require that any optional narrative disclosure should be concise and focused on the reported metrics, with a view to facilitating the reader's understanding of the metrics. We believe this should help mitigate the risk that auditors would use the optional narrative disclosure to manipulate users' perceptions of the metrics.

Firms may attempt to improve their metrics by shifting resources from non-accelerated filer engagements to accelerated filer or large accelerated filer engagements. This could reduce the quality of service on non-accelerated filer engagements. However, subject to the audit labor market concerns discussed below, firms would be able to mitigate this effect by acquiring additional resources for their accelerated filer and large accelerated filer engagements (e.g., hiring additional staff). Furthermore, the effect would be mitigated by the fact that non-accelerated filers have additional time to file their financial statements with the SEC compared to accelerated and large accelerated filers. Firms may also attempt to improve certain metrics by shifting resources within an engagement. For example, a firm may attempt to reduce its workload metrics by shifting manager audit hours to more junior staff. However, attempting to do so may not be beneficial to firms because it could at the same time degrade other metrics. For example, if a firm attempted to reduce its workload metrics by shifting manager audit hours to more junior staff, it would at the same time reduce their partner and manager involvement metrics. Furthermore, the firm's QC system operates over all its PCAOB engagements and should limit the extent to which resources can be diverted.

#### v. Audit Labor Market Impacts

The final metrics could lead to increased public scrutiny of firms and their engagements. This could negatively impact the issuer audit labor market if individual auditors believe the increased public scrutiny negatively impacts their personal reputations or otherwise increases their work pressures. Some commenters agreed that the proposed requirements could make the audit market less attractive to auditors.[442] One commenter suggested that the potential negative impact on individual auditors could lead individual auditors to exit the labor market

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441 *See*, *e.g.*, Dichev et al., *Earnings Quality: Evidence from the Field*.

442 One commenter referred to a market research report that finds downwards trends in the number of accounting graduates and the number of hires but upwards trends in the number of new CPA candidates. *See* Association of International Certified Professional Accountants, *2021 Trends: A Report on Accounting Education, the CPA Exam and Public Accounting Firms' Hiring of Recent Graduates*, (2022). The commenter also referred to an article discussing the perceived talent shortage, firms' efforts to address it, and commentators views. *See* Stephen Foley, *Accountants Work to Shed 'Boring' Tag Amid Hiring Crisis*, Financial Times (Oct 3. 2022).

which would in turn drive up labor costs to audit firms. The commenter suggested this could potentially increase labor costs for issuers as well to the extent audit firms seek to hire individuals from issuers that have relevant industry experience.[443] Based on discussions with audit committee chairs, one commenter said that survey participants were "very concerned" that the proposal could render the profession less appealing to new auditors.[444]

Referring to a survey commissioned by the commenter's parent organization, one commenter reported that, among undergraduate accounting majors not pursuing or undecided on CPA licensure, 94% cite the regulatory environment as either a major or partial reason.[445] We note that this statistic ignores the facts that: (i) undergraduate accounting majors not pursuing or undecided on CPA licensure reflect just 20% of the participants in the survey (80% of the participants in the survey are planning to pursue a CPA); and (ii) respondents to the question were allowed to select multiple reasons. Indeed, 10 out of 14 of the possible reasons were cited by over 85% of the respondents as a major or partial reason for not pursuing or being undecided on CPA licensure. Thus, the findings suggest, at most, that the regulatory environment is one of many factors discouraging some students from pursuing a CPA. Furthermore, one commenter suggested that, rather than the regulatory environment, the 150-credit hour requirement to apply for a CPA license and work-life balance concerns are the key reasons college graduates are discouraged from becoming auditors. The commenter said that the challenges finding qualified auditors are especially pronounced for smaller firms.

We note that individual auditors could also use the final metrics to gain insights into workplace conditions and find firms more suitable to their skillsets and workplace preferences. This may lead firms to compete for labor by improving their workplace conditions. One commenter explained that the industry's challenges attracting staff may be driven in part by the commodification of the audit, which the proposal would help reduce by providing transparency around the quality of the audit. The same commenter agreed that the proposed

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443 In the context of this comment, the commenter referred to an academic article where discussion on dysfunctional manager and investor behavior in response to differential audit quality could be found. We are unsure how such a discussion or the article itself are relevant to the topic at hand. *See* Patrick J. Hurley, Brian W. Mayhew, Kara M. Obermire, and Amy C. Tegeler, *The Impact of Risk and the Potential for Loss on Managers' Demand for Audit Quality*, 38 Contemporary Accounting Research 2795 (2021).

444 *See* Section IV.B.2.i above for more discussion on the survey.

445 *See* Center for Audit Quality, *Increasing Diversity in the Accounting Profession Pipeline: Challenges and Opportunities*, (July 2023).

metrics could empower potential employees when shopping for a potential audit firm employer.

One commenter said that the firm-level retention metric could present firms with a competitive disadvantage for recruiting talent if high turnover rates are provided without sufficient context (e.g., changes in firm structure, shifting industry concentrations, eliminating personnel due to performance or ethical concerns, independence issues resulting in the departure of firm personnel, etc.). The retention metric may result in additional recruiting costs to some firms. However, we believe that auditors will benefit from using this metric to shop for employers. Firms would also be able to provide additional context through the optional narrative disclosure.

Some commenters said that the costs would be increased by the need to implement multiple significant PCAOB standards at the same time.[446] Relatedly, one commenter said that the costs would be exacerbated by the proposed timing for Form FM, which would fall during the same time as PCAOB inspections and the QC system evaluation. We acknowledge that the issuer audit labor market may be relatively inelastic in the short run, particularly so given recent concerns about inadequate labor supply, which could increase the cost implications of the additional staffing that would be required to implement multiple PCAOB standards in relatively quick succession. This could exacerbate the costs of the final rules or lead to improper implementation.

**vi. Litigation and Reputations Risks**

Two commenters suggested that the proposed rules would exacerbate audit firm litigation and reputation risks. One commenter performed a survey of audit committee chairs.[447] Some participants in the survey agreed that the proposal could create litigation and reputation risk. Regarding litigation risk, we agree that plaintiffs' lawyers may use the final metrics to support their cases. Supporting this view, some research finds that PCAOB inspection reports with audit deficiencies are positively associated with the number of lawsuits subsequently filed against the inspected auditor.[448] However, while we acknowledge this could

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446 The preamble to Section IV.C discusses commenters' concerns about the cumulative impacts of multiple PCAOB standards and rules with overlapping implementation periods including potential benefits.

447 *See* Section IV.B.2.i above for more discussion on the survey.

448 *See, e.g.,* Brant E. Christensen, Nathan G. Lundstrom, and Nathan J. Newton, *Does the Disclosure of PCAOB Inspection Findings Increase Audit Firms' Litigation Exposure?*, 96 The Accounting Review 191 (2021).

encourage some frivolous lawsuits, we believe it would largely contribute positively to audit quality as it would create an incentive for firms to produce high quality audits. Indeed, we believe it would help drive more competition on audit quality, a criterion that the same commenter urged us to consider. Regarding reputation risk, we believe that the impact on reputation is central to the intended impacts of the final rules.

**vii. Tacit Collusion**

Some commenters suggested that the proposal could have anticompetitive effects. One commenter analogized the proposed metrics to (i) the sharing of compensation practices in the poultry-processing market; (ii) information sharing in healthcare; and (iii) information benchmarking in the meat-packing market. Relatedly, several commenters suggested that the proposed metrics could reveal competitively sensitive information. We acknowledge commenters' concerns about potential anticompetitive effects which, if obtained, could reduce quality or increase price. For example, in addition to the largely procompetitive effects discussed in the proposal and in Section IV.C., there could be an offsetting negative effect on competition to the extent the final metrics facilitate tacit collusion among audit firms.[449] Some research suggests that public disclosure can negatively impact competition. For example, one academic study suggests that U.S. public companies opportunistically use their public financial disclosures to tacitly collude.[450] Another academic study shows that public disclosure of transaction-level pricing data by Danish antitrust authorities led to an increase in prices for ready-mix concrete.[451] Similarly, another academic study shows that legacy airlines use their earnings calls to coordinate capacity reductions on competitive routes.[452] However, this research may not necessarily apply to the audit market. For example, the relationship between

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449 Tacit collusion refers to coordinated action among competitors intended to raise profits that does not involve explicit communication. *See*, *e.g.*, Rama Cont and Wei Xiong, *Dynamics of Market Making Algorithms in Dealer Markets: Learning and Tacit Collusion*, 34 Mathematical Finance 467 (2024). The concentrated nature of the audit market may enhance the possibility of tacit collusion.

450 *See* Thomas Bourveau, Guoman She, and Alminas Žaldokas, *Corporate Disclosure as a Tacit Coordination Mechanism: Evidence from Cartel Enforcement Regulations*, 58 Journal of Accounting Research 295 (2020) (finding that "after a rise in cartel enforcement, U.S. firms start sharing more detailed information in their financial disclosure about their customers, contracts, and products. This new information potentially benefits peers by helping to tacitly coordinate actions in product markets.").

451 *See* Svend Albæk, Peter Møllgaard, and Per B. Overgaard, *Government-Assisted Oligopoly Coordination? A Concrete Case*, 45 The Journal of Industrial Economics 429 (1997).

452 *See* Gaurab Aryal, Federico Ciliberto, and Benjamin T. Leyden, *Coordinated Capacity Reductions and Public Communication in the Airline Industry*, 89 Review of Economic Studies 3055 (2022)

competition and audit quality is ambiguous with some research suggesting that increased competition is negatively associated with audit quality.[453] As a result, to the extent the final rules facilitate tacit collusion, this effect could either raise or lower audit quality in certain segments of the market. By contrast, we believe the procompetitive effects of the final rules described in Section IV.C.1.ii above will be significant due to the dearth of information currently available to audit committees and investors. Furthermore, competition in the audit market is limited by the presence of switching costs, reducing firms' incentives to tacitly collude.

**viii. Opportunistic Behavior by Preparers**

One commenter suggested that financial statement preparers may be able to use the proposed metrics to evade their auditor's scrutiny.[454] We agree that preparers might be able to exploit some of the final metrics in this way (e.g., partner and manager involvement) but for others it will be less likely (e.g., restatements). The effect will be limited by the fact that preparers already have some familiarity with their auditor's processes. For example, auditors are required to provide a variety of audit committee communications which preparers may be privy to.[455] Indeed, one key premise of the economic analysis is that auditors and preparers have better information than investors and audit committees do about the audit process and outcomes.

The same commenter suggested that financial statement preparers could use the proposed metrics to shop for a lower quality auditor. We agree this will be possible but, as we discussed in the proposal and in Section IV.C.1.i.b above, we believe that the public nature of the metrics will tend to suppress this. More specifically, the broader financial statement user community will be able to observe how auditor switches correlate with company characteristics and firms' metrics and judge the company's financial reporting quality, and the audit

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453 *See*, *e.g.*, Yue Pan, Nemit Shroff, and Pengdong Zhang, *The Dark Side of Audit Market Competition*, 75 Journal of Accounting and Economics 101520 (2023) (explaining how greater competition can, on one hand, "foster audit process innovation" and, on the other hand, lead auditors to "focus on appeasing clients by reducing professional skepticism and allowing clients excessive financial reporting discretion") and cites therein. We note that controlling for all potential drivers of audit quality and fees is challenging. As such, the results obtained by these studies may be affected by omitted variable biases.

454 The commenter referred to two articles about "the fraud diamond," a heuristic that approximates the conditions under which fraud may occur. *See* David T. Wolfe and Dana R. Hermanson, *The Fraud Diamond: A 20-year Retrospective*, The CPA Journal 16 (2024) and David T. Wolfe and Dana R. Hermanson, *The Fraud Diamond: Considering the Four Elements of Fraud*, The CPA Journal 38 (2004).

455 *See* AS 1301.

committee's execution of its auditor oversight responsibilities, accordingly. However, we acknowledge that, because companies will be better informed about the nuances of the audit process, the final metrics could make it easier for some companies to shop for a lower quality auditor without significant negative consequence.

**ix. Attention Diversion**

One commenter suggested that the proposed rules could reduce audit quality by diverting engagement teams' attention away from other activities. Another commenter suggested that this risk would be greater for smaller audit firms and provided numerous research articles suggesting that auditors are overburdened.[456] The same commenter suggested that the PCAOB should, as a starting point, consider whether the proposed metrics place burdens on engagement teams that would distract them from audit quality. Several commenters suggested that the time required to prepare the proposed metrics would necessarily divert attention from audit work and thus reduce audit quality. One commenter suggested that strains on the audit labor market could increase audit deficiencies. Another commenter suggested that the proposed metrics would distract audit committees from their oversight responsibilities.

We acknowledge that the final rules could require some engagement team members' time. For example, some engagement team members may be tasked with gathering information from the engagement team and forwarding it to the national office (e.g., experience, hours). Subject to the audit labor market concerns discussed above, firms will be able to relieve some of this burden by hiring additional staff or by centralizing or automating certain aspects of the implementation effort.[457] We also reject the premise that the presence of any engagement-level burden should automatically disqualify a metric. Such a criterion ignores the metric's associated benefits. Regarding audit committees, as discussed in the proposal and again in Section IV.C.2.ii above, we recognize that audit committees could incur costs understanding the metrics. One type of cost could be the opportunity cost associated with spending less time on other oversight activities to the extent audit committees choose to do so. However, we note that audit committees could minimize this opportunity cost by spending more total time overseeing the audit. Also, Section IV.C.1 above discusses the various ways the final metrics would improve audit committee oversight.

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456 *See* Kimberly D. Westermann, Jeffrey Cohen, and Greg Trompeter, *PCAOB Inspections: Public Accounting Firms on "Trial"*, 36 Contemporary Accounting Research 694 (2019); Persellin, et al., *Audit Perceptions*.

457 *See* Section IV.C.3.v.

#### x. Non-PCAOB Registered Firms

One commenter suggested the proposed metrics could have cost implications for non-PCAOB registered firms. We agree. For example, non-substantial role firms may incur costs providing information to firms subject to the final requirements. However, they already should be providing total audit hours for Form AP reporting purposes. Also, any incremental cost will be limited to the Partner and Manager Involvement and Allocation of Audit Hours final metrics.

#### xi. Unintentional Engagement-Level Disclosures

Several commenters said that, for firms that issue a limited number of audit reports for accelerated filers and large accelerated filers, many of the firm-level metrics could result in the disclosure of engagement-level information.[458] One commenter cited the internal monitoring metric as an example. However, for most of the final firm-level metrics, corresponding engagement-level information will also be publicly available independent of the public disclosure of the firm-level metric itself. We do not believe that the possibility of making engagement-level inferences from the final metrics that are required only at the firm level would impose costs on firms. Furthermore, we note that the proposed internal monitoring metric is not among the final metrics.

## D. Alternatives Considered

The development of the final rules involved considering alternative approaches to address the problems described above. This section explains: (i) why standard setting is preferable to other policy-making approaches, such as providing interpretive guidance or enhancing inspection or enforcement efforts, (ii) other standard-setting approaches that were considered, and (iii) key policy choices made in determining the details of the final standard-setting approach.

### 1. Why Standard Setting is Preferable to Another Approach

As potential alternatives to standard setting, we considered whether interpretive guidance or greater focus on inspections or enforcement could better address the need described in Section IV.B above. One commenter suggested the PCAOB could communicate to stakeholders observations related to audit quality based on the outcomes of its inspections and its enforcement actions, noting that the PCAOB has unique access to information and people

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458 Among the firms that will be impacted by the final rules, approximately 41%, 19%, and 11% had a total of one, two, or three accelerated filer or large accelerated filer engagements, respectively, during the 12-month period ending September 30, 2023.

and has the context to understand quality risks. We determined that, despite long-term requests by investors to disclose additional metrics, similar initiatives by other standard setters, and the apparent ability of firms to voluntarily disclose metrics, the fact that most auditors have not voluntarily acted to disclose effective metrics on a uniform basis at the firm and engagement level points to the need for regulatory intervention through standard setting.

Increased focus on inspections or enforcement is unlikely to incentivize audit firms to voluntarily disclose the final metrics. Likewise, interpretive guidance is unlikely to address audit firms' lack of incentives to voluntarily disclose the final metrics. While some firms may choose to disclose information similar to the final metrics voluntarily, the lack of a standardized approach would result in inconsistencies that prevent effective comparisons across the profession. Similarly, standardization without mandated disclosure is not sufficient to ensure the availability of comparable public reporting of metrics.[459] As discussed in Section IV.B.2, required mandatory and uniform reporting will help audit committees make more informed decisions in retaining and monitoring auditors, and investors make more informed decisions when ratifying auditor appointments, electing board members (including those who serve on the audit committee), and allocating capital. The Board believes that standard setting addresses the problem in the most effective way.

One commenter said that the commenter's experienced implementing the Form AP amendments proved to them that calculations require a robust implementation support infrastructure. Several commenters suggested that guidance regarding the final amendments would reduce the complexity and challenges associated with calculating the metrics. One commenter said that guidance would be essential to balance the costs of compiling and reporting the information and this guidance should extend to the evaluation of differences that may arise in the disclosure of participating firms on Form AP. Another commenter said that the Board should clarify whether the current Form AP Staff Guidance regarding amendments would extend to all metrics as well as how routine corrections and re-allocations of time entries and other matters affecting metrics reported on Forms FM are expected to be handled.[460] We acknowledge that guidance could help reduce the complexity and costs associated with implementing the final rule. As discussed in Section III.C.5, we will monitor for issues and consider updates to implementation guidance as appropriate.

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459 *See*, *e.g.*, Patrick Bolton and Marcin T. Kacperczyk, *Firm Commitments*, SSRN Electronic Journal (2024). We note that SSRN does not peer review its submissions.

460 *See* Staff Guidance on Form AP.

### 2. Other Standard-Setting Alternatives Considered

During the development of the final rules, we considered two alternatives to the current disclosure rules: (i) publishing benchmarks on the final firm and engagement metrics, and (ii) requiring additional audit committee communications.

First, we considered collecting the final metrics from the firms on a non-public basis and then publicly publishing benchmarks based on those metrics. This approach would benefit the Board in the ways described in Section IV.C.1.i.c. However, we believe that investors and audit committees will be able to effectively interpret the final metrics in their disaggregated form when made directly available to the public. Therefore, public transparency will be important. Moreover, as discussed in Section IV.C.3, benchmarking could even have potentially harmful unintended consequences.

Second, we considered requiring auditors to communicate the final metrics just to their audit committees and not to other members of the public. One commenter suggested that the benefits of the proposal would be the same under this alternative. However, such a policy choice would not directly benefit the decision-making capabilities of investors and other stakeholders in the public securities markets. Moreover, it would limit audit committees' ability to compare the final metrics across different firms and engagements and thus impair their decision-making (e.g., auditor selection) by depriving audit committees of the broader context needed to make informed choices.

One commenter suggested that we adopt a specific plan to conduct a PIR. The Board has an established PIR program under which staff of the Office of Economic and Risk Analysis (OERA) conduct an analysis of the overall effect of new rules or amendments on key stakeholders in the audit process, including whether the rules or amendments are accomplishing their intended purpose and identifying benefits, costs, and unintended consequences flowing from them. In determining whether to conduct a PIR, staff will consider the nature of the rules or amendments (including the magnitude of and degree of uncertainty around the key economic effects), the feasibility (including research design and data availability), and the potential utility to the Board (including whether the PIR might identify a demand for additional guidance or amendments). Under the established PIR program, the Board expects that OERA staff will consider whether, based on these factors, a PIR might be warranted and, if so, OERA staff will recommend that the Board determine to conduct one. In other words, this deliberation should take place without any commitment. By contrast, a commitment to conduct a PIR can be counter-productive if OERA staff would otherwise determine that a PIR is not warranted or feasible. In addition, a well-designed PIR is one that is itself based on some early experience (even if only anecdotal), and thus, we believe having a specific plan of PIR at this stage may be premature. We believe having an established PIR program tends to increase the net expected value of the PCAOB's adopted rules and standards.

Should future PIRs lead to potential modification or revision of these rules and standards, this dynamic approach to assessing the impact of the PCAOB's rules and standards compares favorably with a static analysis of costs and benefits. [461]

Several commenters that opposed aspects of the rulemaking suggested that we should pilot test the final rules. One commenter suggested pilot testing would allow the PCAOB to obtain feedback on the nature, timing, extent, and usefulness of reporting. The commenter referred to a pilot program planned by another regulator. Another commenter said that pilot testing should occur prior to adoption of the final rules to confirm whether the final metrics can be consistently collected and reported by firms and whether they would be useful to stakeholders. One commenter suggested that pilot testing would provide the Board with data to quantitatively estimate the economic impacts of the proposal.

We agree that a pilot study could theoretically provide useful preliminary compliance data.[462] For example, a pilot study could provide insights on the impacts of the proposed requirements or alternative approaches. However, we believe several concerns would challenge the utility of such an approach. First, participation in a pilot study would likely be voluntary, potentially with a limited group of participating firms, which may not be representative of all firms. This could skew results and would limit the applicability of any findings to a broader set of firms. Second, the impacts of the metrics on competition and capital allocation in the markets are complex and may require analysis across a broad set of firms and market conditions. A pilot study would not capture this diversity or the broader impacts on competition and capital markets, potentially leading to incomplete or misleading conclusions. Third, the full implications of the metrics on competition and capital formation might take several years to manifest, as stakeholders would need time to adapt to and fully integrate the final metrics effectively. This delay could postpone the benefits expected from the final rules, especially if the pilot study would need to run for multiple years to capture the necessary information and trends. Finally, as stakeholders (including firms, issuers, investors, and others)

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461 *See, e.g.*, Yoon-Ho Alex Lee, *An Options-Approach to Agency Rulemaking*, 65 Administrative Law Review 881 (2013); *see also* OMB Circular A-4 at 69 ("The assessment of real options allows you to monetize the benefits and costs of changing the timing of regulatory effects in light of the value of information about potential states of the world that can be learned over time."). In short, when a policy is reversible (as in the case with the final rules) and the policy outcome is probabilistically determined between an efficient outcome and an inefficient outcome, a case can be made for moving forward with the policy even when the net expected benefit under the static cost-benefit analysis is negative because of the option of repealing the policy in the future in case the inefficient outcome is realized.

462 *See* Admin. Conf. of the U.S., Recommendation 2017-6, Learning from Regulatory Experience, 82 Fed. Reg. 61738 (Dec. 29, 2017), *available at* https://www.acus.gov/recommendation/learning-regulatory-experience.

adapt to the new metrics, their behaviors and the resulting data might change over time, potentially rendering early data from a pilot study less relevant or useful for long-term policy decisions. For these reasons, a pilot study, while potentially yielding some initial insights, would have limited overall benefits in this case. It would not offer a comprehensive view of the metrics' implications across the entire spectrum of firms and could unduly delay the transparency objectives of the rulemaking. We note that the proposal considered the work of other regulators, including the planned pilot study referred to by one of the commenters.[463] That discussion appears in Section II.B above in substantially the same form.

### 3. Key Policy Choices

During the development of the final rules, we considered different approaches to addressing key policy issues.

#### i. Definitions and Calculations of the Final Metrics

We considered a variety of alternative definitions and calculations of the final metrics, including several suggested by commenters and those initially proposed. See Section III.B for a discussion of these considerations.

#### ii. Applicability

Section III.C describes the conditions under which firms will be required to comply with the final engagement and firm-level reporting requirements. During the development of the final rules, we considered limiting applicability to firms that met a certain aggregate issuer market capitalization threshold. We also considered broadening the set of applicable filer statuses.

We noted that compared to the proposed approach, an aggregate issuer market capitalization threshold could help focus the final rules on auditors and engagements that investors are most interested in.

Commenters during the development of QC 1000 indicated that a threshold based on market capitalization was perhaps preferable to a threshold based on issuer count because many auditors audit numerous small engagements with limited operations (e.g., special purpose acquisition companies). However, such an approach could present challenges. As one commenter noted, thresholds based on market capitalization may be subject to the volatility of the market. During a review of the potential methodologies, we found that such a threshold

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463 *See* FRC, *Consultation Document: Firm-level Audit Quality Indicators*.

would also be sensitive to auditor switches, particularly if the switching issuer had a large market capitalization. Some auditors near the threshold could move back and forth between applicability and non-applicability. We also considered alternative transition thresholds for market capitalizations, or a phase-out period in attempting to mitigate the negative aspects of these options. Ultimately, we have determined that there was limited benefit to using these alternative applicability thresholds.[464]

We also considered broadening the applicability of the final firm-level metrics to include all firms that audited at least one operating company. This would increase the number of firms impacted by the final firm-level metrics by approximately 160 and increase the number of engagements and market capitalization covered by the final firm-level metrics by approximately 16% and less than 0.1%, respectively.[465] Expanding the scope to cover all firms that audit at least one operating company could reduce any potential negative stigma associated with smaller firms for not being required to disclose the final metrics. However, these firms tend to be smaller and hence may lack the infrastructure and economies of scale to efficiently implement the final rules. Furthermore, the gain of information to audit committees and investors would be limited by the fact that these firms tend to have smaller or fewer issuers on average. It also could create confusion to have different thresholds for the final firm-level reporting requirements and the final engagement-level reporting requirements. Finally, firms that will not be subject to the final firm-level disclosure requirements could voluntarily disclose the final metrics.

We also considered broadening applicability of the final engagement-level metrics to include non-accelerated filer issuers. While the importance of audit quality may be more significant for smaller issuers,[466] staff analysis finds that non-accelerated filers are proportionately smaller—at the median—than accelerated filer and large accelerated filers in terms of audit fees and total assets.[467] One survey of audit committees of smaller public companies found that five of the 28 metrics discussed in the Concept Release were evaluated

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464 *See* Section VI for a discussion of phased implementation.

465 *See* Section III.C.1 for discussion on data sourcing. We exclude firms that filed an audit opinion during the sample period but whose registration has since been withdrawn, revoked, or is pending withdrawal.

466 *See* Section V for additional discussion.

467 Based on 2023 fiscal year data sourced through Audit Analytics' Web service, non-accelerated filers paid median audit fees of $320,000 and had median total assets of $66 million. Comparatively, accelerated filers paid median fees of $1,300,000 and had median total assets of $765 million. Large accelerated filers paid median fees of $3,010,000 and had median total assets of $5,509 million. Only issuers filing pursuant to the Exchange Act (a.k.a. Act-34 filers) were retained in the sample.

by more than half of the audit committees surveyed.[468] Staff also reviewed the relative trading volume associated with these filer status groups and found that non-accelerated filer issuers have higher average daily (unit) volume than accelerated filer issuers but lower average daily (unit) volume than large accelerated filers.[469] Neither issuer group, in general, was "thinly traded," as measured by average daily volume.[470] Given these differences, the costs of the final rules associated with non-accelerated filer issuer engagements could be proportionally higher than the costs associated with accelerated filer or large accelerated filer issuers engagements. As a result, we have restricted the applicability of the final engagement-level metrics to accelerated filer and large accelerated filer engagements. Firms that will not be subject to the final engagement-level disclosure requirements could voluntarily disclose the final metrics.

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[468] *See, e.g.*, Harris and Williams, *Audit Quality Indicators*.

[469] Sourcing data across the University of Chicago's Center for Research and Security Prices (CRSP) Annual flat-file to collect annual volume, along with Compustat, and Audit Analytics, we identified, using filer statuses reported by Audit Analytics, that the median average daily volume (the quantity of share units traded per year divided by 252 trading days) for large accelerated filers in 2020 and 2021 was roughly 867,000 units per day and 762,000 units per day, respectively. For accelerated filers, the average daily volume was 183,000 and 168,000 respectively. For non-accelerated filers, the average daily volume was 528,000 and 756,000, units per day, for 2020 and 2021. One reason for this is possibly the relatively lower share price non-accelerated filer issuers have, resulting in a higher unit-volume (per trade lot) compared to accelerated filer issuers. We maintain share codes 10, 11 (i.e., U.S. issuers), and 12 (foreign issuers trading on U.S. exchanges) in our analysis, and remove American depositary receipts, shares of beneficial interest, real estate investment trusts, and closed-end funds. Additionally, we retain only Exchange Act 1934 filers and volumes related to the first audit opinion filed with the SEC for a given fiscal year. Filer status, as sourced through Audit Analytics, may be an imperfect proxy of the true filer status of the entity-issuer due to errors in reporting and or collection. Furthermore, we retain only observations in which there is recorded to be complete volume for the entire annual period. There were 1,350 large accelerated filer issuers in our sample in 2020, and 1,358 in 2021. For accelerated filers there are 337 and 329 issuers in each 2020 and 2021 that remain in our sample, and for non-accelerated filers there are 121 and 134 issuers, respectively. We attempt to remove issuers additionally classified as Small Reporting Companies from the reported statistics. Lastly, not all issuers, particularly smaller issuers, trade on exchanges observed in the CRSP data set—as a result our sample may be biased towards larger issuers, or issuers that trade on exchanges observed by CRSP.

[470] For a discussion of "thinly traded" markets, *see Division of Trading and Markets: Background Paper on the Market Structure for Thinly Traded Securities*, Roundtable on Market Structure for Thinly Traded Securities (April 23, 2018), *available at* https://www.sec.gov/rules/policy/2019/thinly-traded-securities-tm-background-paper.pdf.

We also considered whether the scope for engagement-level reporting should be extended to non-operating company issuers whose financial statements are required under SEC rules to be audited under PCAOB standards (i.e., investment companies, employee stock plans) and broker-dealers. While these additional disclosures could be informative, commenters indicated that the proposed metrics would be less beneficial for these entities compared to accelerated filers and large accelerated filers.[471] We agree, and therefore are not requiring disclosure of these metrics for issuers that are not accelerated filers or large accelerated filers under the final rules.

**iii. Reporting**

Several commenters suggested that we could alleviate the burden on smaller firms by raising the reporting threshold. One commenter said that firms that issue audit reports for 100 issuers or more are the firms whose metrics investor-related groups would be most interested in reviewing, given these firms audit a significant majority of the market capitalization of issuers reporting on Form 10-K, Form 20-F, and Form 40-F. Another commenter suggested a threshold of 25 or more large accelerated filer and accelerated filer issuer engagements combined. The same commenter said that metrics of firms with few engagements could be unduly influenced by a single engagement. By contrast, one commenter suggested making the reporting requirements apply to all PCAOB-registered firms. As discussed in the proposal and above, we recognize the potential disproportionate cost to smaller firms and have considered this in our decision to scope in all firms that audit at least one accelerated filer or large accelerated filer.[472] We believe audit committees and investors will benefit from information related to the audits of accelerated filers and large accelerated filers and the firms that perform these audits. Two commenters agreed that the proposed scope captures situations where investment and proxy voting decisions would be most likely to benefit from additional information about the audit and the auditor.

As discussed in Section III.C.3, firms subject to the final engagement-level reporting requirements will be required to disclose the final engagement-level metrics in Form AP, to be filed by the 35th day (for most audits) after the date the audit report is first included in a document filed with the SEC. Firms subject to the final firm-level reporting requirements will also be required to disclose the final firm-level metrics in the newly created Form FM.

As contemplated above in Section III.C.5, we considered requiring that the final metrics be included in the audit report in addition to on Form AP and Form FM. Under this alternative,

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471 *See* Section III.C.1.ii for additional discussion on commenters' views on this alternative.

472 *See* Section III.C.1 for additional discussion on this policy alternative.

costs incurred by investors and audit committees when gathering information to inform their decision-making could be further reduced. Investors would be able to look down from the auditor's opinion and immediately review the final metrics. Moreover, this would serve as a prime opportunity for the firm to communicate critical context through narratives that might be beneficial for investors in reviewing the final metrics.

The disclosure of the proposed metrics in the audit report would not impair the usefulness of their disclosure through Form AP and Form FM. Indeed, such additional reporting may enhance their usefulness by setting the proposed metrics within the full context of the issuer's financial reporting. However, some investors and audit committees may prefer to obtain the information from Form AP and Form FM, or from other sources (e.g., a subscription-based data provider), and hence may find little use for metrics in the audit report. There likely would not be appreciable costs associated with this additional reporting, outside of costs to include the report in the filing of the audit opinion. Firms will already be required to collate information and compute the final metrics for reporting to the PCAOB in their relevant forms.

Many commenters disagreed with this approach citing that, for example, it could potentially detract from the clarity and purpose of the report, could result in delays in the issuance of audit reports, and amendments to the audit report for corrections to metrics could create unnecessary burden for issuers and confusion for investors. One commenter suggested the proposed metrics would be better placed in audit committee reports in company proxy statements. One commenter said that the proposed metrics: (i) would create a misimpression that the metrics are indicative of audit quality; (ii) would be impractical to implement in a timely manner; and (iii) could distract auditors. However, several commenters, primarily investor-related groups, were supportive of reporting in the auditor's report. One commenter said that the proposed engagement performance metrics are as important to understanding audit risks as CAMs and thus merit inclusion in the auditor's report. We are persuaded by commenter feedback that this alternative would be burdensome and could diminish the value of the auditor's report. Therefore, we are not adopting this alternative at this time.

We also considered requiring firms subject to the final firm-level reporting requirements to disclose the firm-level metrics on Form 2 rather than Form FM. This approach could benefit some investors or audit committees because the firm-level metrics would appear in the context of other firm-level information. It could also reduce compliance costs for firms because firms are already familiar with Form 2. However, information reported on Form 2 is currently not downloadable as a structured data set. This could reduce the accessibility of the final firm-level metrics to investors and audit committees. Furthermore, the final firm-level metrics use terms that have different meanings in the context of Form 2 (e.g., "Partners"). This could lead some investors or audit committees to misunderstand the final firm-level metrics or lead some firms to mistakenly provide incorrect information in Form 2. Finally, the due date of Form 2, June 30, falls after the general timing of shareholder meanings and therefore would generally arrive too

late to inform shareholders' voting decisions. Section III.C.3 discusses this alternative and commenter feedback. Overall, we are persuaded by commenters' concerns that this alternative would place burdens on firms during their busy season. Therefore, we are not adopting this alternative at this time.

While several commenters suggested that we limit the disclosure of engagement-level metrics to audit committees—citing audit committees' ability to engage in dialogue with the auditor and to understand the context of the metrics—we believe public disclosure will provide the benefits associated with investor decision-making as well as some benefits related to improved audit committee decision-making. For example, public disclosure allows investors to make more informed decisions regarding board directors (including audit committee members), and auditor ratification. It also will provide audit committees with comparative information about other firms and engagements which may improve their auditor selection and oversight decisions. Furthermore, we believe that the public nature of the metrics will be a key driver of the pro-competitive effects in the auditing market, by making it easier to compare an existing auditor's metrics to the same metrics for other potential auditors. We therefore believe public transparency will foster a competitive auditing environment and support robust governance by providing all stakeholders, not just audit committees, with information to make well-informed decisions.

Two commenters suggested we refer to work performed by the SEC when it considered requiring additional audit committee disclosures.[473] One commenter suggested that the 2015 SEC Concept Release could inform our consideration of requiring auditors to disclose engagement-level metrics to audit committees only. Staff reviewed the 2015 SEC Concept Release. The 2015 SEC Concept Release sought comment on, among other things, whether the reporting of additional information by the audit committee with respect to its oversight of the audit may provide useful information to investors as they evaluate the audit committee's performance in connection with, among other things, their vote for or against directors who are members of the audit committee, the ratification of the auditor, or their investment decisions. We believe this request for comment is consistent with the questions included in our proposal, the feedback from investor-related groups we received, and our view that investors need more information to: (i) evaluate the performance of auditors and audit committees; (ii) vote for or against directors who are members of the audit committee; (iii) ratify the appointment of the auditor; and (iv) invest capital. The 2015 SEC Concept Release also stated that to the extent the audit committee uses indicators or metrics in assessing the quality of the auditor and the audit, disclosure about the use and consideration of such metrics may provide useful information

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473 *See SEC Concept Release on Possible Revisions to Audit Committee Disclosures*, SEC Rel. No. 33-9862 (July 1, 2015) ("2015 SEC Concept Release").

about the audit committee's process for assessing the auditor. We note that the relevance of the 2015 SEC Concept Release is limited by the fact that it: (i) contemplates public disclosures by audit committees rather than by auditors; and (ii) aims to solicit feedback rather than provide a cost-benefit analysis. As explained previously, we believe that restricting the disclosure of these metrics solely to audit committees would cause investors and other stakeholders to forgo the benefits of disclosure.

Some commenters suggested a more flexible approach to engagement-level reporting, such as voluntary disclosure. One commenter suggested that competition among auditors should be the primary source of practice enhancements as opposed to regulatory control. One commenter suggested that voluntary disclosure allows for refinements and innovation in response to the evolving auditing environment. Another commenter suggested that voluntary disclosure could facilitate a market for enhanced disclosures. Relatedly, referring academic research, one commenter said that relevant metrics could evolve over time and that many metrics could be useful.[474] Also citing academic research, another commenter recommended a principles-based approach.[475] We recognize that a purely voluntary or principles-based approach could foster innovation. However, for reasons discussed in Section IV.B.2 and Section IV.C.1, we believe the benefits associated with a mandatory approach, with clearly articulated calculations relative to the current practice baseline of voluntary disclosure, are substantial. For example, as discussed in Section IV.B.1, we believe that the market does not provide sufficient incentives for auditors to disclose information akin to the metrics voluntarily. Furthermore, even under the mandatory framework we are adopting, firms would still have the freedom to innovate beyond the required metrics through additional voluntary disclosures.

One commenter suggested that an analysis of analogous initiatives in foreign jurisdictions would inform the PCAOB of potential alternatives to the final rules that may be less costly or present less risk of unintended consequences. One commenter suggested that we more carefully consider the context in which those metrics are used, emphasizing their voluntary nature. As discussed in the proposal, staff reviewed initiatives in foreign jurisdictions

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474 *See* Gillian Rose Barnes and Dana R. Hermanson, *Fraud Brainstorming Sessions and Interviews in a Remote World: Initial Evidence*, 15 Journal of Forensic and Investigative Accounting 248 (2023); Lazarus Elad Fotoh and Johan Ingemar Lorentzon, *Audit Digitalization and its Consequences on the Audit Expectation Gap: A Critical Perspective*, 37 Accounting Horizons 43 (2023); Jean C. Bedard, Karla M. Johnstone, and Edward F. Smith, *Audit Quality Indicators: A Status Update on Possible Public Disclosures and Insights from Audit Practice*, 4 Current Issues in Auditing C12 (2010); Knechel, et al., *Audit Quality*; and Christensen et al., *Understanding Audit Quality*.

475 *See* Arianna S. Pinello, Ara G. Volkan, Justin Franklin, Michael Levatino, and Kimberlee Tiernan, *The PCAOB Audit Quality Indicator Framework Project: Feedback from Stakeholders*, 16 Journal of Business & Economics Research 1 (2019).

and noted their generally less prescriptive approaches compared to the metrics we are adopting. While these international approaches may involve lower costs and possibly fewer unintended consequences, they are also likely to mean that metrics are less comparable and less comprehensively available, implying less-substantial benefits. We believe that our approach, although potentially more prescriptive, is necessary to achieve the desired level of transparency and oversight in audit practices.

Two commenters representing investor groups suggested that, if the Board adopts the final rules, the PCAOB could amplify the value of the final metrics by providing tools, research, or periodic reviews of the information. We will consider these suggestions. However, we note that, under the final rules, users will be able to analyze the data using tools of their choice. Additionally, the PCAOB plans to have programs to sponsor research which may consider the final metrics. We will be alert to how the metrics are utilized and their impact.

### iv. Alternative Firm and Engagement Metrics Considered

We considered but at this time are not adopting metrics related to: (i) auditor proficiency testing; surveys of firms and audit committees; and auditor absenteeism; (ii) legal proceedings against audit firms and firm ownership structures; (iii) engagement-level PCAOB deficiencies; (iv) access to national office or other technical resources and staff and investments in infrastructure to support audit quality; (v) auditor independence and financial reporting quality; (vi) timely issuance of internal controls weaknesses and going concern opinions and fraud or other financial reporting misconduct; (vii) audit fees, effort, and client risk; (viii) audit personnel; (ix) allocation of audit hours; and (x) internal monitoring and incentives. In the following discussion we briefly describe and evaluate the literature on these metrics and provide our rationale for not adopting them.

#### a. Metrics Related to Auditor Proficiency Testing, Surveys of Firms and Audit Committees, and Auditor Absenteeism

Metrics related to proficiency testing, surveys of firms and audit committees, and auditor absenteeism would generally speak to the "Tone at the Top" or workplace culture of the audit firm. There is a lack of literature covering the economic impacts that disclosure of these metrics might engender. While some academic literature suggests strong work culture and a "Tone at the Top" is associated with audit quality,[476] it is unclear how an informative

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[476] *See, e.g.,* Stephen Perreault, James Wainberg, and Benjamin L. Luippold, *The Impact of Client Error-Management Climate and the Nature of the Auditor-Client Relationship on External Auditor Reporting Decisions*, 29 Behavioral Research in Accounting 37 (2017) and Donna D. Bobek, Derek W.

metric could be constructed. Similarly, while some academic literature suggests competence is associated with audit quality, there is limited research related to proficiency testing per se and it is unclear how an informative metric on proficiency testing could be constructed.[477] Finally, we are unaware of any literature related to auditor absenteeism. At this time, we are not requiring disclosure of these metrics under the final rules.

#### b. Metrics Related to Legal Proceedings Against Audit Firms and Firm Ownership Structures

Some academic literature suggests there may be no relationship between the quality of audit services or the auditor's provision of reasonable assurance and the likelihood that an auditor could be sued, have a case settled, or be taken through court.[478] Many cases brought against auditors fail to meet the threshold of fault required to show the auditor is liable for the damages incurred by investors. Information related to legal proceedings may also be confidential or otherwise sensitive. Furthermore, the incidence of lawsuits against auditors has declined in recent years.[479] One investor survey finds that investors perceive private litigation as being unrelated to audit quality.[480] Additionally, information regarding proceedings initiated by government entities against firms and certain of their personnel is already reported on Form 3. Metrics related to firm ownership structure are being considered by the PCAOB's Firm Reporting rulemaking project. At this time, we are not requiring disclosure of these metrics under the final rules.

#### c. Metrics Related to Engagement-Level PCAOB Deficiencies

Section III.E.2 discusses our considerations regarding potential metrics related to engagement-level PCAOB deficiencies. Several commenters suggested we include metrics related to deficiencies identified during PCAOB inspections. Several commenters suggested we require firms to report the percentage of their reviewed audits that received Part I.A deficiencies in their PCAOB inspection reports. These commenters highlighted the critical nature of Part I.A deficiencies and suggested that requiring this information to be disclosed

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Dalton, Brian E. Daugherty, Amy M. Hageman, Robin R. Radtke, *An Investigation of Ethical Environments of CPAs: Public Accounting versus Industry*, 29 Behavioral Research in Accounting 43 (2017).

477 *See*, *e.g.*, Christensen et al., *Understanding Audit Quality*.

478 *See, e.g.*, Colleen Honigsberg, Shivaram Rajgopal, and Suraj Srinivasan, *The Changing Landscape of Auditors' Liability,* 63 The Journal of Law and Economics 367 (2020).

479 *See* Honigsberg et al., *The Changing Landscape*.

480 *See* Christensen et al., *Understanding Audit Quality*.

along with the other final metrics would increase its prominence. While we acknowledge the significance of Part I.A deficiencies – indicating deficiencies that were of such significance that we believe the firm, at the time it issued its audit report, had not obtained sufficient appropriate audit evidence to support its opinion on the issuer's financial statements and/or ICFR – we note that this information is already publicly available and stakeholders already utilize this information, compiling it in their analyses.

One commenter suggested that we consider requiring auditors to disclose which of their audits had Part I.A deficiencies included in their PCAOB inspection reports. The commenter suggested that this disclosure would obviate need for most, if not all, of the proposed firm- and engagement-level metrics. We acknowledge that information on engagement deficiencies identified through PCAOB inspection could provide investors and other stakeholders with additional insight on audit quality. However, PCAOB inspection reports are typically published well after the reporting deadlines for engagement-level metrics on Form AP, making it impractical to include such inspection results in that form. We also disagree that disclosure of PCAOB inspection findings would obviate the need for the metrics. The final metrics will be available for the full population of accelerated filer and large accelerated filer issuers, whereas the presence of Part I.A deficiencies are available for the much more limited sample of inspected firm engagements. Furthermore, we believe the final metrics would provide information on aspects of audit quality not entirely captured by Part I.A deficiencies. While academic literature suggests that engagement-level PCAOB auditing deficiencies are indicative of low audit quality, Sarbanes-Oxley already provides a robust framework for making PCAOB inspection findings and sanctions public.[481] At this time, we are not requiring the disclosure of engagement-level PCAOB auditing deficiencies under the final rules.

#### d. Metrics Related to Access to the National Office or Other Technical Resources and Staff and Investments in Infrastructure to Support Audit Quality

Section III.E.2 discusses our considerations regarding potential metrics related to access to technical resources. Overall, metrics related to audit teams' access to such technical resources and staff could indicate how accessible individuals, decision aids, or technical audit-process manuals are to audit teams. For example, in larger firms, individuals in the national office may provide consultation on complex, unusual, or unfamiliar issues. One study using PCAOB data found that national office consultations are common among PCAOB-inspected engagements and that national office consultation use is associated with engagement

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481 *See*, *e.g.,* Aobdia et al., *Practitioner Assessments*.

characteristics and proxies for audit quality.[482] Smaller firms may retain individuals with such expertise from outside the firm. Metrics related to infrastructure that supports audit quality could provide information on resources audit teams have available to them that could support audit quality. However, due to the variety of ways firms provide technical resources and infrastructure to support audit quality, we believe that metrics related to these areas would likely not be informative or comparable for all firms. Furthermore, disclosures related to network relationships currently being considered as part of the PCAOB's Firm Reporting rulemaking project would provide some information to investors and audit committees regarding firms' access to technical resources. At this time, we are not requiring disclosure of metrics related to access to technical resources under the final rules.

Section III.E.2 discusses our considerations regarding potential metrics related to investment in audit infrastructure. In particular, one commenter suggested that we consider requiring firms to report the percentage of the firm's revenues invested in technology accessible by audit teams. We believe the broad range of what constitutes "technology" and how it is used across different firms could lead to inconsistencies in how such a metric is calculated and reported. Overall, we do not believe such a metric would be informative and comparable. At this time, we are not requiring disclosure of metrics related to access to investment in audit infrastructure under the final rules.

#### e. Metrics Related to Auditor Independence and Financial Reporting Quality

Disclosures related to audit fees and non-audit fees are being considered as part of the PCAOB's Firm Reporting rulemaking project. Furthermore, the final rules already include a metric for restatements, a well-accepted proxy for financial reporting quality. Therefore, we do not think there is a need to expand disclosures related to this information under the final rules.

#### f. Metrics Related to the Timely Issuance of Internal Controls Weaknesses and Going Concern Opinions, and Fraud or Other Financial Reporting Misconduct

Academic research suggests that (i) markets react to going concern reporting and (ii) timely reporting of a going concern opinion is an indicator of audit quality.[483] However, there is a lack of academic research related to timely reporting of internal control weaknesses. The final

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482 *See*, *e.g.*, Matthew G. Sherwood, Miguel Minutti-Meza, and Aleksandra B. Zimmerman, *Auditors' National Office Consultations*, SSRN Electronic Journal (2024). We note that SSRN does not peer review its submissions.

483 *See* DeFond and Zhang, *A Review of Archival Auditing Research*.

rules include metrics related to restatement history, which we believe will provide a clearer signal of audit quality. Firms' reporting of internal control weaknesses and their inclusion of going concern explanatory paragraphs in the audit report are also publicly available already, as are indicators of auditors' timeliness (e.g., subsequent restatements or bankruptcies). Additionally, we are considering other standard-setting opportunities related to the reporting of fraud or other financial reporting misconduct as well as the auditor's going concern evaluation. At this time, we do not think there is a need to require disclosure of these metrics under the final rules.

### g. Metrics Related to Audit Fees, Effort, and Client Risk

Regarding audit fees, we note that engagement-level audit fees are already publicly available and firm-level audit fees may be constructed by summing engagement-level audit fees. Regarding audit effort, we note that, while some academic research finds that proxies for audit effort are associated with audit quality, the level of association diminishes in certain settings when considered jointly with other information correlated with audit effort.[484] Indeed, stakeholders will have access to information correlated to audit effort. For example, engagement-level audit hours, a commonly used proxy for audit effort, are highly correlated with engagement-level audit fees which are publicly available.[485] Additionally, the final metrics related to Partner and Manager Involvement, Workload, Training Hours for Audit Personnel, and Allocation of Audit Hours will provide information related to audit effort. Regarding client risk, we have observed through our oversight activities that firms classify clients as high risk in various ways. At this time, we are not requiring disclosure of these metrics under the final rules.

### h. Metrics Related to Audit Personnel

We proposed but are not adopting engagement-level metrics related to turnover (i.e., Retention and Tenure). Section IV.C.1.iv.a discusses academic literature related to turnover generally. Section III.E discusses commenters' views on the proposed metric. Overall, commenters generally did not support engagement-level metrics in this area. Several

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[484] See, *e.g.*, Aobdia et al., *The Economics of Audit Production* Table 3 and Table 4 (finding that audit effort is not related to various proxies for audit quality after holding other factors constant); Constantinos Caramanis and Clive Lennox, *Audit Effort and Earnings Management*, 45 Journal of Accounting and Economics 116 (2008) (studying Greek audit firms, finding that lower audit hours are associated with decreases in various proxies for audit quality) and Dafydd Mali and Hyoung-Joo Lim, *Can Audit Effort (Hours) Reduce a Firm's Cost of Capital? Evidence from South Korea,* 45 Accounting Forum 171 (2020) (finding, using data on Korean audit firms, that audit effort is negatively associated with weighted average cost of capital).

[485] *See*, *e.g.*, Aobdia, *Practitioner Assessments*, Table 4.

commenters said that mandatory partner rotation, personal issues, and strategic resource management concerns could drive the proposed engagement-level metric related to turnover. Commenters said that for these and other reasons the metrics would be especially difficult for stakeholders to interpret and would need to be considered in conjunction with other metrics. After considering these comments, and in light of our original analysis, we are not adopting the proposed engagement-level Retention and Tenure metric under the final rules.

### i. Certain Metrics Related to the Allocation of Audit Hours

We proposed but are not adopting several metrics related to the allocation of audit hours (i.e., Audit Hours and Risk Areas, Audit Resources – Use of Auditor's Specialists and Shared Service Centers). These proposed metrics predominantly focus on whether the audit team is being efficiently and effectively deployed. The proposed metrics were intended to improve transparency into the audit process and help investors and audit committees to review: (i) whether the auditor is effectively allocating hours in response to areas of significant risk, (ii) whether the auditor is efficiently and effectively deploying individuals with expertise to address areas that require their specialized knowledge; and (iii) whether the auditor is efficiently and effectively using SSCs. Section IV.C.1.iv.b of the proposal provides additional discussion on the potential benefits of these metrics and relevant academic literature. Section IV.C.1.iv above addresses comments related to the discussion of academic literature. We address below more specific comments related to the impacts of these metrics.

Section III.E discusses commenters' views on the proposed Audit Hours and Risk Areas metric including alternative approaches suggested. Overall, many commenters did not support the proposed metric and said that it would be challenging to calculate. Several commenters said that, because risk assessment is an iterative process, high-risk areas could change over the course of the audit, leading to challenges tracking the required hours information. Several commenters also said that calculating the proposed metric would require extensive coordination among other auditors. Several commenters also said that hours charged to particular accounts may include work that is unrelated to an identified significant risk. After considering these comments, and in light of our original analysis, we are not adopting the proposed Audit Hours and Risk Areas metric under the final rules.

Section III.E discusses commenters' views on the proposed Audit Resources metrics including alternative approaches suggested. Overall, commenters generally opposed these metrics. For example, one commenter said that the use of auditor's specialists would not be comparable across firms of different sizes without sufficient context. The same commenter said that smaller firms are more likely to engage outside specialists compared to larger firms with in-house specialists. One commenter said firms are already required to communicate their use of specialists to audit committees on an engagement. One commenter said that the use of specialists is highly contextual. One commenter said it would be difficult obtain the hours

information to calculate the proposed use of specialists metric. Referring to several academic articles, one commenter suggests that smaller firms and larger firms' metrics related to the use of specialists would not be comparable because smaller firms feel regulatory pressure to use specialists and typically retain outside specialists.[486] One commenter said that the SSC metric would be misinterpreted as indicating that greater SSC hours indicated lower quality. After considering these comments, and in light of our original analysis, we are not adopting the proposed Audit Resources metrics under the final rules.

### j. Metrics Related to Internal Monitoring and Incentives

We proposed but are not adopting metrics related to internal audit quality review (i.e. Audit Firms' Internal Monitoring) and incentive alignment (i.e., Quality Performance Ratings and Compensation). Metrics related to internal audit quality review and incentive alignment focus on the positive and negative incentives auditors face. Unlike the final metrics related to audit personnel and allocation of audit hours, which would provide additional transparency into the inner workings and characteristics of the audit team, the disclosure of these proposed metrics would provide information related to audit outcomes and the incentives that led to those results. Section IV.C.1.iv.c of the proposal provides additional discussion on the potential benefits of these metrics and relevant academic literature. Section IV.C.1.iv above addresses comments related to the discussion of academic literature. We address below more specific comments related to the impacts of these metrics.

Section III.E discusses commenters' views on these proposed metrics including alternative approaches raised. Two commenters agreed that the proposed metrics related to firms' internal monitoring would be useful for stakeholders. One firm reported that it provides similar firm-level information in its transparency report. However, others expressed several concerns, particularly regarding the engagement-level metrics. By way of background, survey research cited in the proposal finds that internal monitoring programs are valued by audit partners for their focus on the firm's audit methodology, their timeliness, and the quality of the

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[486] *See* J. Efrim Boritz, Natalia Kochetova-Kozloski, and Linda Robinson, *Are Fraud Specialists Relatively More Effective Than Auditors at Modifying Audit Programs in the Presence of Fraud Risk?*, 90 The Accounting Review 881 (2015); Candice T. Hux, *Use of Specialists on Audit Engagements: A Research Synthesis and Directions for Future Research*, 39 Journal of Accounting Literature 23 (2017); Zimmerman, et al., *Auditor's Use*; Dereck Barr-Pulliam, Stephani Mason, and Kerri Ann Sanderson, *The Joint Effects of Work Content and Work Context on Valuation Specialists' Perceptions of Organizational-Professional Conflict*, SSRN Electronic Journal (2022); Aleksandra B. Zimmerman, Dereck Barr-Pulliam, Joon-Suk Lee, and Miguel Minutti-Mezza, *Auditors' Use of In-House Specialists*, 61 Journal of Accounting Research 1363 (2023). We note that SSRN does not peer review its submissions.

feedback.[487] Pointing to this research, one commenter suggested that the proposed internal monitoring metric would undermine the efficacy of audit firm internal inspection programs and audit quality. Some commenters said that the information would not be comparable due to differences in firms' monitoring programs. One commenter said that smaller firms would be disadvantaged because the results of their monitoring programs tend to be more variable. Regarding incentive alignment, some commenters supported a metric for incentive alignment and agreed with our rational for proposing it. One commenter said that investors routinely evaluate executive compensation packages and understand that compensation may be driven by a variety of factors which could be discussed in the voluntary narrative discussion. However, other commenters said it would lack comparability, would not capture other important drivers of compensation, and would raise confidentiality concerns. After considering these comments, and in light of our original analysis, we are not adopting these metrics under the final rules.

## V. SPECIAL CONSIDERATIONS FOR AUDITS OF EMERGING GROWTH COMPANIES

Section 104 of the Jumpstart Our Business Startups ("JOBS") Act imposes certain limitations to the application of the Board's standards to audits of Emerging Growth Companies ("EGCs"), as defined in Section 3(a)(80) of the Exchange Act. Under Section 104, the JOBS Act provides that any additional rules adopted by the Board subsequent to April 5, 2012, "shall not apply to an audit of any [EGC] unless the Commission determines that the application of such additional requirements is necessary or appropriate in the public interest, after considering the protection of investors, and whether the action would promote efficiency, competition, and capital formation."[488] As a result, the final rules are subject to a separate determination by the SEC regarding their applicability to audits of EGCs.[489]

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487 *See* Richard W. Houston and Chad M. Stefaniak, *Audit Partner Perceptions of Post-Audit Review Mechanisms: An Examination of Internal Quality Reviews and PCAOB Inspections*, 27 Accounting Horizons 23 (2013).

488 *See* Pub. L. No. 112–106 (Apr. 5, 2012). Section 103(a)(3)(C) of Sarbanes-Oxley, as added by Section 104 of the JOBS Act. Section 104 of the JOBS Act also provides that any rules of the Board requiring (1) mandatory audit firm rotation or (2) a supplement to the auditor's report in which the auditor would be required to provide additional information about the audit and the financial statements of the issuer (auditor discussion and analysis) shall not apply to an audit of an EGC. The final mandatory disclosure rules do not fall within either of these two categories.

489 We are providing this analysis of the impact on EGCs to assist the SEC in making the determination required under Section 104 to the extent that the requirements apply to "the audit of any emerging growth company" within the meaning of Section 104 of the JOBS Act.

To inform consideration of the application of PCAOB standards and rules to audits of EGCs, the staff publishes a white paper annually that provides general information about characteristics of EGCs. The data on EGCs outlined in the most recent white paper, released in February 2024, remains generally consistent with the data outlined in prior EGC white papers.[490] As of the November 15, 2022, measurement date, PCAOB staff identified 3,031 companies that self-identified with the SEC as EGCs and filed with the SEC audited financial statements in the 18 months preceding the measurement date.[491]

The discussion of benefits, costs, and unintended consequences of the final rules in Section IV is generally applicable to all audits performed pursuant to PCAOB standards, including audits of EGCs. The economic impacts of the final rules on an individual EGC audit will depend on factors such as the auditor's ability to distribute implementation costs across its audit engagements and whether the auditor has already incorporated the final metrics into its audit approach. One survey of audit committees of smaller public companies found that five of the 28 metrics discussed in the Concept Release were evaluated by more than half of the audit committees surveyed.[492] EGCs are more likely to be newer companies, which are typically smaller in size and receive lower analyst coverage.[493] For example, smaller companies have very little, if any, analyst coverage, which reduces the amount of information made available to financial statement users and therefore makes markets less efficient.[494] These factors may increase the importance to investors of the higher audit quality expected to result from the final rules, as high-quality audits generally enhance the credibility of management

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490 *See* PCAOB, *White Paper on Characteristics of Emerging Growth Companies and Their Audit Firms at November 15, 2022* (Feb. 20, 2024), *available at* https://pcaobus.org/resources/other-research-projects ("EGC White Paper").

491 The EGC White Paper uses a lagging 18-month window to identify companies as EGCs. Please refer to the "Current Methodology" section in the EGC White Paper for details. Using an 18-month window enables staff to analyze the characteristics of a fuller population in the EGC White Paper, but may tend to result in a larger number of EGCs being included for purposes of the present EGC analysis than would alternative methodologies. For example, an estimate using a lagging 12-month window would exclude some EGCs that are delinquent in making periodic filings. An estimate as of the measurement date would exclude EGCs that have terminated their registration, or that have exceeded the eligibility or time limits. *See id*.

492 *See, e.g.*, Harris and Williams, *Audit Quality Indicators*.

493 *See* EGC White Paper at Figure 9 and Figure 12 (indicating that exchange-listed EGCs have less market capitalization and revenue than exchange-listed non-EGCs).

494 *See* SEC, *Final Report of the Advisory Committee on Smaller Public Companies to the U.S. Securities and Exchange Commission* (Apr. 23, 2006) at 73.

disclosures.[495] The costs of the final rules may disproportionately impact smaller audit firms, and in so much as smaller audit firms tend to audit smaller issuers, pass through of these costs may disproportionately impact EGCs.[496]

However, two important caveats will limit the impact of the final rules on EGCs. First, the vast majority of EGC engagements will not be subject to the final engagement-level reporting requirements because an EGC cannot be a large accelerated filer and few accelerated filers maintain the EGC status.[497] We believe these EGCs will therefore not be impacted by the final engagement-level reporting requirements. Second, approximately 23% of EGC engagements (712 out of 3,031) will not be included in any final firm-level reporting because they are not audited by a firm that will be subject to the final firm-level reporting requirements. We believe these EGCs will therefore not be impacted by the final firm-level reporting requirements.

Overall, among the impacted EGCs, the final rules are expected to enhance the quality of EGC audits and financial reporting quality.[498] To the extent the final rules will improve EGCs' financial reporting quality, it may also improve the efficiency of capital allocation, lower the cost of capital, and enhance capital formation. For example, investors may improve their capital

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[495] Researchers have developed a number of proxies that are thought to be correlated with information asymmetry, including small issuer size, lower analyst coverage, larger insider holdings, and higher research and development costs. To the extent that EGCs exhibit one or more of these properties, there may be a greater degree of information asymmetry for EGCs than for the broader population of companies, which increases the importance to investors of the external audit to enhance the credibility of management disclosures. *See*, *e.g.*, Steven A. Dennis and Ian G. Sharpe, *Firm Size Dependence in the Determinants of Bank Term Loan Maturity,* 32 Journal of Business Finance and Accounting 31 (2005); Michael J. Brennan and Avanidhar Subrahmanyam, *Investment Analysis and Price Formation in Securities Markets*, 38 Journal of Financial Economics 361 (1995); David Aboody and Baruch Lev, *Information Asymmetry, R&D, and Insider Gains*, 55 Journal of Finance 2747 (2000); Raymond Chiang and P. C. Venkatesh, *Insider Holdings and Perceptions of Information Asymmetry: A Note*, 43 Journal of Finance 1041 (1988); and Molly Mercer, *How Do Investors Assess the Credibility of Management Disclosures?*, 18 Accounting Horizons 185 (2004).

[496] Staff analysis indicates that, compared to exchange-listed non-EGCs, exchange-listed EGCs are approximately 2.6 times as likely to be audited by an NAF and approximately 1.3 times as likely to be audited by a triennially inspected firm. Source: EGC White Paper and S&P.

[497] As of November 15, 2022, among the 2,562 EGCs for which "accelerated filer" status information is available, just 163 identified as accelerated filers. *See* EGC White Paper at 26.

[498] *See* the preamble to Section IV.C.1 for a discussion on the link between audit quality and financial reporting quality.

allocation by more accurately identifying EGCs with the strongest prospects for generating future risk-adjusted returns and reallocating their capital accordingly. Investors may also perceive less risk in the impacted EGC capital markets generally, leading to an increase in the supply of capital to the impacted EGCs. This may increase capital formation and reduce the cost of capital to impacted EGCs. The final rules could reduce competition in an EGC's product market if the indirect costs to audited companies disproportionately impact EGCs relative to their competitors.

As discussed in Section IV.D.3.ii, we considered broadening the applicability of the final rules to include information from audits of EGCs generally. However, for the reasons described there, we are not doing so at this time. In particular, non-accelerated filer EGCs may be disproportionately impacted by cost passthrough and tend to be smaller than in-scope issuers. Section IV.D.3.ii discusses comments related to this alternative. There were no comments related to the EGC analysis specifically.

Accordingly, and for the reasons explained above, the Board recommends that the Commission determine that it is necessary or appropriate in the public interest, after considering the protection of investors and whether the action will promote efficiency, competition, and capital formation, to apply the final rules to audits of EGCs.

## VI. EFFECTIVE DATE

For firm-level metrics, we proposed an effective date beginning October 1 of the year after approval by the SEC, with the first reporting period ending the following September 30. We also proposed a phased implementation period:

- Firms that issued audit reports with respect to more than 100 issuers in the calendar year preceding the effective date would begin reporting firm-level metrics in the first year; and

- All other firms would begin reporting firm-level metrics one year later.

For engagement-level metrics, we also proposed a phased implementation period:

- Firms that issued audit reports with respect to more than 100 issuers in the calendar year preceding the effective date– for audits of companies with fiscal years beginning on or after October 1 of the year after the year in which SEC approval is obtained; and

- All other firms – for audits of companies with fiscal years beginning on or after October 1 two years after the year in which SEC approval is obtained.

We solicited comment on whether the proposed effective date would provide challenges for auditors and how these challenges should be addressed. We also solicited comment on whether the phased implementation period would be appropriate and whether the phased implementation should be based on the number of issuer audit reports issued or some other basis.

One investor-related group suggested that extending the implementation period would allow smaller firms to adapt incrementally, ensuring they are not disproportionately affected by the new requirements. This commenter further suggested that we could identify and make certain metrics optional for smaller firms without making all the metrics optional.

Primarily, firms and firm-related groups recommended extending the proposed effective date. While many firms did not provide a specific implementation time period, other than stating that more time is needed, other firms recommended an effective date at least three years after the SEC's approval, and others recommended at least two years after the SEC's approval. Some commenters specifically stated that additional time (i.e., one more year) would be needed for smaller firms. Another commenter recommended an effective date of at least three years after the SEC's approval, if adopted as proposed, or shorter if engagement-level metrics will be communicated to the audit committee, rather than reported publicly, as proposed. These commenters provided reasons for extending the implementation period including more time to implement systems or system changes, develop processes, train professionals, and accumulate and test data and calculations. Some commenters specifically emphasized the need for more time to make changes in the GNFs or other firms who are participating in the audit that may or may not have the same systems or policies. Other commenters stated that more time would be needed to implement this rulemaking because of other recently adopted standards.

We considered these comments and are providing additional time before the reporting rules become effective. The final rules will become effective beginning October 1 of two years after the year of approval by the SEC, with the first reporting period ending the following September 30 with a phased implementation period:

- Firms that issued audit reports with respect to more than 100 issuers in the calendar year in which the effective date occurs will begin reporting firm-level metrics in the first year reporting is required; and

- All other firms would begin reporting firm-level metrics one year later.

If approved by the SEC, the effective date of the firm-level metrics will be October 1, 2027. For firms that issued audit reports with respect to more than 100 issuers in 2027, the first

reporting period would end on September 30, 2028, with the first Form FM due by November 30, 2028. For all other firms, the first reporting period would end on September 30, 2029, with the first Form FM due by November 30, 2029.

For engagement-level metrics, we are also adopting a phased implementation period:

- Firms that issued audit reports with respect to more than 100 issuers in the calendar year preceding the effective date – for audits of companies with fiscal years beginning on or after October 1 of two years after the year of approval by the SEC; and

- All other firms – for audits of companies with fiscal years beginning on or after October 1 of three years after the approval by the SEC.

If approved by the SEC, reporting of engagement-level metrics would start for firms that issue audit reports with respect to more than 100 issuers in 2026 for the audits of companies with fiscal years beginning on or after October 1, 2027. For other firms, it will start with audits of companies with fiscal years beginning on or after October 1, 2028. The reporting will be on Form AP, which is generally due 35 days after the issuance of the auditor's report.

As discussed in earlier sections, we are adopting a smaller number of firm- and engagement-level metrics than proposed. Specifically, we are adopting eight metric areas (as opposed to 11 proposed metric areas), which should reduce the administrative burden and cost of calculating and reporting the metrics. Therefore, we believe that the smaller number of metrics, the extension of the effective date, and the phased implementation should provide sufficient time for firms, including smaller firms, to implement new or enhanced systems and processes, train professionals, and conduct internal testing and reporting before reporting of the metrics.

* * *

On the 21st day of November, in the year 2024, the foregoing was, in accordance with the bylaws of the Public Company Accounting Oversight Board,

ADOPTED BY THE BOARD.

/s/ Phoebe W. Brown

Phoebe W. Brown
Secretary

November 21, 2024

* * *

# APPENDIX 1 – FIRM-LEVEL REPORTING RULE, FORM FM, AND CONFORMING AMENDMENTS

## Rule 2203C. Firm Metrics

(a) Each registered public accounting firm that issued an audit report with respect to at least one issuer that identified itself as an "accelerated filer" or "large accelerated filer" by checking the box on its most recent annual report filed with the Commission during the reporting period of October 1 to September 30, must file with the Board a report on Form FM with respect to such reporting period by following the instructions to that form. Other registered firms may elect to voluntarily file a report on Form FM with the Board.

(b) Form FM is deemed to be timely filed if the form is filed no later than November 30, provided, however, that a registered public accounting firm that has its application for registration approved by the Board in the period between and including October 1 and November 30 of any year shall not be required to file a Form FM in that year.

Note: Pursuant to Rule 1002, in any year in which the filing deadline falls on a Saturday, Sunday, or federal legal holiday, the deadline for filing Form FM shall be the next day that is not a Saturday, Sunday, or federal legal holiday.

(c) Unless directed otherwise by the Board, the registered public accounting firm must file Form FM electronically with the Board through the Board's Web-based system.

## Form FM - Firm Metrics

### GENERAL INSTRUCTIONS

1. Submission of this Report. A *registered public accounting firm* that issued an audit report with respect to at least one *issuer* that identified itself as an "accelerated filer" or "large accelerated filer" by checking the box on its most recent annual report filed with the *Commission* during the reporting period October 1 to September 30, must use this Form to file with the *Board* the report required by Rule 2203C and to file any amendments to such report. Unless otherwise directed by the *Board*, the Firm must file this Form electronically with the *Board* through the *Board*'s Web-based system.

2. Defined Terms. The definitions in the *Board's rules* apply to this Form. Italicized terms in the instructions to this Form are defined in the *Board's rules*. In addition, as used in the instructions to this Form, the term "the Firm" means the *registered public accounting firm* that is filing this Form with the *Board*.

3. When this Report is Considered Filed. A report on Form FM is required to be filed on or before November 30. A Form FM is considered filed when the Firm has submitted to the *Board* a Form FM in accordance with Rule 2203C that includes the signed certification required in Part V of Form FM.

4. Period Covered by this Report. Reports on this Form shall cover a 12-month period from October 1 to September 30 (the "reporting period"), except as expressly provided in Item 4.3 below.

5. Estimates and Rounding. Regarding the metric calculations and reporting required by Part IV of this Form, actual amounts (e.g., audit hours) should be used if available. If actual amounts are unavailable, the Firm may use a reasonable method to estimate the components of a calculation. Reported amounts should be rounded to the nearest whole number, except where additional decimal places (no more than two) are needed to properly interpret the result or to enable comparison to prior periods.

6. Optional Narrative. When the Firm elects to provide a brief narrative to accompany any of the Items in Part IV of this Form, language should be concise and focused on the reported metrics, with a view to facilitating the reader's understanding of the metrics.

7. Documentation. The Firm should retain documentation in sufficient detail to enable an experienced auditor, having no previous connection with the determination of the metrics, to understand the computations of amounts, the amounts on which they are based, and the method(s) used to estimate the amounts when actual amounts were unavailable.

8. Amendments to this Report. Amendments shall not be filed to update information in a filed Form FM that was correct at the time the Form was filed, but only to correct information that was incorrect at the time the Form was filed or to provide information that was omitted from the Form and was required or permitted to be provided at the time the Form was filed. When filing a Form FM to amend an earlier filed Form FM, the Firm must supply not only the corrected or supplemental information, but must include in the amended Form FM all information, affirmations, and certifications that were required to be included in the original Form FM. The Firm may access the originally filed Form FM through the *Board's* Web-based system and make the appropriate amendments without needing to re-enter all other information.

   Note: The *Board* will designate an amendment to a Form FM as a report on "Form FM/A."

9. *Rules* Governing this Report. In addition to these instructions, the *rules* in Part 2 of Section 2 of the *Board rules* govern this Form. Read these *rules* and the instructions carefully before completing this Form.

10. Language. Information submitted as part of this Form, including any exhibit to this Form, must be in the English language.

## PART I – IDENTITY OF THE FIRM

Item 1.1 Name of the Firm

State the legal name of the Firm.

## PART II – GENERAL INFORMATION CONCERNING THIS REPORT

Item 2.1 Reporting Period

State the reporting period covered by this report.

Note: The reporting period, which the Firm should enter in Item 2.1, is the period beginning on October 1 of the year before the year in which Form FM is required to be filed and ending September 30 of the year in which Form FM is required to be filed. That is the period referred to where this Form refers to the "reporting period."

Item 2.2 Voluntary Reporting

Indicate, by checking the box corresponding to this item, that the firm is not required to file this Form FM pursuant to Rule 2203C.

## PART III – TERMINOLOGY

Item 3.1 Terminology used in this Form that applies to Part IV

a. Engagement partner (as defined in paragraph .A1 of AS 1201, *Supervision of the Audit Engagement*): The member of the engagement team with primary responsibility for the audit.

b. Engagement team (as defined in paragraph .A3 of AS 2101, *Audit Planning*):

    a. Engagement team includes:

        (i) Partners, principals, and shareholders of, and accountants[1] and other professional staff employed or engaged by, the lead auditor or other accounting firms who perform audit procedures on an audit or assist the

engagement partner in fulfilling his or her planning or supervisory responsibilities on the audit pursuant to this standard or AS 1201, *Supervision of the Audit Engagemen*t; and

(ii) Specialists who, in connection with the audit, (i) are employed by the lead auditor or an other auditor participating in the audit and (ii) assist that auditor in obtaining or evaluating audit evidence with respect to a relevant assertion of a significant account or disclosure.

b. Engagement team does not include:

(i) The engagement quality reviewer and those assisting the reviewer (to which AS 1220, *Engagement Quality Review*, applies);

(ii) Partners, principals, and shareholders of, and other individuals employed or engaged by, another accounting firm in situations in which the lead auditor divides responsibility for the audit with the other firm under AS 1206, *Dividing Responsibility for the Audit with Another Accounting Firm*; or

(iii) Engaged specialists.[2]

[1] *See* paragraph (a)(ii) of PCAOB Rule 1001, *Definitions of Terms Employed in Rules*, which defines the term "accountant."

[2] AS 1210, *Using the Work of an Auditor-Engaged Specialist*, establishes requirements that apply to the use of specialists engaged by the auditor's firm. Appendix A of AS 1105, *Audit Evidence*, sets forth the auditor's responsibilities for using the work of a specialist employed or engaged by the company.

c. Managers: Accountants or other professional staff commonly referred to as managers or senior managers (or persons in an equivalent position) who participate in audits.

d. of the Firm/the Firm's: Refers to individuals participating in audits who work for the Firm or work under the Firm's direction and control and function as the Firm's employees (e.g., secondees and contractors); interpreted consistently with "firm personnel," as defined in paragraph .A5 of QC 1000, *A Firm's System of Quality Control*.

e. Partners: Partners or persons in an equivalent position (e.g., shareholders, members, or other principals) who participate in audits.

f. Reissuance restatement:[1] When a material error in previously-issued financial statements[2] is identified and disclosed by an *issuer* in a filing with the SEC (e.g., on Form 8-K Item 4.02, Non-Reliance on Previously Issued Financial Statements or a Related Audit Report or Completed Interim Review) or the firm is required to file a notice pursuant to Item 2.1 of Form 3.

g. Reissuance restatement of management's report on ICFR: When a material error in a previously-issued report on management's assessment of the effectiveness of internal control over financial reporting is identified and disclosed by an *issuer* in a filing with the SEC.

h. Revision restatement: When an error in previously-issued financial statements that did not result in a reissuance restatement, but would give rise to a material misstatement if (a) the error was left uncorrected in the current report or (b) the error correction was recognized in the current period, is corrected and disclosed by an *issuer* in a filing with the SEC.

i. Staff: Accountants or other professional staff who participate in audits and are not partners or managers.

j. Total Audit Hours (as described in General Instruction 8 of Form AP): Comprised of hours attributable to: (1) the financial statement *audit*; (2) reviews pursuant to AS 4105, *Reviews of Interim Financial Information*; and (3) the *audit* of internal control over financial reporting pursuant to AS 2201, *An Audit of Internal Control Over Financial Reporting That Is Integrated with An Audit of Financial Statements*; and excluding hours incurred by: (1) the engagement quality reviewer; (2) specialists engaged, not employed, by the Firm; (3) accounting firms in performing the audit of entities in which the *issuer* has an investment that is accounted for using the equity method; (4) internal auditors, other company personnel, or third parties working under the direction of management or the audit committee who provided direct assistance in the *audit* of internal control over financial reporting; and (5) internal auditors who provided direct assistance in the *audit* of the financial statements. Hours incurred in the *audit* by entities other than *other accounting firms* are included in the calculation of total *audit* hours and should be allocated among the Firm and the *other accounting firms* participating in the *audit* on the basis of which accounting firm commissioned and directed the applicable work.

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[1] The term "restatements" has the same meaning as defined in the FASB Accounting Standards Codification ("FASB ASC") Topic 250, *Accounting Changes and Error Corrections; see also,* "retrospective restatement" as defined in IFRS Accounting Standard (IAS) 8, *Accounting Policies, Changes in Accounting Estimates and Errors*.

[2] The phrase "error in previously-issued financial statements" has the same meaning as defined in the FASB ASC 250; *see also* "prior period errors" as defined in IAS 8.

## PART IV – METRIC CALCULATIONS, REPORTING AND DISCUSSION

**Boldfaced** terms in Part IV of this Form are described in Part III.

Item 4.1 Partner and Manager Involvement

Total audit hours for partners and managers on the engagement team as a percentage of total audit hours, for the 12-month period ended September 30 for all accelerated filer and large accelerated filer engagements for which the Firm issued an audit report.

Note: For the purpose of calculating this metric, an "accelerated filer" or "large accelerated filer" is an issuer that identified itself as such by checking the box on its most recent annual report filed with the *Commission*.

a. Provide the calculated metric for this item.

$$\frac{\text{**Total audit hours** incurred by **partners** and **managers** on the **engagement team** for all accelerated filer and large accelerated filer engagements}}{\text{**Total audit hours** for all accelerated filer and large accelerated filer engagements}}$$

| | | |
|---|---|---|
| Partner and Manager Involvement | Percentage of total audit hours for partners and managers for all accelerated filer and large accelerated filer engagements | XX% |

b. Optional narrative.

Item 4.2 Workload

Average weekly hours worked by the Firm's (i) partners and (ii) managers, who, in each case, incurred hours on accelerated filer or large accelerated filer engagements for which the Firm issued an audit report, calculated for each calendar quarter of the preceding 12-month period ended September 30 (e.g., September 30, 20XX, June 30, 20XX, March 31, 20XX, and December 31, 20YY).

Note 1: Hours worked are the sum of hours that are incurred on *issuer* and non-*issuer* engagements and include hours spent on training, practice development, personnel

development, or other firm activities. Hours worked exclude hours that are not considered working hours (e.g., paid time off and holiday time).

Note 2: For the purpose of calculating this metric, an "accelerated filer" or "large accelerated filer" is an *issuer* that identified itself as such by checking the box on its most recent annual report filed with the *Commission*.

a. Provide the calculated metric for these items.

(i) Average weekly hours worked by the Firm's partners:

$$\frac{\text{Average number of hours worked by } \textbf{partners} \text{ who incurred hours on accelerated filer or large accelerated filer engagements in the calendar quarter}}{\text{Number of weeks in the calendar quarter}}$$

(ii) Average weekly hours worked by the Firm's managers:

$$\frac{\text{Average number of hours worked by } \textbf{managers} \text{ who incurred hours on accelerated filer or large accelerated filer engagements in the calendar quarter}}{\text{Number of weeks in the calendar quarter}}$$

| | | Average Weekly Hours Worked | |
|---|---|---|---|
| | Quarter ended | (i) Partners | (ii) Managers |
| Workload | Sep 30, 20XX | XX | XX |
| | Jun 30, 20XX | XX | XX |
| | Mar 31, 20XX | XX | XX |
| | Dec 31, 20YY | XX | XX |

b. Optional narrative.

Item 4.3 Training Hours for Audit Personnel

Average annual professional development training hours for partners, managers, and staff of the Firm, combined.

Note: Training metrics should be calculated for the same 12-month period, either ended September 30, or based on the Firm's training calendar.

a. Provide the calculated metric for this item.

$$\frac{\text{Total professional development training hours completed by } \textbf{partners}, \textbf{managers}, \text{ and } \textbf{staff of the Firm}}{\text{Total number of } \textbf{partners, managers,} \text{ and } \textbf{staff of the Firm}}$$

| | |
|---|---|
| Average annual professional development training hours | XX |

b. Optional narrative.

Item 4.4 Experience of Audit Personnel

Average experience at a public accounting firm of the Firm's (i) partners and (ii) managers, as of September 30.

Note: Experience at a public accounting firm is the total number of years worked as an accountant for a public accounting firm (whether or not PCAOB-registered).

a. Provide the calculated metric for these items.

(i) Average experience at a public accounting firm of the Firm's partners:

$$\frac{\text{Total experience at a public accounting firm of } \textbf{partners}}{\text{Total number of } \textbf{partners}}$$

(ii) Average experience at a public accounting firm for the Firm's managers:

$$\frac{\text{Total experience at a public accounting firm of } \textbf{managers}}{\text{Total number of } \textbf{managers}}$$

| | | Partners | Managers |
|---|---|---|---|
| Experience of Audit Personnel | Average years of experience at a public accounting firm | XX | XX |

b. Optional narrative.

Item 4.5 Industry Experience

For each of the top five industries of the Firm's audit practice (based on revenue from audit services for the Firm's most recently completed fiscal year), (i) the number of the Firm's partners with five or more years of career experience in that industry and (ii) the number of the Firm's managers with three or more years of career experience in that industry, as of September 30. Firms may, but are not required to, provide the same metric for one or more additional industries.

Note 1: Reporting of this metric is not required for firms that issued fewer than five audit reports for accelerated filers and large accelerated filers, combined, during the 12 months ended September 30, although such firms may choose to report voluntarily. For this purpose, an "accelerated filer" or "large accelerated filer" is an issuer that identified itself as such by checking the box on its most recent annual report filed with the *Commission*.

Note 2: Industry experience is accumulated throughout an individual's career (i.e., aggregates experience obtained at all career levels). When determining whether an individual has experience in a specific industry the following may be taken into account: (i) industry experience may be, but is not required to be, exclusive to experience on audit engagements, or exclusive to experience gained at an accounting firm, but must be relevant, and (ii) industry experience can be acquired in non-consecutive years. Relevant experience includes experience in accounting or auditing roles and other specializations, such as experience that is related to fair value estimates in the industry. It is expected that a year of industry experience generally represents approximately 250 hours or 25% of hours worked in a year or more.

Note 3: A list of industries available to be used to report this metric can be found at Appendix A to these instructions.

a. Provide the calculated metric for these items.

   (i) The number of **the Firm's partners** with 5 or more years of career industry experience for each of the top five industries of the Firm's audit practice.

   (ii) The number of **the Firm's managers** with 3 or more years of career industry experience for each of the top five industries of the Firm's audit practice.

| Industry Experience | Top five industries of the Firm's audit practice | (i) Number of partners with 5 or more years of career industry experience | (ii) Number of managers with 3 or more years of career industry experience |
|---|---|---|---|

| | | | |
|---|---|---|---|
| | [Industry] | XX | XX |
| | [Industry] | XX | XX |
| | [Industry] | XX | XX |
| | [Industry] | XX | XX |
| | [Industry] | XX | XX |

b. Optional narrative.

Item 4.6 Retention of Audit Personnel

Retention and headcount change of (a) the Firm's partners and (b) the Firm's managers for the 12-month period ended September 30:

(i) Average number of the Firm's partners and managers.

(ii) Average annual retention rate (percentage of the Firm's partners and managers who remained employed with the Firm for the entire 12-month period).

Note: The partners and managers of the Firm included in the numerator of paragraph (ii) of this Item are those with one or more years of service and who were employed continuously during the 12-month period. Any partners and managers of the Firm hired or positions added during the 12-month period would not be counted in either the numerator or denominator of this formula. The retention rate would not include departures of partners and managers of the Firm who joined and subsequently left during the 12-month period. The retention rate treats promotions to another level of seniority as if they occurred at the beginning of the year; therefore, the number of promoted employees would be included in both the numerator and the denominator of the level at which they ended the year and excluded from both the numerator and the denominator of the level at which they began the year.

(iii) Average annual headcount change (percent change in the number of the Firm's partners and managers from the previous reporting period to the current reporting period, based on the number at the beginning of the period).

a. Provide the calculated metrics for (a) the Firm's partners and (b) the Firm's managers.

(i) Average number:

$$\frac{\text{The number of [}\textbf{partners/managers}\text{] as of October 1 (Year 1) + the number of [}\textbf{partners/managers}\text{] as of September 30 (Year 2)}}{2}$$

(ii) Average annual retention rate:

$$\frac{\text{The number of [}\textbf{partners/managers}\text{] continuously holding the same position from October 1 (Year 1) to September 30 (Year 2)}}{\text{Number of [}\textbf{partners/managers}\text{] as of October 1 (Year 1)}}$$

(iii) Average annual headcount change:

$$\frac{\text{Number of [}\textbf{partners/managers}\text{] as of September 30 (Year 2) – Number of [}\textbf{partners/managers}\text{] as of September 30 (Year 1)}}{\text{Number of [}\textbf{partners/managers}\text{] as of September 30 (Year 1)}}$$

| | | Partners | Managers |
|---|---|---|---|
| Retention of Audit Personnel | (i) Average number | XX | XX |
| | (ii) Average annual retention rate | XX% | XX% |
| | (iii) Average annual headcount change | XX% | XX% |

b. Optional narrative.

Item 4.7 Allocation of Audit Hours

Percentage of total audit hours incurred (i) prior to *issuers*' year ends and (ii) following *issuers*' year ends, for the 12-month period ended September 30 for all accelerated filer and large accelerated filer engagements for which the Firm issued an audit report.

Note 1: Multi-year audits are excluded from these calculations.

Note 2: For the purpose of calculating this metric, an "accelerated filer" or "large accelerated filer" is an *issuer* that identified itself as such by checking the box on its most recent annual report filed with the *Commission*.

a. Provide the calculated metric for these items.

(i) Percentage of total audit hours incurred prior to *issuers*' year ends:

$$\frac{\textbf{Total audit hours} \text{ incurred prior to } \textit{issuers}\text{' year ends for all accelerated filer and large accelerated filer engagements}}{\textbf{Total audit hours} \text{ for all accelerated filer and large accelerated filer engagements}}$$

(ii) Percentage of total audit hours incurred following *issuers*' year ends:

$$\frac{\textbf{Total audit hours} \text{ incurred following } \textit{issuers}\text{' year ends for all accelerated filer and large accelerated filer engagements}}{\textbf{Total audit hours} \text{ for all accelerated filer and large accelerated filer engagements}}$$

| | | |
|---|---|---|
| Allocation of Audit Hours | Percentage of audit hours incurred prior to *issuers*' year ends for all accelerated filer and large accelerated filer engagements | XX% |
| | Percentage of audit hours incurred following *issuers*' year ends for all accelerated filer and large accelerated filer engagements | XX% |

b. Optional narrative.

Item 4.8 Restatement History

For each of the last three 12-month periods ended September 30, provide the following:

(i) The number of audit reports initially issued by the Firm for *issuers* during that 12-month period, in connection with which any of the following subsequently occurred:

(a) **revision restatement** of the financial statements for errors.

(b) **reissuance restatement** of the financial statements for errors.

(c) **reissuance restatement of management's report on ICFR** disclosing an additional material weakness or additional elements to a previously disclosed material weakness.

(ii) Total *issuer* engagements for which the Firm initially issued audit reports during that 12-month period.

(iii) Total *issuer* engagements for which the Firm initially issued audit reports expressing an opinion on internal control over financial reporting during that 12-month period.

a. Provide the calculated metric for these items.

| | | Audit Report Initially Issued | | |
|---|---|---|---|---|
| | | Current Reporting Period (Year 3) | Reporting Period-Ended (Year 2) | Reporting Period-Ended (Year 1) |
| Restatement History | Revision restatements of the financial statements for errors | X | X | X |
| | Reissuance restatements of the financial statements for errors | X | X | X |
| | Reissuance restatements of management's report on ICFR | X | X | X |
| | Total *issuer* engagements | X | X | X |
| | Total *issuer* engagements with audits of ICFR | X | X | X |

b. Optional narrative.

## PART V – CERTIFICATION OF THE FIRM

Item 5.1 Signature of Partner or Authorized Officer

This Form must be signed on behalf of the Firm by an authorized partner or officer of the Firm including, in accordance with Rule 2204, both a signature that appears in typed form within the

electronic submission and a corresponding manual signature retained by the Firm. The signer must certify that –

a. the signer is authorized to sign this Form on behalf of the Firm*;*

b. the signer has reviewed this Form;

c. based on the signer's knowledge, this Form does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading; and

d. based on the signer's knowledge, the Firm has not failed to include in this Form any information or affirmation that is required by the instructions to this Form.

The signature must be accompanied by the signer's title, the capacity in which the signer signed the Form, the date of signature, and the signer's business mailing address, business telephone number, and business email address.

## PART VI – AMENDMENTS

Item 6.1 Amendments

If this is an amendment to a report previously filed with the *Board* –

a. Indicate, by checking the box corresponding to this item, that this is an amendment.

b. Identify the specific Item numbers of this Form (other than this Item 6.1) as to which the Firm's response has changed from that provided in the most recent Form FM or amended Form FM filed by the Firm with respect to the reporting period.

## Appendix A

| Industry Classification | |
|---|---|
| **1** | **Agriculture and Forestry** |
| 1.1 | Agriculture and Forestry |
| **2** | **Automotive** |
| 2.1 | Automotive: Manufacturing |
| 2.2 | Automotive: Retail |
| **3** | **Basic Resources** |
| 3.1 | Basic Resources: Chemicals |
| 3.2 | Basic Resources: Industrial Materials |
| 3.3 | Basic Resources: Industrial Metals and Mining |
| **4** | **Construction and Materials** |
| 4.1 | Construction and Materials |
| **5** | **Consumer Products and Services** |
| 5.1 | Consumer Products and Services |
| **6** | **Energy** |
| 6.1 | Energy: Alternative Energy |
| 6.2 | Energy: Oil, Gas, and Coal |
| 6.3 | Energy: Other Energy and Transportation |
| **7** | **Finance** |
| 7.1 | Finance: Banks (Excluding Investment Banking and Brokerage Services) |
| 7.2 | Finance: Investment Banking and Brokerage Services |
| 7.3 | Finance: Finance and Credit Services |
| 7.4 | Finance: Insurance |
| 7.5 | Finance: Real Estate |
| 7.6 | Finance: Other |
| **8** | **Government and Public Services** |
| 8.1 | Government and Public Services: Government |
| 8.2 | Government and Public Services: Public Services |
| **9** | **Health Care** |
| 9.1 | Health Care: Health Care Providers |
| 9.2 | Health Care: Pharmaceuticals and Biotechnology |
| 9.3 | Health Care: Medical Equipment and Services |
| 9.4 | Health Care: Other |
| **10** | **Industrial Goods and Services** |
| 10.1 | Industrial Goods and Services: Aerospace and Defense |
| 10.2 | Industrial Goods and Services: General |

| | |
|---|---|
| **11** | **Technology, Media, and Telecommunication** |
| 11.1 | Technology, Media, and Telecommunication: Media |
| 11.2 | Technology, Media, and Telecommunication: Technology Hardware and Equipment |
| 11.3 | Technology, Media, and Telecommunication: Telecommunication |
| 11.4 | Technology, Media, and Telecommunication: Other |
| **12** | **Trades and Services** |
| 12.1 | Trades and Services: Travel and Leisure |
| 12.2 | Trades and Services: Retail |
| 12.3 | Trades and Services: Wholesale |
| 12.4 | Trades and Services: Other |
| **13** | **Utilities** |
| 13.1 | Utilities: Electricity |
| 13.2 | Utilities: Gas, Water, and Multi-utilities |
| 13.3 | Utilities: Waste and Disposal Services |
| **14** | **Other Industry [specify]** |
| 14.1 | Other |

## CONFORMING AMENDMENTS

Language that is deleted by the amendments is ~~struck though~~. Language that is added by the amendments is underlined.

### Rule 2205. Amendments

Amendments to a filed report on Form 2, Form 3, Form QC, ~~or~~ Form QCPP, or Form FM shall be made by filing an amended report on the applicable form in accordance with the instructions to that form concerning amendments. Amendments shall not be filed to update information in a report that was correct at the time the report was filed, but only to correct information that was incorrect at the time the report was filed or to provide information that was omitted from the report and was required to be provided at the time the report was filed.

### Rule 2206. Date of Filing

(a) An annual report shall be deemed to be filed on the date on which the registered public accounting firm submits a Form 2 in accordance with Rule 2200 that includes the signed certification required in Part X of Form 2.

(b) A special report on Form 3 shall be deemed to be filed on the date that the registered public accounting firm submits a Form 3 in accordance with Rule 2203 that includes the signed certification required in Part X of Form 3.

(c) A report on the evaluation of the firm's system of quality control on Form QC shall be deemed to be filed on the date that the registered public accounting firm submits a Form QC in accordance with Rule 2203A that includes the signed certifications required in Parts III and V of Form QC.

(d) A report on Form QCPP shall be deemed to be filed on the date on which the registered public accounting firm submits a Form QCPP in accordance with Rule 2203B that includes the signed certification required in Part IV of Form QCPP.

(e) A report on Form FM shall be deemed to be filed on the date that the registered public accounting firm submits a Form FM in accordance with Rule 2203C that includes the signed certification required in Part V of Form FM.

# APPENDIX 2 – AMENDMENTS TO ENGAGEMENT-LEVEL REPORTING RULE, FORM AP, AND CONFORMING AMENDMENT

Language that is deleted by the amendments is ~~struck though~~. Language that is added by the amendments is underlined.

## Rule 3211. ~~Auditor Reporting of Certain~~ Audit Participants and Metrics

* * *

(d) Form AP shall be deemed to be filed on the date that the registered public accounting firm submits a Form AP in accordance with this rule that includes the certification in Part VII of Form AP.

* * *

Language that is deleted by the amendments is ~~struck though~~. Language that is added by the amendments is underlined. Terms defined in General Instruction 8 may appear in **boldface** in this Form.

## Form AP - ~~Auditor Reporting of Certain~~ Audit Participants and Metrics

### GENERAL INSTRUCTIONS

1. Submission of this Report. ~~Effective January 31, 2017, a~~A *registered public accounting firm* must use this Form to file with the *Board* reports required by Rule 3211 and to file any amendments to such reports. Unless otherwise directed by the *Board*, the *registered public accounting firm* must file this Form electronically with the *Board* through the *Board's* Web-based system.

2. Defined Terms. The definitions in the *Board's rules* apply to this Form. Italicized terms in the instructions to this Form are defined in the *Board's rules*. In addition, as used in the instructions to this Form, the term "the Firm" means the *registered public accounting firm* that is filing this Form with the *Board*. Additional defined terms used in Parts III, IV, V, and VI of this Form are included below at General Instruction 8.~~;and the term, "other accounting firm" means (i) a *registered public accounting firm* other than the Firm; or (ii) any other *person* or entity that opines on the compliance of any entity's financial statements with an applicable financial reporting framework~~.

3. When this Report is Considered Filed. A report on Form AP is considered filed on the date the Firm submits to the *Board* a Form AP in accordance with Rule 3211 that includes the certification required by Part VII of Form AP.

* * *

4. Amendments to this Report. Amendments to Form AP are required to correct information that was incorrect at the time the Form was filed or to provide information that was omitted from the Form and was required or permitted to be provided at the time the Form was filed. When filing a Form AP to amend an earlier filed Form AP, the Firm must supply not only the corrected or supplemental information, but it must include in the amended Form AP all information and certifications that were required to be included in the original Form AP. The Firm may access the originally filed Form AP through the *Board's* Web-based system and make the appropriate amendments without needing to re-enter all other information.

* * *

8. Terminology. The terms below may appear in **boldface** in this Form.

   a. Core engagement team:

      1. The engagement partner and

      2. Members of the engagement team who are:

         a. Partners or employees of the registered public accounting firm issuing the audit report (or individuals who work under that firm's direction and control and function as the firm's employees); and

         b. Either of the following:

            i. A partner (excluding the engagement partner) who reported ten or more hours on the engagement; or

            ii. Managers and staff who reported 40 or more hours on the engagement or, if less, 2% or more of the *total audit hours.*

   b. Engagement partner: (as defined in paragraph .A1 of AS 1201, *Supervision of the Audit Engagement*): The member of the engagement team with primary responsibility for the audit.

c. Engagement quality reviewer: (as described in AS 1220, *Engagement Quality Review*) An associated person of a registered public accounting firm who performs an engagement quality review and provides concurring approval of issuance.

d. Engagement team: (as defined in paragraph .A3 of AS 2101, *Audit Planning*):

a. Engagement team includes:

(i) Partners, principals, and shareholders of, and accountants[1] and other professional staff employed or engaged by, the lead auditor or other accounting firms who perform audit procedures on an audit or assist the engagement partner in fulfilling his or her planning or supervisory responsibilities on the audit pursuant to this standard or AS 1201, *Supervision of the Audit Engagemen*t; and

(ii) Specialists who, in connection with the audit, (i) are employed by the lead auditor or an other auditor participating in the audit and (ii) assist that auditor in obtaining or evaluating audit evidence with respect to a relevant assertion of a significant account or disclosure.

b. Engagement team does not include:

(i) The engagement quality reviewer and those assisting the reviewer (to which AS 1220, *Engagement Quality Review*, applies);

(ii) Partners, principals, and shareholders of, and other individuals employed or engaged by, another accounting firm in situations in which the lead auditor divides responsibility for the audit with the other firm under AS 1206, *Dividing Responsibility for the Audit with Another Accounting Firm*; or

(iii) Engaged specialists.[2]

[1] *See* paragraph (a)(ii) of PCAOB Rule 1001, *Definitions of Terms Employed in Rules*, which defines the term "accountant."

[2] AS 1210, *Using the Work of an Auditor-Engaged Specialist*, establishes requirements that apply to the use of specialists engaged by the auditor's firm. Appendix A of AS 1105, *Audit Evidence*, sets forth the auditor's responsibilities for using the work of a specialist employed or engaged by the company.

e. Managers: Accountants or other professional staff commonly referred to as managers or senior managers (or persons in an equivalent position) who participate in audits.

f. Other accounting firm: (i) a *registered public accounting firm* other than the Firm; or (ii) any other *person* or entity that opines on the compliance of any entity's financial statements with an applicable financial reporting framework.

g. Partners: Partners or persons in an equivalent position (e.g., shareholders, members, or other principals) who participate in audits.

h. Staff: Accountants or other professional staff who participate in audits and are not partners or managers.

i. Total audit hours: Comprised of hours attributable to: (1) the financial statement *audit*; (2) reviews pursuant to AS 4105, *Reviews of Interim Financial Information*; and (3) the *audit* of internal control over financial reporting pursuant to AS 2201, *An Audit of Internal Control Over Financial Reporting That Is Integrated with An Audit of Financial Statements*; and excluding hours incurred by: (1) the engagement quality reviewer; (2) specialists engaged, not employed, by the Firm; (3) accounting firms in performing the audit of entities in which the *issuer* has an investment that is accounted for using the equity method; (4) internal auditors, other company personnel, or third parties working under the direction of management or the audit committee who provided direct assistance in the *audit* of internal control over financial reporting; and (5) internal auditors who provided direct assistance in the *audit* of the financial statements. Hours incurred in the *audit* by entities other than *other accounting firms* are included in the calculation of total *audit* hours and should be allocated among the Firm and the *other accounting firms* participating in the *audit* on the basis of which accounting firm commissioned and directed the applicable work.

9. Estimates and Rounding. Actual amounts (e.g., audit hours) should be used if available. If actual amounts are unavailable, the Firm may use a reasonable method to estimate the components of a calculation. Amounts should be rounded to the nearest whole number, except where additional decimal places (no more than two) are needed to properly interpret the result or to enable comparison to prior periods.

10. Documentation. The Firm should document in its files the method used to estimate amounts when actual amounts are unavailable and the computation of amounts on a basis consistent with AS 1215, *Audit Documentation*. Under AS 1215, the documentation should be in sufficient detail to enable an experienced auditor, having no previous connection with the engagement, to understand the computations of amounts and the method(s) used to estimate amounts when actual amounts were unavailable.

* * *

## PART I – IDENTITY OF THE FIRM

In Part I, the Firm should provide information that is current as of the date of the certification in Part VII.

* * *

## PART III – *AUDIT* CLIENT AND *AUDIT REPORT*

Item 3.1 *Audit Report*

a. Provide the following information concerning the *issuer* for which the Firm issued the *audit report* –

1. Indicate, by checking the box corresponding to this item, whether the *audit* client is an *issuer* other than an employee benefit plan or investment company; an employee benefit plan; or an investment company;

a. Indicate by checking the box corresponding to this item, if the *audit* client identified itself as an "accelerated filer" or "large accelerated filer" by checking the box on its most recent annual report filed with the *Commission*.

* * *

## PART IV – RESPONSIBILITY FOR THE *AUDIT* IS NOT DIVIDED

~~In responding to Part IV, total *audit* hours in the most recent period's *audit* should be comprised of hours attributable to: (1) the financial statement *audit*; (2) reviews pursuant to AS 4105, *Reviews of Interim Financial Information*; and (3) the *audit* of internal control over financial reporting pursuant to AS 2201, *An Audit of Internal Control Over Financial Reporting That Is Integrated with An Audit of Financial Statements*. Excluded from disclosure and from total *audit* hours in the most recent period's *audit* are, respectively, the identity and hours incurred by: (1) the engagement quality reviewer; (2) the person who performed the review pursuant to SEC Practice Section 1000.45 Appendix K; (3) specialists engaged, not employed, by the Firm; (4) an accounting firm performing the audit of entities in which the issuer has an investment that is accounted for using the equity method; (5) internal auditors, other company personnel, or third parties working under the direction of management or the audit committee who provided direct assistance in the *audit* of internal control over financial reporting; and (6) internal auditors who provided direct assistance in the *audit* of the financial statements. Hours incurred in the *audit* by entities other than *other accounting firms* are included in the calculation of total *audit* hours and should be allocated among the Firm and the *other accounting firms* participating in the *audit* on the basis of which accounting firm commissioned and directed the applicable work.~~

~~Actual audit hours should be used if available. If actual audit hours are unavailable, the Firm may use a reasonable method to estimate the components of this calculation. The Firm should document in its files the method used to estimate hours when actual audit hours are unavailable and the computation of total audit hours on a basis consistent with AS 1215, *Audit Documentation*. Under AS 1215, the documentation should be in sufficient detail to enable an experienced auditor, having no previous connection with the engagement, to understand the computation of total audit hours and the method used to estimate hours when actual hours were unavailable.~~

* * *

## PART VI – REPORTING OF ENGAGEMENT METRICS

Part VI must be completed for each *audit* in which the *audit* client identified itself as an "accelerated filer" or "large accelerated filer" by checking the box on its most recent annual report filed with the *Commission*. This section may, but is not required to be completed, for other *audits*.

Note: When the Firm elects to provide a brief narrative to accompany any of the Items in this Part, language should be concise and focused on the reported metrics, with a view to facilitating the reader's understanding of the metrics.

Item 6.1 Partner and Manager Involvement

Total audit hours for partners and managers on the engagement team as a percentage of total audit hours.

a. Provide the calculated metric for this item.

$$\frac{\textbf{Total audit hours} \text{ incurred by } \textbf{partners} \text{ and } \textbf{managers} \text{ on the } \textbf{engagement team}}{\textbf{Total audit hours} \text{ for the engagement}}$$

| | | |
|---|---|---|
| Partner and Manager Involvement | Percentage of total audit hours for partners and managers | XX% |

b. Optional narrative.

Item 6.2 Workload

Average weekly hours worked by (i) the engagement partner and (ii) partners (excluding the engagement partner) and managers on the core engagement team, calculated for each of the preceding three fiscal quarters up to the *issuer's* fiscal year end and the portion of the final fiscal quarter of the engagement through the issuance of the audit report.

Note: Hours worked are the sum of hours that are incurred on *issuer* and non-*issuer* engagements and include hours spent on training, practice development, personnel development, or other firm activities. Hours worked exclude hours that are not considered working hours (e.g., paid time off and holiday time).

a. Provide the calculated metric for these items.

i. Average weekly hours worked by the engagement partner:

$$\frac{\text{Number of hours worked by the } \textbf{engagement partner} \text{ in the fiscal quarter}}{\text{Number of weeks in the fiscal quarter}}$$

ii. Average weekly hours worked by partners (excluding the engagement partner) and managers on the core engagement team:

$$\frac{\text{Average number of hours worked by } \textbf{partners} \text{ (excluding the } \textbf{engagement partner}\text{) and } \textbf{managers} \text{ who are on the } \textbf{core engagement team} \text{ in the fiscal quarter}}{\text{Number of weeks in the fiscal quarter}}$$

| | Average Weekly Hours Worked During the Engagement | | |
|---|---|---|---|
| | Period ended | (i) Engagement Partner | (ii) Partners (excluding the engagement partner) and Managers |
| Workload | Quarter end 1, YYYY | XX | XX |
| | Quarter end 2, YYYY | XX | XX |
| | Quarter end 3, YYYY | XX | XX |

| | | | |
|---|---|---|---|
| | Audit Report date YYYY | XX | XX |

b. Optional narrative.

Item 6.3 Training Hours for Audit Personnel

Average annual professional development training hours for partners, managers, and staff on the core engagement team, combined.

Note: Training metrics should be calculated for the same 12-month period, either ended September 30, or based on the Firm's training calendar.

a. Provide the calculated metric for this item.

$$\frac{\text{Total professional development training hours completed by } \textbf{partners}, \textbf{managers}, \text{ and } \textbf{staff} \text{ on the } \textbf{core engagement team}}{\text{Total number of } \textbf{partners, managers,} \text{ and } \textbf{staff} \text{ on the } \textbf{core engagement team}}$$

| | |
|---|---|
| Average annual professional development training hours | XX |

b. Optional narrative.

Item 6.4 Experience of Audit Personnel

Experience of Audit Personnel of the following individuals and groups:

(i) Total experience at a public accounting firm of the engagement partner,

(ii) Total experience at a public accounting firm of the engagement quality reviewer,

(iii) Average experience at a public accounting firm of the core engagement team who are partners (excluding the engagement partner), and

(iv) Average experience at a public accounting firm of the core engagement team who are managers.

Note: Experience at a public accounting firm is the total number of years worked as an accountant for a public accounting firm (whether or not PCAOB-registered).

a. Provide the number for items (i) and (ii) and the calculated metric for items (iii) and (iv)

(i) Total experience at a public accounting firm of the **engagement partner**

(ii) Total experience at a public accounting firm of the **engagement quality reviewer**

(iii) Average experience at a public accounting firm of the core engagement team who are partners (excluding the engagement partner):

$$\frac{\text{Total experience at a public accounting firm of the } \textbf{core engagement team} \text{ who are } \textbf{partners} \text{ (excluding the } \textbf{engagement partner}\text{)}}{\text{Total number of people on the } \textbf{core engagement team} \text{ who are } \textbf{partners} \text{ (excluding the } \textbf{engagement partner}\text{)}}$$

(iv) Average experience at a public accounting firm of the core engagement team who are managers:

$$\frac{\text{Total experience at a public accounting firm of the } \textbf{core engagement team} \text{ who are } \textbf{managers}}{\text{Total number of people on the } \textbf{core engagement team} \text{ who are } \textbf{managers}}$$

| Experience of Audit Personnel | (i) Years of experience at a public accounting firm for the Engagement Partner | (ii) Years of experience at a public accounting firm for the Engagement Quality Reviewer | (iii) Average years of experience for Partners (excluding the engagement partner) on the Core Engagement Team | (iv) Average years of experience for Managers on the Core Engagement Team |
|---|---|---|---|---|
| | XX | XX | XX | XX |

b. Optional narrative.

Item 6.5 Industry Experience

Experience in the *issuer's* primary industry:

(i) Years of career industry experience of the engagement partner.

(ii) Years of career industry experience of the engagement quality reviewer.

(iii) The number of partners (excluding the engagement partner) on the core engagement team with five or more years of career industry experience.

(iv) The number of managers on the core engagement team with three or more years of career industry experience.

Note 1: Industry experience is accumulated throughout an individual's career (i.e., aggregates experience obtained at all career levels). When determining whether an individual has experience in a specific industry the following may be taken into account: (i) industry experience may be, but is not required to be, exclusive to experience on audit engagements, or exclusive to experience gained at an accounting firm, but must be relevant, and (ii) industry experience can be acquired in non-consecutive years. Relevant experience includes experience in accounting or auditing roles and other specializations, such as experience that is related to fair value estimates in the industry. It is expected that a year of industry experience generally represents approximately 250 hours or 25% of hours worked in a year or more.

Note 2: A list of industries available to be used to report this metric can be found at Appendix A to these instructions.

a. Provide the number for items (i), (ii), (iii), and (iv).

(i) Years of career industry experience in the *issuer's* primary industry of the **engagement partner.**

(ii) Years of career industry experience in the *issuer's* primary industry of the **engagement quality reviewer**.

(iii) The number of **partners** (excluding the **engagement partner**) on the **core engagement team** with five or more years of career industry experience in the *issuer's* primary industry**.**

(iv) The number of **managers** on the **core engagement team** with three or more years of career industry experience in the *issuer's* primary industry.

| Select the *issuer's* primary industry from the list provided | [Industry] | | | |
|---|---|---|---|---|
| Industry Experience in the *issuer's* Primary Industry | (i) Engagement Partner years of career industry experience | (ii) Engagement Quality Reviewer years of career industry experience | (iii) Number of partners (excluding the engagement partner) on the core engagement team with five or more years of career industry experience | (iv) Number of managers on the core engagement team with three or more years of career industry experience |
| | XX | XX | XX | XX |

b. Optional narrative.

Item 6.6 Allocation of Audit Hours

Percentage of total audit hours incurred (i) prior to the *issuer's* year end and (ii) following the *issuer's* year end.

Note: Multi-year audits are excluded from these calculations.

a. Provide the calculated metric for these items.

(i) Percentage of total audit hours incurred prior to the *issuer's* year end:

$$\frac{\textbf{Total audit hours} \text{ incurred prior to the } \textit{issuer's} \text{ year end}}{\textbf{Total audit hours}}$$

(ii) Percentage of total audit hours incurred following the *issuer's* year end:

$$\frac{\textbf{Total audit hours} \text{ incurred following the } \textit{issuer's} \text{ year end}}{\textbf{Total audit hours}}$$

| | | |
|---|---|---|
| Allocation of Audit Hours | Percentage of total audit hours incurred prior to the *issuer's* year end | XX% |
| | Percentage of total audit hours incurred following the *issuer's* year end | XX% |

b. Optional narrative.

## PART VII – CERTIFICATION OF THE FIRM

Item ~~6~~7.1 Signature of Partner or Authorized Officer

* * *

## Appendix A

| Industry Classification | |
|---|---|
| **1** | **Agriculture and Forestry** |
| 1.1 | Agriculture and Forestry |
| **2** | **Automotive** |
| 2.1 | Automotive: Manufacturing |
| 2.2 | Automotive: Retail |
| **3** | **Basic Resources** |
| 3.1 | Basic Resources: Chemicals |
| 3.2 | Basic Resources: Industrial Materials |
| 3.3 | Basic Resources: Industrial Metals and Mining |
| **4** | **Construction and Materials** |
| 4.1 | Construction and Materials |
| **5** | **Consumer Products and Services** |
| 5.1 | Consumer Products and Services |
| **6** | **Energy** |
| 6.1 | Energy: Alternative Energy |
| 6.2 | Energy: Oil, Gas, and Coal |
| 6.3 | Energy: Other Energy and Transportation |
| **7** | **Finance** |
| 7.1 | Finance: Banks (Excluding Investment Banking and Brokerage Services) |
| 7.2 | Finance: Investment Banking and Brokerage Services |
| 7.3 | Finance: Finance and Credit Services |
| 7.4 | Finance: Insurance |
| 7.5 | Finance: Real Estate |
| 7.6 | Finance: Other |
| **8** | **Government and Public Services** |
| 8.1 | Government and Public Services: Government |
| 8.2 | Government and Public Services: Public Services |
| **9** | **Health Care** |
| 9.1 | Health Care: Health Care Providers |
| 9.2 | Health Care: Pharmaceuticals and Biotechnology |
| 9.3 | Health Care: Medical Equipment and Services |
| 9.4 | Health Care: Other |
| **10** | **Industrial Goods and Services** |
| 10.1 | Industrial Goods and Services: Aerospace and Defense |

| | |
|---|---|
| 10.2 | Industrial Goods and Services: General |
| **11** | **Technology, Media, and Telecommunication** |
| 11.1 | Technology, Media, and Telecommunication: Media |
| 11.2 | Technology, Media, and Telecommunication: Technology Hardware and Equipment |
| 11.3 | Technology, Media, and Telecommunication: Telecommunication |
| 11.4 | Technology, Media, and Telecommunication: Other |
| **12** | **Trades and Services** |
| 12.1 | Trades and Services: Travel and Leisure |
| 12.2 | Trades and Services: Retail |
| 12.3 | Trades and Services: Wholesale |
| 12.4 | Trades and Services: Other |
| **13** | **Utilities** |
| 13.1 | Utilities: Electricity |
| 13.2 | Utilities: Gas, Water, and Multi-utilities |
| 13.3 | Utilities: Waste and Disposal Services |
| **14** | **Other Industry [specify]** |
| 14.1 | Other |

## CONFORMING AMENDMENT

### AS 3101, *The Auditor's Report on an Audit of Financial Statements When the Auditor Expresses an Unqualified Opinion*

* * *

.20 The auditor may include in the auditor's report information regarding the engagement partner and/or other accounting firms participating in the audit that is required to be reported on PCAOB Form AP, ~~*Auditor Reporting of Certain*~~ *Audit Participants and Metrics*.[38] If the auditor decides to provide information about the engagement partner, other accounting firms participating in the audit, or both, the auditor must disclose the following:

* * *

[38] If the auditor decides to include information regarding certain audit participants in the auditor's report, the auditor should use an appropriate section title.

* * *

# APPENDIX 3 – ILLUSTRATIVE EXAMPLES OF METRIC CALCULATIONS

The examples below are based on hypothetical situations and have been prepared for illustrative purposes only, to show how metrics would be calculated based on the facts presented. They are not intended to provide guidance or suggestions regarding what the numerical values of the metrics themselves, or of the inputs on which they are based, are likely to be or should be. They are qualified in their entirety by reference to Rule 2203C, *Firm Metrics,* Rule 3211*, Audit Participants and Metrics,* Form FM, *Firm Metrics*, and Form AP*, Audit Participants and Metrics*.

## I. Partner and Manager Involvement

***Example firm-level calculation:***

Total audit hours of the firm's accelerated filer and large accelerated filer engagements

| Accelerated filer and large accelerated filer engagements | Total Audit Hours | Total Audit Hours incurred by partners and managers on the engagement team |
|---|---|---|
| Company X | 3,900 | 1,400 |
| Company Y | 2,500 | 625 |
| Company Z | 1,500 | 300 |
| **Total** | **7,900** | **2,325** |

$$\frac{\text{*Total audit hours* incurred by *partners* and *managers* on the *engagement team* for all accelerated filer and large accelerated filer engagements}}{\text{*Total audit hours* for all accelerated filer and large accelerated filer engagements}}$$

Calculation: 2,325/7,900 = **29%**

***Example firm-level reporting for Form FM:***

| | | |
|---|---|---|
| **Partner and Manager Involvement** | Percentage of total audit hours for partners and managers for all accelerated filer and large accelerated filer engagements | **29%** |

***Example engagement-level calculation:***

Details for total audit hours of the accelerated filer or large accelerated filer engagement

- Lead auditor issues the audit report for Company X.
- Total audit hours for the engagement: **3,900**

Details for partners and managers

| Company X | Total audit hours incurred by partners and managers on the engagement team |
|---|---|
| Engagement Partner | 300 |
| U.S. (partners other than the engagement partner and managers) | 700 |
| France (partners and managers) | 150 |
| Germany (managers) | 125 |
| Italy (managers) | 60 |
| China (managers) | 15 |
| India shared service center (managers) | 50 |
| **Total** | **1,400** |

$$\frac{\textit{Total audit hours} \text{ incurred by } \textit{partners} \text{ and } \textit{managers} \text{ on the } \textit{engagement team}}{\textit{Total audit hours} \text{ for the engagement}}$$

Calculation: 1,400/3,900 = **36%**

***Example engagement-level reporting for Form AP:***

| **Partner and Manager Involvement** | Percentage of total audit hours for partners and managers | **36%** |
|---|---|---|

## II. Workload

***Example firm-level calculations**:*

Details for hours worked[1] by the firm's partners who worked on accelerated filer and large accelerated filer engagements

| Quarter | Total hours worked for the quarter | Number of partners who incurred hours on accelerated filer and large accelerated filer engagements | Average number of hours worked in the quarter | Weeks in the quarter | Average weekly workload |
|---|---|---|---|---|---|
| Sep 30, 2024 | 5,400 | 10 | 540 | 13 | 42 |
| Jun 30, 2024 | 5,300 | 10 | 530 | 13 | 41 |
| Mar 31, 2024 | 6,700 | 10 | 670 | 13 | 52 |
| Dec 31, 2023 | 5,750 | 10 | 575 | 13 | 44 |

$$\frac{\text{Average number of hours worked by } \textit{partners} \text{ who incurred hours on accelerated filer and large accelerated filer engagements in the calendar quarter}}{\text{Number of weeks in the calendar quarter}}$$

Calculation (September 30, 2024): 540/13 = **42**

Details for hours worked by the firm's managers who worked on accelerated filer and large accelerated filer engagements

[1] As noted in Form FM and Form AP, hours worked are the sum of hours that are incurred on issuer and non-issuer engagements and include hours spent on training, practice development, personnel development, or other firm activities. Hours worked exclude hours that are not considered working hours (e.g., paid time off and holiday time).

| Quarter | Total hours worked for the quarter | Number of managers who incurred hours on accelerated filer and large accelerated filer engagements | Average number of hours worked in the quarter | Weeks in the quarter | Average weekly workload |
|---|---|---|---|---|---|
| Sep 30, 2024 | 14,000 | 25 | 560 | 13 | 43 |
| Jun 30, 2024 | 13,750 | 25 | 550 | 13 | 42 |
| Mar 31, 2024 | 18,000 | 25 | 720 | 13 | 55 |
| Dec 31, 2023 | 14,750 | 25 | 590 | 13 | 45 |

$$\frac{\text{Average number of hours worked by } \textit{managers} \text{ who incurred hours on accelerated filer and large accelerated filer engagements in the calendar quarter}}{\text{Number of weeks in the calendar quarter}}$$

Calculation (September 30, 2024): 560/13 = **43**

***Example firm-level reporting for Form FM:***

| | | Average weekly hours worked | |
|---|---|---|---|
| | Quarter ended | Partners | Managers |
| **Workload** | Sep 30, 2024 | 42 | 43 |
| | Jun 30, 2024 | 41 | 42 |
| | Mar 31, 2024 | 52 | 55 |
| | Dec 31, 2023 | 44 | 45 |

***Example engagement-level calculations:***

Company A has a fiscal year end of December 31. The audit report was issued on March 1, 2024 and the firm filed Form AP on March 15, 2024.

Details for hours worked by the engagement partner

| Quarter | Number of hours worked in the quarter | Number of weeks in the quarter | Average weekly workload |
|---|---|---|---|
| Jun 30, 2023 | 546 | 13 | 42 |
| Sep 30, 2023 | 559 | 13 | 43 |
| Dec 31, 2023 | 585 | 13 | 45 |
| Mar 1, 2024[2] | 468 | 8.6 | 54 |

$$\frac{\text{Number of hours worked by the } \textit{engagement partner} \text{ in the fiscal quarter}}{\text{Number of weeks in the fiscal quarter}}$$

Calculation (September 30, 2023): 559/13 = **43**

Details for hours worked by partners (excluding engagement partner) and managers on the core engagement team

| Quarter | Total hours worked for the quarter | Number of partners (excluding the engagement partner) and managers on the core engagement team | Average number of hours worked in the quarter | Weeks in the quarter | Average weekly workload |
|---|---|---|---|---|---|
| Jun 30, 2023 | 2,260 | 4 | 565 | 13 | 43 |
| Sep 30, 2023 | 2,300 | 4 | 575 | 13 | 44 |
| Dec 31, 2023 | 2,400 | 4 | 600 | 13 | 46 |
| Mar 1, 2024 | 1,975 | 4 | 494 | 8.6 | 57 |

$$\frac{\text{Average number of hours worked by } \textit{partners} \text{ (excluding the } \textit{engagement partner}\text{) and } \textit{managers} \text{ who are on the } \textit{core engagement team} \text{ in the fiscal quarter}}{\text{Number of weeks in the fiscal quarter}}$$

Calculation (September 30, 2023): 575/13 = **44**

***Example engagement-level reporting for Form AP:***

| Workload | | Average weekly hours worked during the engagement | |
|---|---|---|---|
| | Period ended | Engagement Partner | Partners (excluding the engagement partner) and Managers |
| | Jun 30, 2023 | 42 | 43 |
| | Sep 30, 2023 | 43 | 44 |
| | Dec 31, 2023 | 45 | 46 |
| | March 1, 2024 | 54 | 57 |

[2] The number of weeks for the quarter ended March 1, 2024, represents the number of weeks through the issuance of the audit report.

## III. Training Hours for Audit Personnel

***Example firm-level calculation:***

Details for total professional development training hours

The firm tracks its annual partner and staff training based on the calendar year.[3] The firm has a combined headcount of partners, managers, and staff of 1,400. Total professional development training hours recorded from January 1, 2024, through December 31, 2024, were 68,600. The hours were distributed as follows:

| | Total Professional Development Training Hours | Total Audit Personnel |
|---|---|---|
| Partners | 4,100 | 100 |
| Managers | 17,200 | 400 |
| Staff | 47,300 | 900 |
| **Total** | **68,600** | **1,400** |

$$\frac{\text{Total professional development training hours incurred by } \textit{partners}, \textit{managers} \text{ and } \textit{staff} \text{ of the firm}}{\text{Total number of } \textit{partners}, \textit{managers}, \text{ and } \textit{staff} \text{ of the firm}}$$

Calculation: 68,600/1,400 = **49**

***Example reporting for Form FM:***

| | | |
|---|---|---|
| **Training Hours for Audit Personnel** | Average annual professional development training hours | **49** |

***Example engagement-level calculation:***

Details for total professional development training hours

The firm tracks its annual partner and staff training based on the calendar year. The core engagement team has a combined headcount of partners, managers, and staff of 12. Total

[3] As noted in Form FM and Form AP, training metrics should be calculated for the same 12-month period, either ended September 30, or based on the firm's training calendar.

professional development training hours for all members of the core engagement team recorded from January 1, 2024, through December 31, 2024, were 564. The hours were distributed as follows:

| | Total Professional Development Training Hours | Total Audit Personnel |
|---|---|---|
| Partners | 96 | 2 |
| Managers | 168 | 3 |
| Staff | 300 | 7 |
| **Total** | **564** | **12** |

$$\frac{\text{Total professional development training hours incurred by } \textit{partners}, \textit{managers} \text{ and } \textit{staff} \text{ on the } \textit{core engagement team}}{\text{Total number of } \textit{partners}, \textit{managers}, \text{ and } \textit{staff} \text{ on the } \textit{core engagement team}}$$

Calculation: 564/12 = **47**

***Example reporting for Form AP:***

| | | |
|---|---|---|
| **Training Hours for Audit Personnel** | Average annual professional development training hours | **47** |

## IV. Experience of Audit Personnel

***Example firm-level calculations:***

- The Firm has 100 partners and 500 managers.

| | Number | Years of experience |
|---|---|---|
| Partners | 100 | 2,000 |
| Managers | 500 | 4,000 |

(i) Average experience at a public accounting firm of the firm's partners:

$$\frac{\text{Total experience at a public accounting firm of all } \textit{partners}}{\text{Total number of } \textit{partners}}$$

Calculation: 2,000/100 = **20**

(ii) Average experience at a public accounting firm of the firm's managers:

$$\frac{\text{Total experience at a public accounting firm of } \textit{managers}}{\text{Total number of } \textit{managers}}$$

Calculation: 4,000/500 = **8**

***Example firm-level reporting for Form FM:***

| | | Partners | Managers |
|---|---|---|---|
| **Experience of Audit Personnel** | Average years of experience at a public accounting firm | **20** | **8** |

***Example engagement-level calculations:***

| | Number | Total experience at a public accounting firm |
|---|---|---|

| | | |
|---|---|---|
| Engagement Partner | 1 | 23 |
| Engagement Quality Reviewer | 1 | 19 |
| Core engagement team partners (excluding the engagement partner) | 3 | 45 |
| Core engagement team managers | 8 | 80 |

(i) Total experience at a public accounting firm of the engagement partner:

Total experience at a public accounting firm of the *engagement partner*

Calculation: **23**

(ii) Total experience at a public accounting firm of the engagement quality reviewer:

Total experience at a public accounting firm of the *engagement quality reviewer*

Calculation: **19**

(iii) Average experience at a public accounting firm of the core engagement team members who are partners (excluding the engagement partner):

$$\frac{\text{Total experience at a public accounting firm of the } \textit{core engagement team} \text{ members who are } \textit{partners} \text{ (excluding the } \textit{engagement partner}\text{)}}{\text{Total number of people on the } \textit{core engagement team} \text{ who are } \textit{partners} \text{ (excluding the } \textit{engagement partner}\text{)}}$$

Calculation: 45/3 = **15**

(iv) Average experience at a public accounting firm of the core engagement team members who are managers:

$$\frac{\text{Total experience at a public accounting firm of the } \textit{core engagement team} \text{ members who are } \textit{managers}}{\text{Total number of people on the } \textit{core engagement team} \text{ who are } \textit{managers}}$$

Calculation: 80/8 = **10**

***Example engagement-level reporting for Form AP:***

| | | | | |
|---|---|---|---|---|
| **Experience of Audit Personnel** | Years of experience at a public accounting firm of the Engagement Partner | Years of experience at a public accounting firm of the Engagement Quality Reviewer | Average years of experience of Partners (excluding the engagement partner) on the Core Engagement Team | Average years of experience of Managers on the Core Engagement Team |
| | **23** | **19** | **15** | **10** |

## V. Industry Experience

***Example firm-level calculation:***

The top five industries based on revenue from audit services for the most recently completed fiscal year are the following:

- Consumer products and services,
- Banks,
- Health care providers,
- Industrial goods and services, and
- Government services

The firm took into account a number of factors in determining career industry experience, such as the extent to which non-audit experience and experience in auditing companies in adjacent industries could reasonably be considered as industry experience. The firm determined there were several partners and managers that had career industry experience of five or more years for partners and three or more years for managers in its top five industries.

| Industry | % of firm revenue from audit services | Number of partners with 5 or more years of career industry experience | Number of managers with 3 or more years of career industry experience |
|---|---|---|---|
| Consumer products and services | 18% | 15 | 45 |
| Banks | 11% | 10 | 30 |
| Health care providers | 9% | 12 | 43 |
| Industrial goods and services | 8% | 5 | 13 |
| Government services | 4% | 4 | 6 |

Note: While not required, a firm may choose to report on additional industries that are not among its top five by revenue from audit services.

***Example firm-level reporting for Form FM:***

| **Industry Experience** | Top five industries based on the firm's revenue from audit services | Number of Partners with 5 or more years of | Number of Managers with 3 or more years of |
|---|---|---|---|

| | | career industry experience | career industry experience |
|---|---|---|---|
| | Consumer Products and Services | 15 | 45 |
| | Finance: Banks | 10 | 30 |
| | Health Care: Health Care Providers | 12 | 43 |
| | Industrial Goods and Services: General | 5 | 13 |
| | Government and Public Services: Government | 4 | 6 |

***Example engagement-level calculation:***

The company's primary industry is Banks

The engagement partner and the EQR have 16 and 24 years, respectively, of career industry experience. The core engagement team also has several other partners and managers who work on different aspects of the audit throughout the year, including those who have focused on other industries and have not yet met the five- and three-year requirements. The following table depicts their career industry experience:

| | Bank career industry experience |
|---|---|
| Engagement partner | 16 years |
| Engagement quality reviewer | 24 years |
| IT partner | Does not meet criteria for five years |
| Tax partner | Meets criteria for 5 years |
| Actuarial partner | Does not meet criteria for five years |
| Other assisting partner | Meets criteria for five years |
| Audit lead senior manager | Meets criteria for three years |
| Manager 2 | Meets criteria for three years |
| Manager 3 | Meets criteria for three years |
| Manager 4 | Does not meet criteria for three years |
| Manager 5 | Does not meet criteria for three years |
| Tax senior manager | Meets criteria for three years |
| IT manager | Does not meet criteria for three years |

***Example engagement-level reporting for Form AP:***

| | | | |
|---|---|---|---|
| **Industry Experience** | Issuer's Primary Industry | Financial Services: Banks | |
| | Years of Career Industry Experience | Engagement Partner | Engagement Quality Reviewer |
| | | 16 | 24 |
| | Number of core engagement team members with industry experience | Partners (excluding the engagement partner) | Managers |
| | | 2 | 4 |

## VI. Retention of Audit Personnel

***Example calculations (only manager calculations provided):***

Firm A had 204 managers, 204 managers, and 200 managers as of September 30, 2023, October 1, 2023 and September 30, 2024, respectively. During the 12-month period, 38 managers left the firm, 2 managers did not participate in audits, 5 managers were promoted to partner, 37 staff were promoted to manager, and 4 managers were newly hired or served on audits and did not in the prior year.

- *Average number of managers* – The total number of managers as of October 1, 2023 was 204 and the total number of managers as of September 30, 2024 was 200.

$$\frac{\text{The number of [}\textit{partners}/\textit{managers}\text{] as of October 1 (Year 1) + the number of [}\textit{partners}/\textit{managers}\text{] as of September 30 (Year 2)}}{2}$$

  Calculation: (204+200) / 2 = **202**

- *Average annual retention rate*
  Calculation of the numerator – Calculate the total number of managers who were continuously employed and held the same position from October 1, 2023 to September 30, 2024

| **Calculation of the numerator** | |
|---|---|
| Managers as of October 1, 2023 | 204 |
| *Adjust for managers who were not continuously employed and holding the same position throughout the period* | |
| Left the firm | (38) |
| Did not participate in audits | (2) |
| Promoted to partner | (5) |
| Staff promoted to manager[4] | 37 |
| | **196** |

[4] As noted in Form FM, promotion is treated as if it had occurred at the beginning of the period for the calculation of retention of audit personnel metric.

Because the 4 managers who were newly hired or transferred into the audit practice were not included in the beginning number of 204, no specific adjustment to the numerator relating to these 4 is necessary.[5]

Calculation of the denominator – Adjust the number of managers as of October 1, 2023 (204 managers) for the promotions as if they had occurred at the beginning of the period (the denominator).

| **Calculation of the denominator** | |
|---|---|
| Managers as of October 1, 2023 | 204 |
| *Adjust for managers who did not continuously hold the same position* | |
| Promoted to partner | (5) |
| Staff promoted to manager | 37 |
| | **236** |

$$\frac{\text{The number of [}\textit{partners}/\textit{managers}\text{] continuously holding the same position from October 1 (Year 1) to September 30 (Year 2)}}{\text{Number of [}\textit{partners}/\textit{managers}\text{] as of October 1 (Year 1)}}$$

Calculation: 196/236 = **83%**

- *Average annual headcount change* --- The total number of current year-end managers was 200 and the total number of prior year managers was 204.

$$\frac{\text{Number of [}\textit{partners}/\textit{managers}\text{] as of September 30 (Year 2) – Number of [}\textit{partners/managers}\text{] as of September 30 (Year 1)}}{\text{Number of [}\textit{partners}/\textit{managers}\text{] as of September 30 (Year 1)}}$$

Calculation: (200-204) / 204 = **-2%**

[5] As noted in Form FM, only partners and managers with one or more years of service and who were employed continuously during the 12-month period are included in the numerator.

***Example firm-level reporting for Form FM:***

| Retention of Audit Personnel | | Partners | Managers |
|---|---|---|---|
| | Average number | **85** | **202** |
| | Average annual retention rate | **96%** | **83%** |
| | Average annual headcount change | **-1%** | **-2%** |

## VII. Allocation of Audit Hours

***Example firm-level calculations:***

The firm issued audit reports with respect to eight accelerated filer or large accelerated filer engagements with various year ends during the reporting period ended September 30, 2024. The hours incurred by the engagement teams during the audits were:

| | Issuer year end | Hours incurred prior to issuer year end | Hours incurred following issuer year end |
|---|---|---|---|
| Issuer A | December 31, 2023 | 20,415 | 12,056 |
| Issuer B | December 31, 2023 | 7,856 | 3,020 |
| Issuer C | March 31, 2024 | 10,583 | 8,023 |
| Issuer D | June 30, 2024 | 5,570 | 3,502 |
| Issuer E | March 31, 2024 | 4,508 | 3,752 |
| Issuer F | December 31, 2023 | 1,575 | 1,208 |
| Issuer G | December 31, 2023 | 3,301 | 1,833 |
| Issuer H (Initial public offering engagement) | December 31, 2023, December 31, 2022, and December 31, 2021 | -[6] | - |
| Total | | **53,808** | **33,394** |

$$\frac{\textit{Total audit hours} \text{ incurred prior to } \textit{issuers'} \text{ year ends for all accelerated filer and large accelerated filer engagements}}{\textit{Total audit hours} \text{ for all accelerated filer and large accelerated filer engagements}}$$

Calculation: 53,808 / (53,808+33,394) = **62%**

$$\frac{\textit{Total audit hours} \text{ incurred following } \textit{issuers'} \text{ year ends for all accelerated filer and large accelerated filer engagements}}{\textit{Total audit hours} \text{ for all accelerated filer and large accelerated filer engagements}}$$

Calculation: 33,394 / (53,808+33,394) = **38%**

[6] As noted in Form FM and Form AP, multi-year audits are excluded from both the firm- and engagement-level calculations.

***Example firm-level reporting for Form FM:***

| | | |
|---|---|---|
| **Allocation of Audit Hours** | Percentage of audit hours incurred prior to issuers' year ends for all accelerated filer and large accelerated filer engagements | **62%** |
| | Percentage of audit hours incurred following issuers' year ends for all accelerated filer and large accelerated filer engagements | **38%** |

***Example engagement-level calculations:***

The firm audits Issuer G with a December 31 year end. The hours incurred by the engagement team during the audit were:

| | Hours incurred prior to and including December 31 | Hours incurred following December 31 |
|---|---|---|
| U.S. (lead auditor) | 2,015 | 1,350 |
| Germany | 682 | 265 |
| China | 452 | 163 |
| South Africa | 152 | 55 |
| Total | **3,301** | **1,833** |

$$\frac{\textit{Total audit hours} \text{ incurred prior to the } \textit{issuer's} \text{ year end}}{\textit{Total audit hours}}$$

Calculation: 3,301 / (3,301+1,833) = **64%**

$$\frac{\textit{Total audit hours} \text{ incurred following the } \textit{issuer's} \text{ year end}}{\textit{Total audit hours}}$$

Calculation: 1,833 / (3,301+1,833) = **36%**

***Example engagement-level reporting for Form AP:***

| | | |
|---|---|---|
| **Allocation of Audit Hours** | Percentage of total audit hours incurred prior to the issuer's year end | **64%** |
| | Percentage of total audit hours incurred following the issuer's year end | **36%** |

## VIII. Restatement History

***Example calculation:***

The following is true for Firm X's audit practice for the 12-month periods ended September 30 for the last three years:

- For 09/30/2022, Firm X issued 110 audit reports for its issuer engagements, 40 of which were integrated audits.
- For 09/30/2023, Firm X issued 105 audit reports for its issuer engagements, 35 of which were integrated audits.
- For 09/30/2024, Firm X issued 100 audit reports for its issuer engagements, 30 of which were integrated audits.

During the 12-month period ended September 30, 2024, Firm X had the following restatements for its issuer engagements:

- 9 revision restatements. These restatements relate to audit reports initially issued during the following reporting periods:
    - 2022 – 6
    - 2023 – 3
    - 2024 – 0 *
- 4 reissuance restatements relate to the financial statements. These restatements relate to audit reports initially issued during the following reporting periods:
    - 2022 – 2
    - 2023 – 1
    - 2024 – 1
- 2 reissuance restatements of management's report on ICFR. These restatements relate to audit reports on ICFR initially issued during the following reporting periods:
    - 2022 – 1
    - 2023 – 1
    - 2024 – 0 *

* Note that for the 12-month period ended September 30, 2024, there were no restatements of this type of audit reports issued during that 12-month period.

***Example reporting for Form FM:***

| | | Audit Report Initially Issued | | |
|---|---|---|---|---|
| | | **2024** | **2023** | **2022** |
| **Restatement History** | Revision restatements of the financial statements for errors | 0 | 3 | 6 |
| | Reissuance restatements of the financial statements for errors | 1 | 1 | 2 |
| | Reissuance restatements of management's report on ICFR | 0 | 1 | 1 |
| | Total issuer engagements | 100 | 105 | 110 |
| | Total issuer engagements with audits of ICFR | 30 | 35 | 40 |