
PROPOSED AUDITING STANDARD –)	
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AUDITING ACCOUNTING ESTIMATES, INCLUDING FAIR VALUE MEASUREMENTS)	PCAOB Release No. 2017-002 June 1, 2017
)	
AND PROPOSED AMENDMENTS TO PCAOB AUDITING STANDARDS)	PCAOB Rulemaking Docket Matter No. 043
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Summary: The Public Company Accounting Oversight Board ("PCAOB" or the "Board") is proposing an auditing standard, *Auditing Accounting Estimates, Including Fair Value Measurements* and amendments to other PCAOB auditing standards. The proposal strengthens and enhances the requirements for auditing accounting estimates by establishing a single standard that sets forth a uniform, risk-based approach. The proposed auditing standard and proposed amendments would be applicable to all audits conducted in accordance with PCAOB standards.

Public Comment: Interested persons may submit written comments to the Board. Comments should be sent to the Office of the Secretary, PCAOB, and 1666 K Street, NW, Washington, DC 20006-2803. Comments also may be submitted by e-mail to comments@pcaobus.org or through the Board's website at www.pcaobus.org. All comments should refer to PCAOB Rulemaking Docket Matter No. 043 in the subject or reference line and should be received by the Board by August 30, 2017.

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The Board is proposing for public comment to:

- (1) Replace AS 2501, *Auditing Accounting Estimates*, and retitle the standard as *Auditing Accounting Estimates, Including Fair Value Measurements*.
- (2) Supersede AS 2502, *Auditing Fair Value Measurements and Disclosures*, and AS 2503, *Auditing Derivative Instruments, Hedging Activities, and Investments in Securities*.
- (3) Amend:
 - AS 1015, *Due Professional Care in the Performance of Work*;
 - AS 1105, *Audit Evidence*;
 - AS 2110, *Identifying and Assessing Risks of Material Misstatement*;
 - AS 2301, *The Auditor's Responses to the Risks of Material Misstatement*;
 - AS 2401, *Consideration of Fraud in a Financial Statement Audit*;
 - and
 - AS 2805, *Management Representations*.
- (4) Rescind AI 16, *Auditing Accounting Estimates: Auditing Interpretations of AS 2501*.

TABLE OF CONTENTS

I.	Executive Summary	1
II.	Background.....	4
	A. Current Requirements	7
	B. Current Audit Practices Regarding Auditing Accounting Estimates	10
	C. Reasons to Improve Auditing Standards	14
III.	Discussion of the Proposed Rules	16
IV.	Economic Considerations	21
	A. Baseline.....	22
	B. Need for the Proposal.....	26
	C. Economic Impacts of the Proposal	40
	D. Alternatives.....	45
V.	Special Considerations for Audits of Emerging Growth Companies	51
VI.	Applicability of the Proposed Requirements to Audits of Brokers and Dealers	54
VII.	Effective Date.....	55
VIII.	List of Appendices	56
IX.	Opportunity for Public Comment	56

I. Executive Summary

The Board is proposing amendments to its standards for auditing accounting estimates and fair value measurements, under which three existing standards would be replaced with a single, updated standard. As discussed in more detail below, in the Board's view the proposed standard and amendments would further investor protection by promoting strengthened auditing practices, updating the standards in light of recent developments, and applying a more uniform, risk-based approach to an area of the audit that is of increasing prevalence and significance.

The financial statements of most companies reflect amounts in accounts and disclosures that cannot be directly measured and instead require estimation. Examples include certain valuations of financial and non-financial assets, impairments of long-lived assets, allowances for credit losses, contingent liabilities, and revenues from contracts with customers. Such accounting estimates often have a significant impact on a company's reported financial position and results of operations. Accounting estimates are also becoming more prevalent and more significant as financial reporting frameworks continue to evolve and require greater use of estimates, including those based on fair value measurements.¹

By their nature, accounting estimates, including fair value measurements, generally involve subjective assumptions and measurement uncertainty, making them susceptible to management bias. Some estimates involve complex processes and methods. Consequently, accounting estimates often are some of the areas of greatest risk in an audit, requiring additional audit attention and appropriate application of professional skepticism.

Currently, there are three PCAOB auditing standards that primarily relate to accounting estimates, including fair value measurements.² These standards were originally adopted between 1988 and 2003, and include common approaches for substantively testing accounting estimates, including fair value measurements. The standards vary, however, in their level of detail in describing those approaches. In

¹ For purposes of the proposed standard and accompanying discussion, a fair value measurement is a form of accounting estimate. See Section II for additional discussion.

² See Section II.A for discussion of current requirements that relate to auditing accounting estimates.

addition, the Board's risk assessment standards³ include several requirements that relate to identifying, assessing, and responding to the risks of material misstatement in accounting estimates. The existing auditing standards on accounting estimates and fair value measurements, however, predate the risk assessment standards. Thus, existing standards could be improved through further integration with the risk assessment standards, which in turn could prompt greater audit attention to estimates with a greater risk of material misstatement.

Over a number of years, PCAOB staff has provided implementation guidance⁴ related to auditing accounting estimates, but this area remains challenging and practices among firms currently vary. PCAOB inspections staff continues to identify deficiencies at both larger and smaller audit firms in auditing accounting estimates. Examples of such deficiencies include failures to sufficiently (1) test data used by companies to develop accounting estimates; (2) evaluate the reasonableness of significant assumptions used by management; (3) understand information provided by third-party pricing sources; and (4) obtain an understanding of the process for determining fair value measurements in audits of brokers and dealers. These inspection observations continue to raise concerns about auditors' application of professional skepticism and consideration of the potential for management bias in accounting estimates.

The PCAOB has engaged in outreach to explore the views of market participants and others on the potential for improvement of the auditing standards related to accounting estimates, including the Board's Standing Advisory Group ("SAG"),⁵ the Pricing Sources Task Force ("Task Force");⁶ and the issuance of and comments on the Staff Consultation Paper, *Auditing Accounting Estimates and Fair Value Measurements* ("SCP").⁷

³ See Section II.A for discussion of current requirements, including the risk assessment standards.

⁴ See Section II for discussion of relevant guidance issued by the PCAOB.

⁵ See Section II for additional discussion of outreach performed.

⁶ *Id.*

⁷ See SCP, *Auditing Accounting Estimates and Fair Value Measurements* (Aug. 19, 2014), available on the Board's website.

The increasing prevalence and significance of accounting estimates, many with subjective assumptions, measurement uncertainty, and complex processes; the growing use of third-party pricing sources; and the results of the PCAOB's outreach indicate that improvements in the standards for auditing accounting estimates may be needed. Additionally, the number of audit deficiencies identified in the Board's oversight activities has led the PCAOB to consider whether changes to the existing standards could more effectively prompt the appropriate application of professional skepticism and consideration of potential management bias.

The Board is proposing to replace its existing standards on auditing accounting estimates and fair value measurements with a single standard, Proposed AS 2501, *Auditing Accounting Estimates, Including Fair Value Measurements*, and to amend the risk assessment standards to more specifically address certain aspects of auditing accounting estimates. The proposed standard would also include a special topics appendix that addresses certain matters relevant to auditing the fair value of financial instruments, including the use of information from pricing services.⁸

The proposal builds on the common approaches in the three existing standards and is intended to strengthen PCAOB auditing standards in the following respects:

- Add or revise requirements and provide direction to prompt auditors to devote greater attention to addressing potential management bias in accounting estimates, while reinforcing the need for professional skepticism.
- Extend certain key requirements in the existing standard on auditing fair value measurements, the newest and most comprehensive of the existing standards on auditing accounting estimates and fair value measurements, to all accounting estimates in significant accounts and disclosures to reflect a more uniform approach to substantive testing.
- Further integrate the risk assessment standards to focus auditors on estimates with greater risk of material misstatement.
- Make other updates to the requirements for auditing accounting estimates to provide additional clarity and specificity.

⁸ See Section II.B and Section IV.B.2 for additional discussion of matters relevant to auditing the fair value of financial instruments.

- Provide specific requirements and direction to address certain aspects unique to auditing fair values of financial instruments, including the use of information from pricing sources (e.g., pricing services and brokers or dealers).

The Board is seeking comment on the proposed standard and amendments, alternatives to the proposal, the economic impacts of the proposal, and data on current practices and potential benefits and costs. This release, including Appendix 3, contains questions on discrete aspects of these matters on which the Board seeks comments. Commenters are encouraged to answer questions in the release, and to comment on any aspect of the release or the proposed standard and amendments not covered by specific questions. Commenters are especially encouraged to provide the reasoning to support their views and any relevant data.

The PCAOB has observed that, in many cases, specialists are used to either develop or assist in evaluating various accounting estimates. In a companion release, the Board is proposing amendments to PCAOB auditing standards to strengthen the requirements that apply when auditors use the work of specialists in an audit.⁹ In that release, the Board is proposing to amend AS 1105, *Audit Evidence*, to add a new appendix that addresses the auditor's responsibilities when using the work of a company's specialists as audit evidence; amend AS 1201, *Supervision of the Audit Engagement*, to add a new appendix on supervising the work of auditor-employed specialists; and replace AS 1210, *Using the Work of a Specialist*, with an updated standard on using the work of auditor-engaged specialists (collectively, "specialist proposal"). Certain provisions of the proposed auditing standard in this release include references to the proposed amendments presented in the specialist proposal in order to illustrate how the proposed requirements in the two releases would work together.

II. **Background**

Accounting estimates are an essential part of financial statements. Most companies' financial statements reflect accounts or amounts in disclosures that cannot be directly measured and thus require estimation. Accounting estimates are pervasive to financial statements, often substantially affecting a company's financial position and results of operations. Examples of accounting estimates include certain valuations of

⁹ See *Proposed Amendments to Auditing Standards for the Auditor's Use of the Work of Specialists*, PCAOB Release No. 2017-003 (June 1, 2017) ("Specialists Release").

financial and non-financial assets, impairments of long-lived assets, allowances for credit losses, contingent liabilities, and revenues from contracts with customers. For purposes of this proposal, a fair value measurement is considered a form of accounting estimate because it generally shares many of the same characteristics with other estimates, including subjective assumptions and measurement uncertainty.

The prevalence and significance of accounting estimates have continued to grow with changes in the accounting standards. For example, over the past several years, changes in accounting standards¹⁰ have expanded the use of fair value measurements¹¹ that need to be estimated.

Accounting estimates, by nature, have subjective¹² assumptions and measurement uncertainty, making them susceptible to management bias. Additionally, some estimates involve complex processes and methods. Consequently, accounting estimates often are some of the areas of greatest risk in an audit, requiring appropriate application of professional skepticism and additional audit attention to respond to the identified risks.

¹⁰ See, e.g., Financial Accounting Standards Board ("FASB") Statement of Financial Accounting Standards ("SFAS") No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities* (Feb. 2007). See also paragraph B41 of SFAS No. 141 (revised 2007), *Business Combinations* (Dec. 2007) (listing in the basis for conclusions as a reason to eliminate the pooling method: "Both Boards observed that the pooling method is an exception to the general concept that exchange transactions are accounted for in terms of the fair values of the items exchanged."). See also FASB Accounting Standards Update No. 2014-09, *Revenue from Contracts with Customers (Topic 606)* (May 2014).

¹¹ Under U.S. generally accepted accounting principles, a fair value measurement represents the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. See FASB Accounting Standards Codification ("ASC"), Topic 820, *Fair Value Measurement*, paragraph 10-35-2.

¹² "Subjective" should not be understood to mean purely discretionary. Accounting estimates are bounded by the requirements of the applicable financial reporting framework and reasonableness, such that the financial statements are presented fairly, in all material respects, in conformity with the applicable financial reporting framework. See generally AS 2815, *The Meaning of "Present Fairly in Conformity with Generally Accepted Accounting Principles."*

The 2008 financial crisis underscored both the importance of and potential challenges associated with developing and auditing certain accounting estimates. Among other things, uncertainties in the market and economy during the crisis raised questions about the valuation, impairment, and recoverability of significant categories of assets and the completeness and valuation of significant categories of liabilities reflected in financial statements.

Auditing certain accounting estimates has also proven challenging to auditors.¹³ In past years, PCAOB staff has issued guidance on auditors' responsibilities for auditing estimates under existing PCAOB standards.¹⁴ As discussed in more detail in Section II.B.1, PCAOB inspections staff continues to identify deficiencies in auditing accounting estimates at both larger and smaller audit firms.

¹³ See generally International Forum of Independent Audit Regulators ("IFIAR"), *Report on 2016 Survey of Inspection Findings* (Mar. 3, 2017); IFIAR, *Report on 2015 Survey of Inspection Findings* (Mar. 3, 2016); IFIAR, *Report on 2014 Survey of Inspection Findings* (Mar. 3, 2015); IFIAR, *Report on 2013 Survey of Inspection Findings* (Apr. 10, 2014); and IFIAR, *2012 Summary Report of Audit Inspection Findings* (Dec. 18, 2012) (available at <https://www.ifiar.org/IFIAR-Global-Survey-of-Inspection-Findings.aspx>).

¹⁴ The Staff Audit Practice Alerts relevant to auditing accounting estimates, including fair value measurements, are as follows: (1) *Matters Related to Auditing Fair Value Measurements of Financial Instruments and the Use of Specialists*, Staff Audit Practice Alert No. 2 (Dec. 10, 2007); (2) *Audit Considerations in the Current Economic Environment*, Staff Audit Practice Alert No. 3 (Dec. 5, 2008); (3) *Auditor Considerations Regarding Fair Value Measurements, Disclosures, and Other-Than-Temporary Impairments*, Staff Audit Practice Alert No. 4 (Apr. 21, 2009); (4) *Auditor Considerations of Litigation and Other Contingencies Arising from Mortgage and Other Loan Activities*, Staff Audit Practice Alert No. 7 (Dec. 20, 2010); (5) *Assessing and Responding to Risk in the Current Economic Environment*, Staff Audit Practice Alert No. 9 (Dec. 6, 2011); (6) *Maintaining and Applying Professional Skepticism in Audits*, Staff Audit Practice Alert No. 10 (Dec. 4, 2012); and (7) *Matters Related to Auditing Revenue in an Audit of Financial Statements*, Staff Audit Practice Alert No. 12 (Sept. 9, 2014), available on the Board's website. See also PCAOB Staff Questions and Answers: *Auditing the Fair Value of Share Options Granted to Employees* (Oct. 17, 2006), available on the Board's website.

As part of its research and outreach, the PCAOB held a number of discussions with the SAG¹⁵ and the Task Force¹⁶ on matters relevant to auditing accounting estimates. In August 2014, the SCP was issued to solicit comments on various issues, including the potential need for standard setting and key aspects of a potential new standard and related requirements. The proposal was informed by the comments received on the SCP¹⁷ and other outreach.

A. Current Requirements

The primary PCAOB standards that apply specifically to auditing accounting estimates, including fair value measurements are:¹⁸

- AS 2501, *Auditing Accounting Estimates* (originally issued in April 1988) ("existing accounting estimates standard") – applies to auditing accounting estimates in general.¹⁹

¹⁵ See SAG meeting briefing papers and webcast archives (Jun. 18, 2015, Oct. 2, 2014, Oct. 14-15, 2009, and Jun. 21, 2007), available on the Board's website.

¹⁶ The Task Force was formed in 2011 to assist the staff in gaining insight into issues related to auditing the fair value of financial instruments. The Task Force met in May, June, and September 2011 on fair value related topics such as the use of third-party pricing sources and valuation of financial instruments in illiquid markets.

¹⁷ The comment letters on the SCP are available on the Board's website.

¹⁸ On April 16, 2003, the PCAOB adopted on an interim, transitional basis the generally accepted auditing standards, described in the American Institute of Certified Public Accountants ("AICPA") Auditing Standards Board's ("ASB") Statement on Auditing Standards No. 95, *Generally Accepted Auditing Standards*, then in existence. See *Establishment of Interim Professional Auditing Standards*, PCAOB Release No. 2003-006 (Apr. 18, 2003). Since that time, the Board has superseded or amended many of those auditing standards and has been engaged in updating and reconsidering the remaining standards. In addition, the PCAOB reorganized its auditing standards in 2015. See *Reorganization of PCAOB Auditing Standards and Related Amendments to PCAOB Standards and Rules*, PCAOB Release No. 2015-002 (Mar. 31, 2015).

¹⁹ See generally AS 2501.01.

- AS 2502, *Auditing Fair Value Measurements and Disclosures* (originally issued in January 2003) ("existing fair value standard") – applies to auditing the measurement and disclosure of assets, liabilities, and specific components of equity presented or disclosed at fair value in financial statements.²⁰
- AS 2503, *Auditing Derivative Instruments, Hedging Activities and Investments in Securities* (originally issued in September 2000) ("existing derivatives standard") – applies to auditing financial statement assertions for derivative instruments, hedging activities, and investments in securities. Its scope includes, among other things, requirements for auditing the valuation of derivative instruments and securities, including those measured at fair value.²¹

In addition, the Board's risk assessment standards²² set forth requirements for the auditor's assessment of and response to risk in an audit, and those standards contain requirements that relate to accounting estimates. Those requirements include procedures regarding identifying and assessing risks of material misstatement in accounting estimates,²³ identifying and evaluating misstatements in accounting estimates,²⁴ and evaluating potential management bias associated with accounting estimates.²⁵ PCAOB standards also set forth requirements for the auditor to plan and

²⁰ See generally AS 2502.01.

²¹ See generally AS 2503.01-.04.

²² The Board's "risk assessment standards," originally adopted as Auditing Standards No. 8 through No. 15, set forth requirements relating to the auditor's assessment of, and response to, the risks of material misstatement in the financial statements. See *Auditing Standards Related to the Auditor's Assessment of and Response to Risk and Related Amendments to PCAOB Standards*, PCAOB Release No. 2010-004 (Aug. 5, 2010).

²³ See generally paragraph .13 of AS 2110, *Identifying and Assessing Risks of Material Misstatement*.

²⁴ See paragraph .13 of AS 2810, *Evaluating Audit Results*.

²⁵ See AS 2810.27.

perform his or her work with due professional care, which includes the application of professional skepticism.²⁶

Both the existing accounting estimates standard and the existing fair value standard provide that the auditor may apply one or a combination of approaches to substantively test an accounting estimate:

- Testing management's process. This generally involves:
 - Evaluating significant assumptions used by management for reasonableness, and testing and evaluating the completeness, accuracy and relevance of data used; and²⁷
 - Evaluating the consistency of management's assumptions with other information.²⁸
- Developing an independent estimate. This generally involves using management's assumptions, or alternative assumptions, to develop an independent estimate or an expectation of an estimate.²⁹
- Reviewing subsequent events or transactions. This generally involves using events or transactions occurring subsequent to the balance sheet date, but prior to the date of the auditor's report, to provide evidence about the reasonableness of the estimate.³⁰

²⁶ See generally paragraph .07 of AS 1015, *Due Professional Care in the Performance of Work*.

²⁷ See generally AS 2501.11 and AS 2502.26-.39.

²⁸ *Id.*

²⁹ See generally AS 2501.12 and AS 2502.40.

³⁰ See generally AS 2501.13 and AS 2502.41-.42.

In general, the existing fair value standard, which is the most recent of the existing estimates standards,³¹ sets forth more detailed procedures for the common approaches described above. The level of detail within the existing fair value standard, however, varies.³² For example, the existing fair value standard sets forth a number of different requirements for testing management's process but only a few general requirements for developing an independent estimate.³³

The existing derivatives standard primarily addresses auditing derivatives. This standard also includes requirements for auditing the valuation of derivatives and investment securities, including valuations based on an investee's financial results, and testing assertions about securities based on management's intent and ability.³⁴

B. Current Audit Practices Regarding Auditing Accounting Estimates

This section describes current practices for auditing accounting estimates, as observed over the past several years through PCAOB oversight activities (including observations from audit inspections and enforcement activities).³⁵

The PCAOB has observed through its oversight activities that some audit firms' policies, procedures, and guidance ("methodologies") use approaches that apply certain of the basic procedures for auditing fair value measurements to other accounting estimates (e.g., evaluating the method used by management to develop estimates).³⁶

³¹ The existing accounting estimates standard, existing fair value standard, and existing derivatives standard are referred to collectively herein as the "existing estimates standards."

³² See generally AS 2502.26-.40.

³³ See generally AS 2502.40.

³⁴ See generally AS 2503.28-.34 and AS 2503.56-.57.

³⁵ See Section IV.A for discussion of observations of practice from academic research.

³⁶ Notably, most of those firms base their methodologies largely on the standards of the International Auditing and Assurance Standards Board ("IAASB") or the ASB, which have adopted one standard for auditing both fair value measurements and other accounting estimates.

The PCAOB also has observed that when testing management's process, some auditors have developed expectations of certain significant assumptions as an additional consideration in evaluating the reasonableness of those assumptions.

Over the past few years, some audit firms have updated their methodologies, particularly in the area of auditing the fair value of financial instruments, often in response to identified inspection deficiencies.³⁷ For example, some firms have directed resources to implement more rigorous procedures to evaluate the process used by third-party pricing sources to determine the fair value of financial instruments.

The PCAOB has observed diversity in how audit firms use information obtained from third-party sources in auditing fair value measurements. Such third-party sources may include:

- Pricing services and brokers or dealers, which provide pricing information related to the fair value of financial instruments; and
- Specialists,³⁸ who may develop independent estimates or assist in evaluating a company's estimate or the work of a company's specialist.

Some larger audit firms have implemented centralized approaches to developing independent estimates of the fair value of financial instruments. These firms may use centralized, national-level pricing desks or groups to assist in performing procedures relating to testing the fair value of financial instruments. The level of information provided by these centralized groups to engagement teams varies. In some cases, the national-level pricing desk obtains pricing information from pricing services at the request of the engagement team. Additionally, national-level pricing desks may periodically provide information about a pricing service's controls and methodologies, and provide information on current market conditions for different types of securities to inform an engagement team's risk assessment. In other cases, the national-level pricing desk itself may develop estimates of fair value for certain types of securities, assist audit teams with evaluating the specific methods and assumptions related to a particular instrument, or evaluate differences between a company's price and price from a pricing source. Smaller audit firms that do not have a national pricing group often engage

³⁷ See Section II.B.1 for discussion of audit deficiencies observed by the Board through its inspection process.

³⁸ See Specialists Release, PCAOB Release No. 2017-003.

valuation specialists to perform some or all of these functions. Some smaller firms use a combination of external valuation specialists and internal pricing groups.

1. *Observations from Audit Inspections*

Through its oversight activities, the PCAOB has historically observed numerous deficiencies in auditing accounting estimates. Audit deficiencies have been observed in both larger and smaller audit firms.³⁹

PCAOB inspections staff has observed audit deficiencies in issuer audits related to a variety of accounting estimates, including revenue-related estimates and reserves, the allowance for loan losses, the fair value of financial instruments, the valuation of assets and liabilities acquired in a business combination, goodwill and long-lived asset impairments, inventory valuation allowances, and equity-related transactions. Examples of such deficiencies include failures to (1) sufficiently test the accuracy and completeness of company data used in fair value measurements or other estimates, (2) evaluate the reasonableness of significant assumptions used by management, and (3) understand information provided by third-party pricing sources. In audits of brokers or dealers, deficiencies include failures to (1) obtain an understanding of the methods and assumptions internally developed or obtained by third parties that were used by the broker or dealer to determine fair value of securities, and (2) perform sufficient procedures to test valuation of securities. The observed deficiencies are frequently associated with, among other things, a failure to appropriately apply professional skepticism in auditing the estimates.⁴⁰ More recently, there are some indications in

³⁹ See, e.g., *Annual Report on the Interim Inspection Program Related to Audits of Brokers and Dealers*, PCAOB Release No. 2016-004 (Aug. 18, 2016); PCAOB Staff Inspection Brief, *Information about 2016 Inspections* (July 2016); PCAOB Staff Inspection Brief, *Preview of Observations from 2015 Inspections of Auditors of Issuers* (Apr. 2016); *Annual Report on the Interim Inspection Program Related to Audits of Brokers and Dealers*, PCAOB Release No. 2015-006 (Aug. 18, 2015); *Report on 2007-2010 Inspections of Domestic Firms that Audit 100 or Fewer Public Companies*, PCAOB Release No. 2013-001 (Feb. 25, 2013); and *Report on Observations of PCAOB Inspectors Related to Audit Risk Areas Affected by the Economic Crisis*, PCAOB Release No. 2010-006 (Sept. 29, 2010), available on the Board's website.

⁴⁰ Audit deficiencies have also been observed by other regulators internationally. For example, an IFIAR survey released in 2017 disclosed that the most commonly observed deficiencies related to auditing fair value measurements were failures to assess the reasonableness of assumptions, including consideration of contrary or

PCAOB inspections of issuer audits that observed deficiencies in this area are decreasing, as compared to earlier years. As noted previously, some audit firms have updated their audit practices in light of deficiencies identified through inspections. Not all firms have improved their practices in this area, however, and PCAOB inspections staff has continued to observe deficiencies similar to those described above. Inspection observations continue to raise concerns about auditors' application of professional skepticism and consideration of the potential for management bias in accounting estimates.

2. *Observations from Enforcement Cases*

Over the years, there have been a number of enforcement actions by the PCAOB and Securities and Exchange Commission ("SEC") for violations of PCAOB standards in auditing accounting estimates, demonstrating the importance of this aspect of the audit. Enforcement actions have been brought against larger and smaller firms, with domestic and international practices.

PCAOB enforcement cases related to auditing estimates have generally involved one or more of the following violations: (1) failure to perform any procedures to determine the reasonableness of significant assumptions; (2) failure to test the relevance, sufficiency, and reliability of the data supporting the accounting estimates; (3) failure to perform a retrospective review of a significant accounting estimate to determine whether management's judgments and assumptions relating to the estimate indicated a possible bias; and (4) failure to perform procedures to obtain corroboration for management representations regarding accounting estimates.⁴¹

inconsistent evidence where applicable; perform sufficient risk assessment procedures; sufficiently test the accuracy of data used; and take relevant variables into account. The survey also identified professional skepticism as one of the areas in which high frequencies of findings persist. See IFIAR, *Report on 2016 Survey of Inspection Findings* (Mar. 3, 2017), at 10 and 18.

⁴¹ See, e.g., *Mark E. Laccetti, CPA*, PCAOB File No. 105-2009-007 (Jan. 26, 2015); *L.L. Bradford & Company, LLC*, PCAOB Release No. 105-2015-041 (Dec. 3, 2015); *Gordon Brad Beckstead, CPA*, PCAOB Release No. 105-2015-007 (Apr. 1, 2015); *David T. Svoboda, CPA*, PCAOB Release No. 105-2013-011 (Nov. 21, 2013); *Chisholm, Bierwolf, Nilson & Morrill, LLC, Todd D. Chisholm, CPA, and Troy F. Nilson, CPA*, PCAOB Release No. 105-2011-003 (Apr. 8, 2011); *Traci Jo Anderson and Traci Jo Anderson, CPA*, PCAOB Release No. 105-2010-007 (Aug. 12, 2010); and *Lawrence*

Similarly, the SEC has brought Rule 102(e) proceedings against auditors for substantive failures in auditing accounting estimates, including failures to obtain sufficient competent evidential matter for significant accounting estimates in an entity's financial statements and failures to exercise due professional care, including professional skepticism, throughout the audit.⁴² In some cases, the auditor (1) obtained little, if any, reliable or persuasive evidence with respect to management's adjustments to stale appraised values; (2) failed to identify and address bias in management's estimates; or (3) failed to evaluate the results of audit procedures performed, including whether the evidence obtained supported or contradicted estimates in the financial statements.⁴³

C. Reasons to Improve Auditing Standards

The Board has identified three main reasons to improve its standards for auditing accounting estimates, including fair value measurements:

- The subjective assumptions and measurement uncertainty of accounting estimates make them susceptible to management bias. The Board believes that PCAOB standards related to auditing accounting estimates could be improved by specifically addressing the application of

Scharfman CPA PA, and Lawrence Scharfman, CPA, PCAOB Release No. 105-2009-005 (Aug. 11, 2009).

⁴² See, e.g., *Miller Energy Resources, Inc., Paul W. Boyd, CPA, David M. Hall, and Carlton W. Vogt, III, CPA*, SEC Accounting and Auditing Enforcement Release ("AAER") No. 3780 (June 7, 2016) and SEC AAER No. 3673 (Aug. 6, 2015); *Silberstein Ungar PLLC, Ronald N. Silberstein, CPA, Joel M. Ungar, CPA, Seth A. Gorback, and David A. Kobylarek, CPA*, SEC AAER No. 3777 (June 6, 2016); *Grant Thornton, LLP*, SEC AAER No. 3718 (Dec. 2, 2015); *James Vincent Poti, CPA*, SEC AAER No. 3519 (Dec. 18, 2013); *Sherb & Co., LLP, Steven J. Sherb, CPA, Christopher A. Valteau, CPA, Mark Mycio, CPA, and Steven N. Epstein, CPA*, SEC AAER No. 3512 (Nov. 6, 2013); *John J. Aesoph, CPA, and Darren M. Bennett, CPA*, SEC AAER No. 3436 (Jan. 9, 2013); and *Deloitte & Touche LLP, Steven H. Barry, CPA, and Karen T. Baker, CPA*, SEC AAER No. 2238 (Apr. 26, 2005).

⁴³ See, e.g., *Miller Energy Resources, Inc., Paul W. Boyd, CPA, David M. Hall, and Carlton W. Vogt, III, CPA*, SEC AAER No. 3780 (June 7, 2016) and SEC AAER No. 3673 (Aug. 6, 2015); *Grant Thornton, LLP*, SEC AAER No. 3718 (Dec. 2, 2015); *John J. Aesoph, CPA, and Darren M. Bennett, CPA*, SEC AAER No. 3436 (Jan. 9, 2013).

professional skepticism and responding to potential management bias. Although the risk assessment standards and certain other PCAOB standards address professional skepticism and management bias, the existing estimates standards are largely silent on how to address those topics in the context of auditing accounting estimates.

- The differences in requirements among the three existing estimates standards suggest that revising PCAOB standards to set forth a more uniform, risk-based approach to auditing estimates could lead to improvements in auditing practices for responding to the risks of material misstatement in accounting estimates, whether due to error or fraud.
- PCAOB standards related to auditing accounting estimates could be improved by updating the requirements in light of certain developments, such as the prevalence of third-party pricing sources in fair value measurements.

Some commenters on the SCP and some SAG members suggested that PCAOB standards on auditing accounting estimates could be improved by further emphasizing the application of professional skepticism. These commenters indicated that the application of professional skepticism was important because of the inherent subjectivity of accounting estimates and the potential for management bias.

In addition, some commenters on the SCP indicated that a single standard would alleviate confusion and promote consistency in the application of requirements for auditing accounting estimates. For example, one commenter highlighted a perceived inconsistency in the standards regarding the auditor's responsibilities for evaluating significant assumptions. Other commenters expressed concerns about a single standard for auditing both fair value measurements and other accounting estimates, primarily because of the differences in how those estimates are developed rather than how they are audited. The requirements in the proposed standard take into account the unique aspects of auditing fair value measurements, such as the use of observable and unobservable inputs. Additionally, the proposed standard includes a separate appendix that addresses auditing the fair value of financial instruments.

A number of commenters on the SCP expressed support for PCAOB standards addressing how information from pricing services should be used in auditing the fair value of financial instruments. In addition, commenters recommended coordinating any

changes to existing standards on accounting estimates with the standards on the auditor's use of the work of specialists.⁴⁴

Some commenters on the SCP questioned the need to change PCAOB standards for auditing accounting estimates, citing a lack of perceived audit failures related to estimates or a need for further analysis of audit deficiencies observed by the PCAOB and other audit regulators. However, the Board believes that the reasons cited above for improving the standards are supported by information from its oversight activities and outreach. Additionally, because of the significance and pervasiveness of accounting estimates in financial statements, improving the standards related to auditing estimates could potentially improve auditing practices more generally, for example, by emphasizing the application of professional skepticism.

III. Discussion of the Proposed Rules

The Board is proposing to replace the existing accounting estimates standard, the existing fair value standard, and the existing derivatives standard with a single standard. As described in more detail in Appendix 3, the proposed single standard would include a special topics appendix that addresses certain matters relevant to auditing the fair value of financial instruments. In addition, the proposal would amend several PCAOB auditing standards to align them with the proposed single standard on auditing accounting estimates. The proposal would make the following changes to existing requirements:⁴⁵

- Add or revise requirements and provide direction to prompt auditors to devote greater attention to addressing potential management bias in accounting estimates, while reinforcing the need for professional skepticism. In this regard, the proposal would:

⁴⁴ See Specialists Release, PCAOB Release No. 2017-003.

⁴⁵ The proposed amendments would apply to audits of issuers, as defined in Section 2(a)(7) of the Sarbanes-Oxley Act of 2002 ("Sarbanes-Oxley"), 15 U.S.C. 7201(a)(7), and to audits of brokers and dealers, as defined in Sections 110(3)-(4) of Sarbanes-Oxley, 15 U.S.C. 7220(3)-(4). As discussed further in this release, the PCAOB is seeking comment on whether the proposed amendments should apply to audits of emerging growth companies (see Section V below) and any factors specifically related to audits of brokers and dealers that may affect the application of the proposal to those audits (see Section VI below).

- Establish an objective emphasizing that accounting estimates should be free from bias that results in material misstatement.
- Amend AS 2110 to require a discussion among the key engagement team members of how the financial statements could be manipulated through management bias.
- Emphasize certain key requirements to focus auditors on their obligations to exercise professional skepticism and to identify management bias when evaluating audit results, in the context of auditing accounting estimates.
- Set forth factors for identifying significant assumptions used by the company. The factors would:
 - Encompass significant assumptions identified by the company, as under existing standards, and also include significant assumptions identified by the auditor.
 - Describe characteristics of assumptions that are important to the recognition or measurement of the estimate, such as whether the assumptions are susceptible to manipulation or bias.
- Emphasize requirements for the auditor to evaluate whether the company has a reasonable basis for significant assumptions used and, when applicable, for the company's selection of assumptions from a range of potential assumptions.
- Explicitly require the auditor, when developing an independent expectation of an accounting estimate, to have a reasonable basis for the assumptions he or she uses.
- Establish a requirement for the auditor to understand management's analysis of critical accounting estimates in evaluating the reasonableness of significant assumptions and potential for management bias.
- Recast certain existing requirements using terminology that encourages maintaining a skeptical mindset, such as "evaluate" and "compare" instead of "corroborate."

- Strengthen requirements for evaluating whether data was appropriately used by a company that build on requirements in the existing fair value standard, and include a new requirement for evaluating whether a company's change in the source of data is appropriate.
- Clarify the auditor's responsibilities for evaluating data that build on the existing requirements in AS 1105.
- Amend AS 2401, *Consideration of Fraud in a Financial Statement Audit*, to clarify the auditor's responsibilities when performing a retrospective review of accounting estimates and align them with the requirements in the proposed standard.
- Extend certain key requirements in the existing fair value standard, the newest and most comprehensive of the existing estimates standards, to all accounting estimates in significant accounts and disclosures to reflect a more uniform approach to substantive testing. For estimates not currently subject to the fair value standard, this would:
 - Refine the three substantive approaches common to the existing accounting estimates standard to include more specificity, similar to the existing fair value standard.
 - Describe the auditor's responsibilities for testing the individual elements of the company's process used to develop the estimate (i.e., assumptions, data, and methods).
 - Set forth express requirements for the auditor to evaluate the company's method for developing the estimate, including whether the method is:
 - In conformity with the requirements of the applicable financial reporting framework; and
 - Appropriate for the nature of the related account and the business, industry, and environment in which the company operates.
 - Require the auditor to take into account certain factors in determining whether significant assumptions that are based on the company's intent and ability to carry out a particular course of action are reasonable.

- Further integrate the risk assessment standards to focus auditors on estimates with greater risk of material misstatement. The proposal incorporates specific requirements relating to accounting estimates in AS 2110, and AS 2301, *The Auditor's Responses to the Risks of Material Misstatement*, to inform the necessary procedures for auditing accounting estimates. Specifically, the proposal would:
 - Amend AS 2110 to include risk factors specific to identifying significant accounts and disclosures involving accounting estimates.
 - Align the scope of the new standard with AS 2110 to apply to accounting estimates in significant accounts and disclosures.
 - Amend AS 2110 to set forth requirements for obtaining an understanding of the company's process for determining accounting estimates.
 - Require auditors to respond to differing risks of material misstatement in the components of accounting estimates, consistent with AS 2110.
 - Include a factor for identifying significant assumptions based on whether the assumption specifically relates to an identified and assessed risk of material misstatement.
 - Include risk factors specific to identifying and assessing risks of material misstatement related to the fair value of financial instruments.
 - Add a note in AS 2301, consistent with AS 2820, *Evaluating Consistency of Financial Statements*, to emphasize that performing substantive procedures for the relevant assertions of significant accounts and disclosures involves testing whether the significant accounts and disclosures are in conformity with the applicable financial reporting framework.
- Make other updates to the requirements for auditing accounting estimates, including:
 - Update the description of what constitutes an accounting estimate to encompass the general characteristics of the variety of accounting estimates, including fair value measurements, in financial statements.

- Set forth specific requirements for testing data and pricing information used by the company or the auditor that build on the existing requirements in AS 1105.
- Establish more specific requirements for developing an independent expectation that vary depending on the source of data, assumptions or methods used by the auditor and build on AS 2810 to provide a requirement when developing an independent expectation as a range.
- Provide specific requirements and direction to address auditing fair values of financial instruments, including:
 - Establish requirements for how to determine whether pricing information obtained from third-party pricing sources, including pricing services and brokers or dealers, provides sufficient appropriate audit evidence:
 - Establish factors that affect relevance and reliability of pricing information obtained from a pricing service.
 - Require the auditor to perform additional audit procedures to evaluate the process used by the pricing service.
 - Establish factors that affect the relevance and reliability of quotes from brokers or dealers.
 - Require the auditor to understand, if applicable, how unobservable inputs were determined and evaluate the reasonableness of unobservable inputs.

The Board seeks to improve the quality of auditing in this area and believes these changes would strengthen and enhance the requirements for auditing accounting estimates.

In a companion release, the Board is proposing amendments to PCAOB auditing standards to strengthen the requirements that apply when auditors use the work of specialists in an audit.⁴⁶ In that release, the Board is proposing to amend AS 1105 to

⁴⁶ See Specialists Release, PCAOB Release No. 2017-003.

add a new appendix that addresses the auditor's responsibilities when using the work of a company's specialists as audit evidence, amend AS 1201 with a new appendix on supervising the work of auditor-employed specialists, and replace AS 1210 with an updated standard on using the work of auditor-engaged specialists. Certain provisions of the proposed auditing standard in this release include references to proposed amendments in the companion release.

Questions:

1. Does the discussion of the reasons to improve auditing standards sufficiently describe the nature of concerns related to auditing accounting estimates that the Board should address? Are there additional concerns that the Board should seek to address?
2. Does the information presented above reflect current audit practice? Are there additional aspects of current practice of both larger and smaller audit firms that are relevant to the need for standard setting in this area?
3. Are there additional changes needed to improve the quality of audit work related to accounting estimates that the Board should include in its proposal?
4. Are there any other areas relating to auditing accounting estimates that the Board should address in the proposed standard (e.g., are there related areas of practice for which additional or different requirements are needed, such as the use of data analytics)?
5. Are there considerations affecting accounting estimates relative to the financial reporting frameworks, such as recent changes to revenue recognition or impairment of financial instruments, that the proposed standard does not adequately address?

IV. Economic Considerations

The Board is mindful of the economic impacts of its standard setting. The economic analysis describes the baseline for evaluating the economic impacts of the proposal, analyzes the need for the proposal, and discusses potential economic impacts of the proposed requirements, including the potential benefits, costs, and unintended consequences. The analysis also discusses alternatives considered. Because there are limited data and research findings available to estimate quantitatively the economic impacts of discrete changes to auditing standards in this area, the Board's economic discussion is qualitative in nature.

A. Baseline

Sections II.A–B above discuss the Board's current requirements for auditing accounting estimates and current practices in the application of those requirements. This section expands on the current practices of the profession and currently observed patterns relating to auditing accounting estimates.

Academic research confirms the prevalence and significance of accounting estimates in financial reporting. For example, in a 2014 study, Glendening, Mauldin, and Shaw argue that accounting estimates comprise a large and growing component of financial statements. They also study the determinants of issuers' decisions to provide quantitative sensitivity disclosures about critical accounting estimates,⁴⁷ finding about half of the issuers observed in their sample disclose such estimates.⁴⁸ Accounting estimates can have a high level of inherent subjectivity. One proxy for this is issuers' disclosure of critical accounting policies. In a 2011 study, Levine and Smith, using a large sample of cross-section annual filings, estimate that on average issuers disclose 6.46 policies as critical, with a median of 6.⁴⁹ Their analysis shows that issuers most frequently disclose policies relating to fair value measurements and estimates.⁵⁰ Furthermore, in a 2006 study, Martin, Rich, and Wilks⁵¹ point out that fair value measurements frequently incorporate estimates of future conditions that involve an element of judgment.

Research also confirms that auditors find auditing estimates, including fair value measurements, to be challenging. For example, in providing a brief summary of the

⁴⁷ See Matt Glendening, Elaine Mauldin, and Kenneth W. Shaw, *Management, Auditor, and Audit Committee Influence on MD&A: Evidence from Critical Accounting Estimate Quantitative Sensitivity Disclosures* (Sept. 2014) (working paper, available at <http://www.auditanalytics.com/0000/papers.php?year=2014>).

⁴⁸ *Id.*

⁴⁹ See Carolyn B. Levine and Michael J. Smith, *Critical Accounting Policy Disclosures*, 26 *Journal of Accounting, Auditing & Finance* 39, 48 (2011).

⁵⁰ *Id.* at 49-50.

⁵¹ See Roger D. Martin, Jay S. Rich, and T. Jeffrey Wilks, *Auditing Fair Value Measurements: A Synthesis of Relevant Research*, 20 *Accounting Horizons* 287, 289 (2006).

relevant literature, one study concludes that, while accounting estimates are increasingly important to financial statements, auditors experience "difficulty in auditing them, suggesting that audit quality may be low in this area."⁵² A different study, based on a survey of auditors, finds that features such as "management assumptions, complexity, subjectivity, proprietary valuations, and a lack of verifiable data all contribute to the challenges in auditing [fair value measurements]."⁵³ Another study reports that "[i]nsufficient valuation knowledge is problematic in that relatively inexperienced auditors, who also likely lack knowledge of how their work fits into the bigger picture, perform many audit steps, even difficult ones such as preparation of independent estimates."⁵⁴ Glover et al. finds similar issues with expertise from management's side, with results that indicate that a majority of audit partners participating in their survey reported encountering problems with "management's lack of valuation-process knowledge."⁵⁵

One study suggests that, among the three approaches available under current standards, auditors primarily choose to test management's process, rather than use subsequent events or develop an independent estimate.⁵⁶ Furthermore, in doing so, some auditors tend to verify management's assertions on a piecemeal basis, which the authors argue may result in overreliance on management's process rather than a critical analysis of the estimate. Another study finds that, when auditing lower-risk or simple estimates, auditors primarily test management's process, but are more likely to use a

⁵² See Emily Griffith, Jacqueline S. Hammersley, Kathryn Kadous, and Donald Young, *Auditor Mindsets and Audits of Complex Estimates*, 53 *Journal of Accounting Research* 49, 49 (2014).

⁵³ See Nathan Cannon and Jean C. Bedard, *Auditing Challenging Fair Value Measurements: Evidence from the Field 3*, *The Accounting Review*, in-press 3 (2016).

⁵⁴ See Emily Griffith, Jacqueline S. Hammersley, and Kathryn Kadous, *Audits of Complex Estimates as Verification of Management Numbers: How Institutional Pressures Shape Practice*, 32 *Contemporary Accounting Research* 833, 836 (2015).

⁵⁵ See Steven M. Glover, Mark H. Taylor, and Yi-Jing Wu, *Current Practices and Challenges in Auditing Fair Value Measurements and Complex Estimates: Implications for Auditing Standards and the Academy*, 36 *Auditing: A Journal of Practice & Theory* 63, 65 (2017).

⁵⁶ See Griffith et al., *Audits of Complex Estimates as Verification of Management Numbers: How Institutional Pressures Shape Practice* 841.

combination of substantive approaches as the complexity and associated risk of the estimate increase.⁵⁷

As discussed earlier, the PCAOB has historically observed numerous deficiencies in auditing accounting estimates.⁵⁸ For example, a PCAOB report on the Board's 2004-07 inspections of domestic annually inspected firms identified continued deficiencies in auditing estimates and fair value measurements in audits of issuers of all sizes.⁵⁹ Similarly, a Board report on the PCAOB's 2007-10 inspections of domestic firms that audited 100 or fewer public companies identified auditing accounting estimates, including fair value measurements, as among the areas in which deficiencies occurred more frequently.⁶⁰ To further understand this point, PCAOB staff gathered internal data from issuer inspection reports between 2008 and 2015 for the eight firms that have been inspected every year since the PCAOB's inspection program began. The chart below shows the number of unique inspection deficiencies related to the existing accounting estimates standard and the existing fair value standard from inspection reports between 2008 and 2015 for those eight accounting firms.⁶¹

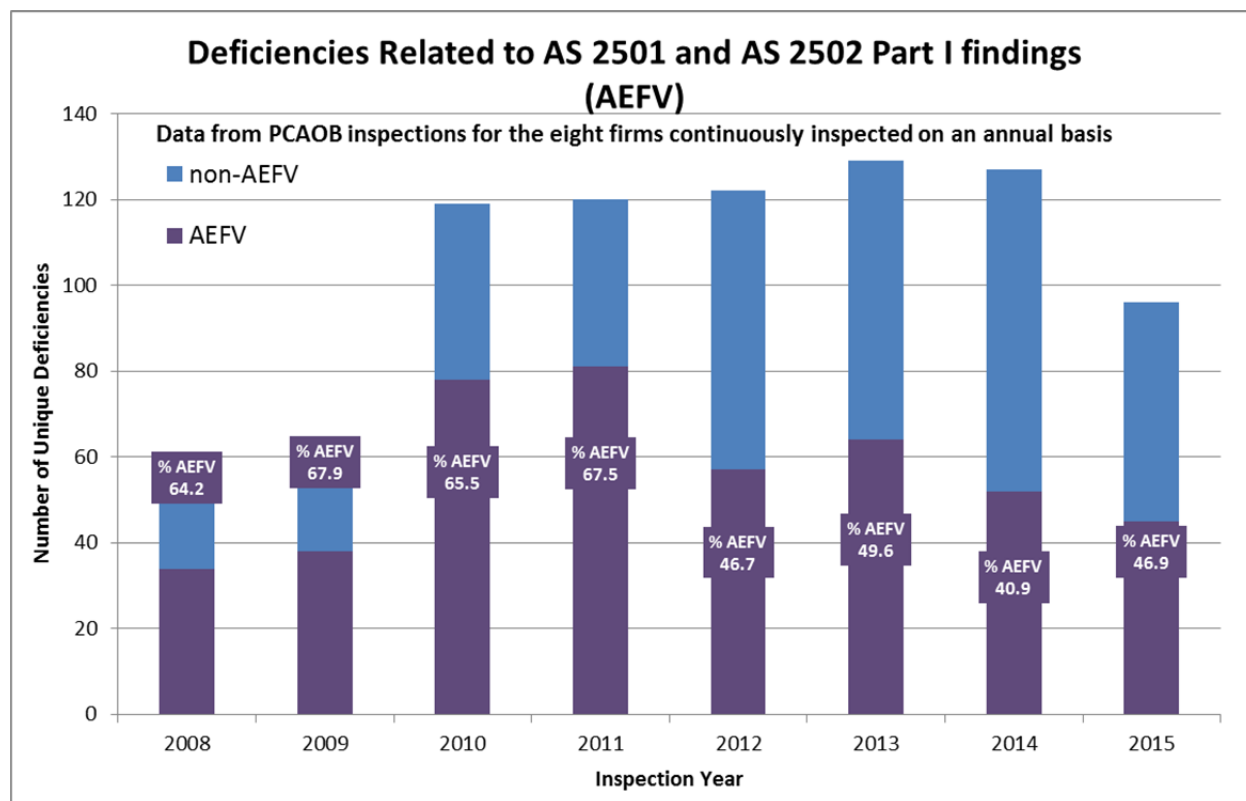
⁵⁷ See Glover et al., *Current Practices and Challenges in Auditing Fair Value Measurements and Complex Estimates: Implications for Auditing Standards and the Academy* 65.

⁵⁸ See Section II.B.1 for discussion of observations from audit inspections.

⁵⁹ See *Report on the PCAOB's 2004, 2005, 2006, and 2007 Inspections of Domestic Annually Inspected Firms*, PCAOB Release No. 2008-008 (Dec. 5, 2008).

⁶⁰ See *Report on 2007-2010 Inspections of Domestic Firms That Audit 100 or Fewer Public Companies*, PCAOB Release No. 2013-001 (Feb. 25, 2013).

⁶¹ The chart identifies deficiencies reported in the public portion of inspection reports. For purposes of the chart, a deficiency that cites more than one of the existing estimates standards is only counted once. The chart shows the relative frequency of deficiencies with the existing accounting estimates standard or the existing fair value standard cited compared to the total deficiencies for that year.



While the deficiencies as a proportion of total deficiencies (including internal control over financial reporting deficiencies), have been declining since 2009-11, they remain relatively high.⁶² This is also consistent with a recent PCAOB Staff Inspection Brief, which observed that "[d]uring the 2014 and 2015 inspection cycles, [i]nspections staff observed some improvements in the audit work performed at some firms [regarding auditing accounting estimates, including fair value measurements] but continued to find high numbers of deficiencies at many firms."⁶³ Given the pattern of the data, one can conclude that, although deficiencies were increasing in the early

⁶² PCAOB inspection reports for the same eight firms covering the inspection period from 2004 to 2009 similarly found deficiencies in auditing fair value measurements, including impairments and other estimates. See also Bryan Church and Lori Shefchik, *PCAOB Inspections and Large Accounting Firms*, 26 Accounting Horizons 43 (2012).

⁶³ See PCAOB Staff Inspection Brief (July 2016), at 4. For a more detailed discussion of observations from audit inspections, see Section II.B.1.

periods, more recently they have declined. Despite this recent decline, they have remained high over an extended period, which demonstrates the challenges involved in auditing estimates and may contribute to the potential need to improve the Board's standards for auditing accounting estimates.

Question:

6. Are there additional academic studies or data the Board should consider? The Board is particularly interested in studies or data that could be used to further assess current practice.

B. Need for the Proposal

As discussed in Section II.C, the Board has identified three main reasons to improve its standards for auditing accounting estimates:

- The subjective assumptions and measurement uncertainty of accounting estimates make them susceptible to management bias. The Board believes that PCAOB standards related to auditing accounting estimates could be improved by specifically addressing the application of professional skepticism and responding to potential management bias. Although the risk assessment standards and certain other PCAOB standards address professional skepticism and management bias, the existing estimates standards are largely silent on how to address those topics in the context of auditing accounting estimates.
- The differences among the three existing estimates standards for auditing accounting estimates suggest that revising PCAOB standards to set forth a more uniform, risk-based approach to auditing estimates could lead to improvements in auditing practices in responding to the risks of material misstatement in accounting estimates, whether due to error or fraud.
- PCAOB standards related to auditing accounting estimates could be improved by updating the requirements in light of certain developments, such as the prevalence of third-party pricing sources in fair value measurements.

Economic theory provides an analytical framework for the Board's consideration of these potential needs.

1. *Principal-agent Problems and Bounded Rationality*

Principal-agent theory is commonly used to describe the economic relationship between investors and managers, and the attendant information and incentive problems that result from the separation of ownership and control.⁶⁴ The presence of information asymmetry⁶⁵ in such a principal-agent relationship results in an inherent incentive problem (moral hazard)⁶⁶ where the objectives of the agent (auditor and management) may differ from the objectives of the principal (investors), such that the actions of auditors may be suboptimal from the investors' perspective. This information asymmetry also leads to an information problem (adverse selection)⁶⁷ resulting in a higher cost of capital, because investors may not be able to accurately assess the quality of management or of management reporting.

⁶⁴ For studies of principal-agent relationships and the attendant information and incentive problems in the context of the separation of ownership and control of public companies and its implications in financial markets, see, e.g., Michael C. Jensen and William H. Meckling, *Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure*, 3 *Journal of Financial Economics* 305 (1976).

⁶⁵ Economists often describe "information asymmetry" as an imbalance, where one party has more or better information than another party.

⁶⁶ The moral hazard problem is also referred to as a hidden action, or agency problem in economics literature. The term "moral hazard" does not refer to a person's morality, but rather to an agent taking actions (such as not working hard enough) that benefit themselves at the expense of harming the principal. To mitigate moral hazard problems, the principal may tie the agent's pay to company performance to better align the agent's interests with the principal's interests. Monitoring the agent's behavior can reinforce these incentives. See, e.g., Bengt Holmstrom, *Moral Hazard and Observability*, 10 *The Bell Journal of Economics* 74 (1979).

⁶⁷ Adverse selection (or hidden information) problems can arise in circumstances where quality is difficult to observe, including in principal-agent relationships where the principal's information problem means it cannot accurately assess the quality of the agent or the agent's work. In addition to diminishing the principal's ability to optimally select an agent, the problem of adverse selection can manifest in markets more broadly, leading to an undersupply of higher-quality products. For a discussion of the concept of adverse selection, see, e.g., George A. Akerlof, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*, 84 *The Quarterly Journal of Economics* 488 (1970).

These issues present particular problems in the context of the estimates used in financial reporting. Given the degree of subjectivity in many financial statement estimates, biases (conscious or otherwise) may lead managers to pick a more favorable estimate within the permissible range.⁶⁸ That is, moral hazard issues may push management toward the most favorable estimates, either with respect to specific accounts or in the overall presentation. Individually, an estimate may be within a reasonable range, but the financial statements as a whole may not be fairly presented if the most favorable estimate is consistently selected by management.

Additional literature shows how these biases, such as management optimism or overconfidence, can manifest themselves.⁶⁹ For example, the literature suggests that individuals often overstate their own capacity and rate their attributes as better than average.⁷⁰ Moreover, evidence suggests that, on average, CEOs and CFOs tend to be more optimistic than the broader population.⁷¹ Managerial overconfidence has been

⁶⁸ For purposes of this discussion, a "favorable" estimate can reflect either an upward or a downward bias, for example in earnings, depending on management incentives.

⁶⁹ Academic literature on managerial attitude draws a subtle distinction between optimism and overconfidence. Optimism leads managers to overestimate the expected value of their firm's cash flows. Overconfidence leads managers to underestimate the volatility of their cash flows. Previous research has found that the two traits are interrelated. See Catherine M. Schrand and Sarah L.C. Zechman, *Executive Overconfidence and the Slippery Slope to Financial Misreporting*, 53 *Journal of Accounting and Economics* 311, 320 (2012). See also Itzhak Ben-David, John R. Graham, and Campbell R. Harvey, *Managerial Overconfidence and Corporate Policies* (Dec. 2007) (working paper, available at <http://www.nber.org/papers/w13711>).

⁷⁰ This and other biases are discussed in, among others, Gilles Hilary and Charles Hsu, *Endogenous Overconfidence in Managerial Forecasts*, 51 *Journal of Accounting and Economics* 300 (2011).

⁷¹ See John R. Graham, Campbell R. Harvey, and Manju Puri, *Managerial Attitudes and Corporate Actions*, 109 *Journal of Financial Economics* 103, 104 (2013). Managerial attitude has been linked to a variety of corporate decisions, including corporate investment and M&A. See Ulrike Malmendier and Geoffrey Tate, *CEO Overconfidence and Corporate Investment*, 60 *The Journal of Finance* 2661 (2005); and Ulrike Malmendier and Geoffrey Tate, *Who Makes Acquisitions? CEO Overconfidence and the Market's Reaction*, 89 *Journal of Financial Economics* 20 (2008).

linked to aggressive earnings forecasts by management.⁷²

Audits are one of the mechanisms for mitigating the information and incentive problems arising in the investor-management relationship.⁷³ Audits are intended to provide a check of management's financial statements, and thus reduce management's potential incentive to prepare and disclose biased or inaccurate financial statements. Audit reports and auditing standards provide information to the market that may affect perceptions about the reliability of the financial statements, and therefore mitigate investors' information problem. Providing this information to investors can increase their willingness to invest in a company, potentially lowering the company's cost of capital.⁷⁴

The auditor is also an agent of investors, however, and the information asymmetry between investors and auditors can also give rise to risks of moral hazard and adverse selection. Auditors may have incentives to behave suboptimally from investors' point of view by, for example, not sufficiently challenging management's estimates or underlying assumptions in order not to disturb the client relationship; shirking, if they are not properly incentivized to exert the effort considered optimal by shareholders; or seeking to maximize profits and/or minimize costs—sometimes at the expense of audit quality. As a result of such misaligned incentives, auditors may engage in practices that do not align with investors' needs and preferences.

Research has shown that even sell-side research analysts, generally understood to be sophisticated financial experts, have trouble assessing the impact on earnings of companies' derivative instruments, where the associated financial reporting involves fair

⁷² See Paul Hribar and Holly Yang, *CEO Overconfidence and Management Forecasting*, 33 *Contemporary Accounting Research* 204 (2016).

⁷³ See Paul M. Healy and Krishna G. Palepu, *Information Asymmetry, Corporate Disclosure, and the Capital Markets: A Review of the Empirical Disclosure Literature*, 31 *Journal of Accounting and Economics* 405, 406 (2001). See also Mark DeFond and Jieying Zhang, *A Review of Archival Auditing Research*, 58 *Journal of Accounting and Economics* 275 (2014).

⁷⁴ See, e.g., David Easley and Maureen O'Hara, *Information and the Cost of Capital*, 59 *The Journal of Finance* 1553 (2004).

value measurements.⁷⁵ Similarly, some auditors may find auditing certain estimates challenging because, like all individuals, they may have limits on their ability to solve complex problems and to process information, especially when faced with time constraints.⁷⁶ In economic theory, this difficulty can be associated with bounded rationality: the idea that when individuals make decisions, their rationality may be limited by certain bounds, such as limits on available information, limits on analytical ability, limits on the time available to make the decision, and inherent cognitive biases.⁷⁷ Thus, in addition to the previously discussed moral hazard problem, the presence of bounded rationality injects another layer of challenges to auditing estimates (i.e., even if incentives between principal and agent are aligned, the agent, being boundedly rational,

⁷⁵ See Hye Sun Chang, Michael Donohoe, and Theodore Sougiannis, *Do Analysts Understand the Economic and Reporting Complexities of Derivatives?* 61 *Journal of Accounting and Economics* 584 (2016).

⁷⁶ One prominent psychologist refers to the mind as having two systems, System 1 and System 2. "System 1 operates automatically and quickly..." System 2 is the slower one that "can construct thoughts in an orderly series of steps." System 2 operations "require attention and are disrupted when attention is drawn away." Daniel Kahneman, *Thinking, Fast and Slow* 4, 20-22 (1st ed. 2011). Examples of System 2 operations include "[f]ill[ing] out a tax form" and "[checking] the validity of a complex logical argument," both of which require time and attention. Without time, one cannot dedicate attention to a task and, fully engage System 2, and hence is left with the automatic instinctual operation of System 1, which can lead to use of rules of thumbs (heuristics) and "biases of intuition." *Id.*

⁷⁷ For a seminal work in this field, see Herbert A. Simon, *A Behavioral Model of Rational Choice*, 69 *The Quarterly Journal of Economics* 99 (1955). Simon introduced this theory and argued that individuals cannot assimilate and process all the information that would be needed to maximize their benefits. Individuals do not have access to all the information required to do so, but even if they did, they would be unable to process it properly, since they are bound by cognitive limits. A short biography of Simon also provides a simple summary of this idea. See *Guru: Herbert Simon, The Economist*, March 20, 2009 (available at <http://www.economist.com/node/13350892>). Time is an essential limitation to problem solving, being fundamental to the definition of bounded rationality – "[t]he principle that organisms have limited resources, such as time, information, and cognitive capacity, with which to find solutions to the problems they face." Andreas Wilke and R. Mata, *Cognitive Bias*, as published in *The Encyclopedia of Human Behavior* 531 (2nd ed. 2012).

may be unable to execute appropriately and prone to the cognitive biases discussed below).

In this standard-setting project, one such bound may be the ability of auditors to analyze and integrate different existing standards or process the information required to audit estimates that involve complex processes, which may require sophisticated analytical and modeling techniques. In the presence of bounded rationality, individuals may resort to heuristics (i.e., rules of thumb).⁷⁸ In particular, auditors facing challenges in auditing an accounting estimate may resort to simplifications that might increase the potential for biases or errors that have seeped into financial statements to go undetected.

The literature has linked these cognitive issues to auditors' actions and attitudes, specifically professional skepticism.⁷⁹ For example, "research in psychology and accounting has identified that auditors' judgments are vulnerable to various problems, such as difficulty recognizing patterns of evidence, applying prior knowledge to the current judgment task, weighting evidence appropriately, and preventing incentives from affecting judgment in unconscious ways."⁸⁰ As a result, cognitive limitations may pose a threat to professional skepticism⁸¹ and "[b]ias-inducing tendencies can lead even the

⁷⁸ "The essence of bounded rationality is thus to be a 'process of thought' rather than a 'product of thought': Individuals have recourse to reasonable procedures rather than to sophisticated computations which are beyond their cognitive capacities." Bertrand Munier, Reinhard Selten, D. Bouyssou, P. Bourguine et al., *Bounded Rationality Modeling*, 10 Marketing Letters 233, 234 (1999). In "[s]ituations where evolved task-general procedures are helpful (heuristics, chunks)...agents have difficulty finding even qualitatively appropriate responses...agents are then left with heuristics..." *Id.* at 237.

⁷⁹ Nelson argues that "[p]roblem-solving ability, ethical predisposition, and other traits like self-confidence and tendency to doubt are all related to [professional skepticism] in judgment and action," and, furthermore "[c]ognitive limitations affect [professional skepticism] in predictable ways." Mark Nelson, *A Model and Literature Review of Professional Skepticism in Auditing*, 28 Auditing: A Journal of Practice & Theory 1, 2 (2009).

⁸⁰ *Id.* at 6.

⁸¹ "[A]uditors' judgments can be flawed because, like all people, sometimes they do not consistently follow a sound judgment process and they fall prey to systematic, predictable traps and biases. People, including experienced professionals ... often unknowingly use mental "shortcuts" ... to efficiently navigate complexity. [S]ituations

brightest, most experienced professionals, including auditors, to make suboptimal judgments."⁸² There is further evidence of how cognitive biases resulting from bounded rationality may affect auditing, e.g., that auditors focus primarily on confirming, rather than challenging, management's model.⁸³ As discussed below, this can be seen as evidence of confirmation bias.

Accordingly, the existence of bounded rationality and, in particular, some inherent cognitive biases, might affect auditor judgment when auditing accounting estimates, even separate from any potential conflict of interest.

Some of the biases that might affect auditors include, but are not limited to:

- Anchoring Bias – decision makers anchor or overly rely on specific information or a specific value and then adjust to that value to account for other elements of the circumstance, so that there is a bias toward that value. In the auditing of estimates, the potential exists for anchoring on management's estimates.⁸⁴ This can be seen as a manifestation of findings that auditors may, at times, experience difficulties weighting evidence appropriately.⁸⁵
- Confirmation Bias – a phenomenon wherein decision makers have been shown to actively seek out and assign more weight to evidence that confirms their hypothesis, and ignore or underweight evidence that could

can arise where they systematically and predictably lead to suboptimal judgments and potentially inhibit the application of appropriate professional skepticism." Steven M. Glover and Douglas F. Prawitt, *Enhancing Auditor Professional Skepticism* (Nov. 2013) (a report commissioned by the Standards Working Group of the Global Public Policy Committee), at 10.

⁸² *Id.*

⁸³ See Griffith et al., *Audits of Complex Estimates as Verification of Management Numbers: How Institutional Pressures Shape Practice*.

⁸⁴ For a discussion on anchoring biases and some evidence, see, e.g., Robert Sugden, Jiwei Zheng, and Daniel John Zizzo, *Not All Anchors Are Created Equal*, 39 *Journal of Economic Psychology* 21 (2013).

⁸⁵ Nelson, *A Model and Literature Review of Professional Skepticism in Auditing* 6.

disconfirm their hypothesis. As such, it can be thought of as a form of selection bias in collecting evidence. It becomes even more problematic in the presence of anchoring bias, since auditors may anchor on management's estimate and may only seek out information to corroborate that value (or focus primarily on confirming, rather than challenging, management's model).⁸⁶

- Familiarity Bias – "Familiarity is associated with a general sense of comfort with the known and discomfort with – even distaste for and fear of – the alien and distant."⁸⁷ In the context of auditing accounting estimates, auditors may be biased toward procedures, methods, models, and assumptions that seem more familiar to them, and auditors' familiarity with management may lead them to tend to accept management's assertions without sufficient challenge or consideration of other options.

All of these cognitive biases would pose a threat to the proper application of professional skepticism and an appropriate focus on the potential for management bias in accounting estimates. Importantly, bounded rationality and the associated biases exist in addition to any incentive problems (moral hazard). However, cognitive biases and moral hazard could work in the same direction to increase the likelihood of auditors agreeing with management, not considering contradictory evidence, or discounting the potential importance or validity of alternative models, methods, and assumptions.

The challenges of auditing estimates, in particular, are discussed throughout the literature. For example, Martin, Rich, and Wilks⁸⁸ point out that fair value measurements frequently incorporate forward-looking information as well as judgments, and that, since future events cannot be predicted with certainty, an element of judgment is always involved.

⁸⁶ For a discussion of confirmation bias, see, e.g., Raymond S. Nickerson, *Confirmation Bias: A Ubiquitous Phenomenon in Many Guises*, 2 *Review of General Psychology* 175 (1998). For a discussion of the manifestation of this bias in auditing, see, e.g., Griffith et al., *Audits of Complex Estimates as Verification of Management Numbers: How Institutional Pressures Shape Practice*.

⁸⁷ Gur Huberman, *Familiarity Breeds Investment*, 14 *Review of Financial Studies* 659, 678 (2001).

⁸⁸ See Martin et al., *Auditing Fair Value Measurements: A Synthesis of Relevant Research*.

It is also logical to conclude that the potential for biases also increases in the presence of measurement uncertainty, since there is more latitude in recording an estimate in such circumstances.

Academic studies find that the measurement uncertainty associated with accounting estimates can be substantial.⁸⁹ The measurement uncertainty inherent in estimates allows room for both management bias and error to affect preparers' valuation judgments, and estimates become less useful to capital market participants as they become less reliable.⁹⁰ It is also important for auditors to be wary of their own biases when auditing accounting estimates (e.g., to avoid merely searching for evidence that corroborates management's assertions).⁹¹

Some commenters on the SCP and SAG members were supportive of a new standard taking into account the potential for confirmation bias and emphasized the importance of the auditor's consideration of contradictory evidence. Members of the academic community have also cited studies suggesting a need for improvement in this area. For example, Griffith et al. found in their 2014 study that auditors focused primarily on confirming, rather than challenging, management's model, and appeared to accept management's model as a starting point and then verify aspects of that model.⁹² Furthermore, none of the auditors in the study indicated that he or she considered

⁸⁹ See, e.g., Brant E. Christensen, Steven M. Glover, and David A. Wood, *Extreme Estimation Uncertainty in Fair Value Estimates: Implications for Audit Assurance*, 31 *Auditing: A Journal of Practice & Theory* 127 (2012); Cannon and Bedard, *Auditing Challenging Fair Value Measurements: Evidence from the Field* 2-3, 19.

⁹⁰ See, e.g., Russell Lundholm, *Reporting on the Past: A New Approach to Improving Accounting Today*, 13 *Accounting Horizons* 315 (1999), and Griffith et al., *Audits of Complex Estimates as Verification of Management Numbers: How Institutional Pressures Shape Practice*.

⁹¹ See, e.g., Martin et al., *Auditing Fair Value Measurements: A Synthesis of Relevant Research*.

⁹² See Griffith et al., *Audits of Complex Estimates as Verification of Management Numbers: How Institutional Pressures Shape Practice*.

whether additional factors beyond the assumptions made by management should be included in management's model. This type of behavior is indicative of anchoring bias.⁹³

To address these issues discussed above, the proposal emphasizes the auditor's existing responsibility to apply professional skepticism, consider potential management bias, and evaluate audit evidence. It does so by emphasizing these professional obligations in the specific context of auditing accounting estimates. In addition, the revised terminology used to describe the nature of the auditor's responsibility and many of the new requirements previously described in Section III should guide the auditor in the appropriate application of professional skepticism when auditing estimates. This should also help auditors to overcome, or compensate for, potential biases and identify situations where management is consistently optimistic. The increased emphasis in the proposal on auditors' responsibilities to remain skeptical and to consider all available audit evidence should also discourage shirking (e.g., simply accepting management's assumptions, models, or estimates).

Reinforcing and clarifying auditors' responsibilities may enhance investors' trust that auditors are obtaining sufficient appropriate audit evidence regarding management's accounting estimates, thereby increasing investors' confidence in financial statements and the corresponding audit work performed. An increased confidence in financial statements could ameliorate investors' information asymmetry problem (adverse selection) and allow for a more efficient capital allocation decision.

2. Fostering a More Efficient, Risk-based Audit

In addition to the principal-agent problems, including the potential for bias described above, having multiple standards with similar approaches but varying levels of detail in procedures may impose unnecessary costs. Perceived inconsistencies among existing standards may result in (1) different auditor responsibilities for accounts

⁹³ The problem resulting from this bias can be ameliorated, but not completely solved. Specifically, starting with management's number is often unavoidable since the auditor is reporting on whether the company's financial statements are fairly presented, in all material respects, in conformity with the applicable financial reporting framework. In other words, the audit, by its nature, uses the company's financial statements as a starting point. When reference is made to anchoring bias in this release, it is therefore not intended to refer to the auditor's responsibility to start with management's financial statements, but instead to the auditor's potential failure to effectively challenge management.

for which a similar audit approach would seem appropriate; (2) inconsistent application of standards; and (3) inappropriate audit responses.

Academic research speaks to the undesirable nature of overlapping standards addressing the same issue, which adds to task difficulty⁹⁴ and may, therefore, create unnecessary additional costs, as it is costly to sift through the standards and reconcile potential conflicts. These costs may exacerbate the principal-agent and cognitive challenges discussed above. For example, auditors might, consciously or otherwise, apply the standards in a manner that satisfies their objectives but not those of investors (e.g., auditors may choose an approach with fewer procedures and requirements to minimize audit cost, or for expediency, hence maximizing their profits). The existence of overlapping requirements might also lead to uncertainty about compliance, if auditors do not understand what is required. Finally, overlapping requirements may increase perceived uncertainty about audit quality, since market participants may not fully understand what standard is being, or even should be, applied.

The proposal seeks to address these issues by developing a single standard to replace the existing three standards related to auditing accounting estimates, including fair value measurements. The proposed single standard would further align the requirements with the risk assessment standards through targeted amendments to promote the development of appropriate responses to the risk of material misstatement related to accounting estimates. It would also include an appendix that addresses matters relevant to auditing the fair value of financial instruments.

Finally, existing standards do not differentiate based on the relative risks posed by different sources of fair value measurements. Existing requirements in the existing fair value standard for developing an independent estimate are not tailored to address the various ways in which auditors use third parties to evaluate a company's fair value measurements. Further, the existing requirements in AS 1210 on the auditor's use of specialists do not differentiate between a specialist and a pricing service or a broker or dealer.

The Board understands that pricing information generated by pricing services generally tend to have three main characteristics not shared by other estimates (1) uniformity of product (with little to no differentiation across users, so there is less risk of

⁹⁴ See Brian Bratten, Lisa Milici Gaynor, Linda McDaniel, Norma R. Montague, and Gregory E. Sierra, *The Audit of Fair Values and Other Estimates: The Effects of Underlying Environmental, Task, and Auditor-Specific Factors*, 32 *Auditing: A Journal of Practice & Theory* 7, 15-16 (2013).

inherent bias); (2) work of the pricing service that, in most cases, is not prepared at the direction of a particular client (which is related to the concept of uniformity of product since absence of direction is akin to the product not being tailored to the client); and (3) buyers of the product with little, if any, market power. These characteristics reduce the risk of bias, unless the pricing service has a relationship with the company by which company management has the ability to directly or indirectly control or significantly influence the pricing service. The potential for bias is further attenuated for pricing services, since there is monitoring by the market as a whole, and most of the prices provided by these services are for traded securities or for securities for which quotes are available or for which similar securities are traded.

Overall, the Board believes that differences in relative risk suggest that some third parties (e.g., pricing services and brokers or dealers) may need to be treated differently from others (e.g., specialists) under some circumstances. Commenters on this topic in the SCP were supportive of requirements that acknowledge the differences between specialists and other third parties such as pricing services.

The Board believes that there also are differences between brokers or dealers and pricing services that may warrant differential treatment. Based on outreach and observations from the Board's oversight activities, the Board understands that pricing services tend to accumulate overall market information, rather than engage directly in market transactions, and typically have well-defined methodologies that are used consistently on an ongoing basis. Therefore, they tend to provide customers with more uniform pricing information. Brokers or dealers, on the other hand, are in the business of providing liquidity to the market (by acting as a buyer or seller) and connecting buyers and sellers. As such, it is likely their pricing is more idiosyncratic (i.e., dependent on the party asking for a quote) and brokers or dealers may occasionally be less transparent in pricing the instruments. In addition, not all brokers or dealers necessarily have a firm-wide methodology, as they typically provide prices on a real-time basis. Therefore, the Board believes that the auditor's consideration of pricing information obtained from a broker or dealer, or from a pricing service should differ.

In order to address this issue, the proposal contains an appendix to the standard that more broadly addresses auditing financial instruments, including procedures specific to an auditor's use of evidence from third-party pricing sources. These procedures allow the auditor to use the work of the pricing service used by management in some circumstances (e.g., generally in cases where management uses a pricing service based on trades of similar instruments to value securities with a lower risk of

material misstatement).⁹⁵ This would be an appropriate risk-based audit response, since there is a lower chance of management bias when management uses a pricing service given their greater objectivity, as highlighted before, relative to management and company-employed specialists. In addition, for easier-to-value securities, particularly exchange-traded securities, requiring the auditor to obtain a price from a different source may not provide better evidence since it is likely based on the same underlying information.

In sum, the moral hazard problem, described in Section IV.B.1, could manifest in the auditor not performing appropriate procedures when auditing estimates, such as sufficiently challenging management's estimates or the assumptions underlying estimates, even though such procedures would improve audit quality. In addition, the presence of bounded rationality and the associated cognitive biases, whereby the auditor may be more prone to resort to simplifications (which could, for example, include not challenging certain assumptions) may lead to challenges in auditing estimates. Furthermore, as described in the preceding paragraphs, the presence of multiple standards with similar approaches but varying levels of detail in procedures also may impose unnecessary costs and inefficiencies in auditing estimates. All these issues result in market failure,⁹⁶ because market forces (e.g., investor demands) may not be effective in making the auditor more responsive to investors' concerns regarding how auditors audit estimates.

⁹⁵ The Specialists Release, PCAOB Release No. 2017-003, proposes requirements when, among other things, an auditor uses the work of a company's specialist as audit evidence.

⁹⁶ "Market failure" refers to a situation in which markets fail to function well. One can distinguish between complete and partial market failure. Complete market failure occurs when a market simply does not operate at all, because there are either no willing buyers (but willing producers) or no willing producers (but willing buyers). Partial market failure occurs when a market does function but produces either the wrong quantity of a product, or produces a product at the wrong price, or produces products at the wrong level of quality. For example, a market for public company audits which consistently produces some deficient audits would be considered a market experiencing partial market failure. See, e.g., Francis M. Bator, *The Anatomy of Market Failure*, 72 *The Quarterly Journal of Economics* 351 (1958); and Steven G. Medema, *The Hesitant Hand: Mill, Sidgwick, and the Evolution of the Theory of Market Failure*, 39 *History of Political Economy* 331 (2007).

These issues are not, and cannot efficiently be, addressed through market forces alone because the auditor may not be fully incentivized to address the aforementioned issues. The auditor may not be fully incentivized because auditors may incur additional costs to produce higher audit quality but would earn lower profits on the audit, since audit quality may not be observable and auditors may be unable to charge more for better audits.⁹⁷ Furthermore, because investors are diverse and geographically distributed, and can benefit from standardization, they face a potential collective action problem that creates additional barriers to jointly negotiate with auditors over requirements for auditing accounting estimates.

To mitigate this collective action problem and other potential sources of market failure, investors generally rely on auditing standards that are based on investor and public interests. PCAOB auditing standards establish performance requirements that, if not implemented, can result in costly penalties to the auditor in the form of litigation and reputational risk. In addition to strengthening the performance requirements for auditing accounting estimates, the proposed auditing standards reinforce the need for professional skepticism, which may encourage auditors, for example, to "refram[e] hypotheses so that confirmation biases favor [professional skepticism]," and thereby mitigate the effect of such biases on auditor judgment.⁹⁸

Question:

7. The Board requests comment generally on the analysis of the need for the proposal. The Board is interested in any alternative economic approaches to analyzing the issues presented in this release, including references to relevant data, studies, or academic literature.

⁹⁷ The general effect of cost pressures on audit quality has been studied in the academic literature with varying empirical findings. See, e.g., James L. Bierstaker and Arnold Wright, *The Effects of Fee Pressure and Partner Pressure on Audit Planning Decisions*, 18 *Advances in Accounting* 25 (2001); B. Pierce and B. Sweeney, *Cost-Quality Conflict in Audit Firms: An Empirical Investigation*, 13 *European Accounting Review* 415 (2004); and Scott D. Vandervelde, *The Importance of Account Relations When Responding to Interim Audit Testing Results*, 23 *Contemporary Accounting Research* 789 (2006).

⁹⁸ Nelson, *A Model and Literature Review of Professional Skepticism in Auditing* 2.

C. Economic Impacts of the Proposal

1. Benefits

The proposed standard could lead to two broad categories of benefits. The first relates directly to audit quality and the second relates to fostering an efficient risk-based approach to auditing accounting estimates, including fair value measurements. First, the proposed approach would strengthen auditor responsibilities for auditing accounting estimates, including fair value measurements, which should increase the likelihood that auditors detect material misstatements. Among other things, the proposed standard seeks to further integrate the risk assessment standards, which should encourage a uniform approach to achieve a risk-based audit response. These improvements should enhance audit quality and, in conjunction with the clarification of the procedures the auditor should perform, give investors and audit committees greater confidence in the accuracy of financial statements.⁹⁹ From a capital market perspective, an increase in investors' confidence about the information provided in companies' financial statements resulting from improved audit quality can increase the efficiency of capital allocation decisions. Second, the proposed approach may foster a more efficient and risk-based audit approach.

The extent of these benefits, which are discussed below, would largely depend on the extent to which firms would have to change their practices and methodologies.

⁹⁹ 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, 21 (2011) ("[M]arket illiquidity influences the amount of information that is reflected in prices [and] ... reduces investors' average precision and thus raises the cost of capital. Moreover, the degree of information asymmetry in the economy influences the amount of market illiquidity, which also raises the cost of capital."). Professor Leuz is an economic advisor to the PCAOB's Office of Economic and Risk Analysis. This research was published before he joined the PCAOB. See also Luigi Guiso, Paola Sapienza, and Luigi Zingales, *Trusting the Stock Market*, 63 *Journal of Finance* 2557 (2008), for a discussion on the relationship between confidence and cost of capital. Professor Zingales is the Founding Director of the PCAOB's Center for Economic Analysis, now known as the Office of Economic and Risk Analysis. The research cited here was published before he joined the PCAOB. Additional evidence exists in, among others, DeFond and Zhang, *A Review of Archival Auditing Research* 275; and Jukka Karjalainen, *Audit Quality and Cost of Debt Capital for Private Firms: Evidence from Finland*, 15 *International Journal of Auditing* 88 (2011).

Benefits will be less for firms that have already adopted practices and methodologies similar to the requirements being proposed.

The proposal aims to reduce the problems generated by moral hazard and potential cognitive biases by establishing clear performance requirements for auditing accounting estimates and emphasizing the importance of potential management bias and the need to maintain a skeptical mindset. The main benefits relate to reinforcing the need to evaluate contradictory evidence, helping mitigate potential auditor biases in agreeing with management, increasing auditors' leverage to challenge management, increasing the reliability or precision of financial statements through such challenges (reducing the investors' informational asymmetry problems), and creating a more risk-based audit in general.

For example, tailoring requirements to the audit objective in the proposed standard as described in Section III may help reduce auditors' naturally existing bias. The use of terms such as "evaluate" and "compare" instead of "corroborate" and greater emphasis on auditors identifying the significant assumptions in accounting estimates could promote a more deliberative approach to auditing estimates, rather than a mechanical process of looking for evidence to support management's assertions. Further reinforcing the consideration of the effects of management bias in the risk assessment process should result in audit procedures that are more responsive to the assessed risks. Emphasizing the auditor's responsibilities to exercise professional skepticism would encourage auditors to be more conscious when weighting audit evidence and could reduce instances where auditors failed to consider contradictory evidence. Overall, these changes would lead to greater confidence in financial statements, therefore reducing investors' informational asymmetry problem.

In addition, several proposed changes to the existing standards would help to foster more efficient, risk-based auditing. First, a single standard with clear performance requirements, which is further aligned with the risk assessment standards, would promote consistency and effectiveness in application. Second, a single standard would allow PCAOB staff to develop timely guidance for specific issues when needed.

Uniformity of the standards would also potentially lead to other benefits to auditors and users of financial statements. A single, consistent set of requirements would lead to greater comparability across audits. In turn, assuming that firms comply with the new requirements, this should increase and make more uniform the quality of the information presented in the financial statements. Audits would be more consistent and efficient, since there should be no doubt on what requirements to apply. Users of financial statements would also know with more certainty what requirements are being applied, again under the assumption that firms comply with the new requirements, and therefore perceive financial statements as being more precise, reducing the information

problem. Additionally, having a uniform set of requirements might enhance the audit committee's understanding of the auditor's responsibilities and, therefore, potentially facilitate communications between the audit committee and the auditor.

By aligning more closely with the risk assessment standards, the proposal may also lead to a better allocation of auditing resources, with more hours, effort, and work being dedicated to higher-risk accounts. This would potentially lead to an increase in audit efficiency. Essentially, the new standard may lead to increased audit quality for harder-to-measure estimates (e.g., estimates with high inherent subjectivity) due to enhanced procedures, while for easier-to-measure and lower-risk estimates, the impact may primarily be an increase in efficiency.

Through the clarification of requirements in the existing estimates standards and further alignment with the risk assessment standards, auditors would have a better understanding of their duties, which could reduce the risk that auditors would perform unnecessary or ineffective procedures. Moreover, auditors may gain efficiencies that possibly would manifest themselves through reduced use of auditor resources, holding constant audit quality.

Requirements specific to pricing services that consider their differing business models would also allow for a more efficient audit. By drawing a clear and meaningful differentiation between specialists and pricing services, the proposed standard would allow for more tailored audit procedures, effectively allowing auditors to direct resources toward areas that pose a higher risk and are more difficult to audit. This approach would lead to an allocation of effort to areas with higher risk.

Question:

8. The Board requests comment generally on the potential benefits to investors and the public. Are there additional benefits the Board should consider?
2. *Costs*

The Board recognizes that imposing new requirements may result in additional costs to auditors and the companies they audit. In addition, to the extent that auditors incur higher costs to implement proposed requirements and are able to pass on at least part of the increased costs through an increase in audit fees, companies and investors could incur an indirect cost. Auditors may incur certain fixed costs (costs that are generally independent of the number of audits performed) related to implementing the proposal. These include costs to update audit methodologies and tools, prepare training materials, and conduct training. Larger firms are likely to update methodologies using

internal resources, whereas smaller firms are more likely to purchase updated methodologies from external vendors.

In addition, auditors may incur certain variable costs (costs that are generally dependent on the number of audits performed) related to implementing the proposal. These include costs of implementing the proposal at the audit engagement level (e.g., in the form of additional time and effort spent on the audit). For example, the suggested approach would require, in some instances, more procedures related to assessing risk and testing management's process, such as evaluating which of the assumptions used by management are significant. This could impose additional costs on auditors and require additional management time. Recurring costs may also increase if firms were to increase their use of specialists in response to the proposed auditing requirements. If this were to occur, it may disproportionately affect firms that do not currently employ or engage specialists and instead rely on the work of company specialists, potentially reducing the competitiveness of such firms.¹⁰⁰

To the extent the proposed amendments require new or additional procedures, they may increase costs. For example, the proposed amendment to AS 2110.52 would require the auditor to consider, as part of the key engagement team member's discussion of the potential for material misstatement due to fraud, how the financial statements could be manipulated through management bias in accounting estimates in significant accounts and disclosures. The proposed requirement would focus the auditor's attention on a risk that is particularly relevant to accounting estimates and further underscores the importance of applying professional skepticism in this area. The additional consideration could further increase costs.

The proposal's impact on the auditor's fixed and variable costs would likely vary depending on, among other things, the extent to which the proposed requirements have already been incorporated in accounting firms' audit methodologies or applied in practice by individual engagement teams. The proposal sets minimum requirements when using pricing information obtained from pricing services, so audit firms that are doing less than the proposed minimum requirements would experience higher cost increases. In addition, the proposal's impact could vary based on the size and complexity of an audit. All else equal, anticipated costs generally would be expected to be scalable: higher for larger, more complex audits than for smaller, less complex audits.

¹⁰⁰ See Specialists Release, PCAOB Release No. 2017-003.

The economic impact of the proposal on larger accounting firms and smaller accounting firms may differ. For example, larger firms and smaller firms may employ different methodologies and approaches when auditing accounting estimates, including fair value measurements. Additionally, larger accounting firms would likely take advantage of economies of scale by distributing fixed costs (e.g., updating audit methodologies) over a larger number of audit engagements. Smaller accounting firms would likely distribute their fixed costs over fewer audit engagements. However, larger accounting firms would likely incur greater variable costs due to the proposal than smaller firms, because larger firms more often perform larger audits and it seems likely that these larger audits will more frequently involve accounting estimates with complex processes. It is not clear whether these costs (fixed and variable), as a percentage of total audit costs, would be greater for larger or for smaller accounting firms.

In addition, companies being audited may incur costs related to the proposed amendments, both directly and indirectly. Companies could incur direct costs from engaging with or otherwise supporting the auditor performing the audit. For example, some companies could face costs of providing documents and responding to additional auditor requests for audit evidence, due to a more rigorous evaluation of management's assumptions and models. Companies may also incur additional costs if, as a result of the proposal, auditors need to discuss additional information with audit committees relating to accounting estimates. In addition, to the extent that auditors are able to pass on at least part of the increased costs they incur by increasing audit fees, companies and investors could incur an indirect cost.

Questions:

9. The Board requests comment generally on the potential costs to auditors and companies they audit. Are there additional costs the Board should consider?
 10. Are there additional academic studies or data the Board should consider? The Board is particularly interested in studies or data that could be used to assess potential benefits and costs.
3. *Unintended Consequences*

One potential unintended consequence of replacing three existing standards with one standard might be a perceived loss of some explanatory language, since the proposal is intended to eliminate redundancies in the current standards. The PCAOB is addressing this potential risk by including the relevant information in this release and, if needed, could also issue more directed staff practice alerts or guidance at a later date.

Another potential unintended consequence of including audit procedures tailored to using information from third-party pricing sources is that the procedures could become obsolete as technology and changes in capital markets affect how fair values of financial instruments are developed by these third parties. In addition, the upcoming implementation of significant changes to the financial reporting frameworks relating to financial instruments could result in the identification of matters that are not addressed by the proposal. The proposal includes a special topics appendix to address certain matters relevant to the auditing of the fair value of financial instruments. Including these matters in a special topics appendix could help mitigate the potential unintended consequences mentioned above by allowing for limited updates to be made, or additional requirements to be added, to the appendix in the future without the need to make more pervasive changes to the broader auditing standard on accounting estimates.

An additional, possible unintended consequence may result from this proposal if an auditor exploits the latitude allowed under the proposal for using information from the company's pricing service, but does so inappropriately. The proposal does, however, set forth specific direction for evaluating the relevance and reliability of such information from the pricing service.

Overall, the Board expects that the benefits of the proposed standard would justify any potential unintended negative effects.

Question:

11. The Board requests comment generally on the potential unintended consequences of the proposal. Are the responses to the potential unintended consequences discussed in the release adequate? Are there additional potential unintended consequences that the Board should consider? If so, what responses should be considered?

D. Alternatives

The development of the proposal involved considering a number of alternative approaches to address the problems described above. This section explains (1) why standard-setting is preferable to other policy-making approaches, such as providing interpretive guidance or enhancing inspection or enforcement efforts; (2) other standard-setting approaches that were considered; and (3) key policy choices made by the Board in determining the details of the proposed standard-setting approach.

As previously discussed, the SCP discussed and requested comment on the alternative approaches described below. These comments are discussed further in Appendix 3.

1. *Alternatives to Standard Setting - Why Standard Setting is Preferable to Other Policy-Making Alternatives*

Among the Board's policy tools, an increased focus on inspections, enforcement of existing standards, or providing additional guidance are alternatives to revising the standards. The Board considered whether increasing inspections or enforcement efforts would be effective corrective mechanisms to address concerns with the audit of estimates, including fair value measurements, and concluded that inspections or enforcement actions alone would be less effective in achieving the Board's objectives than in combination with amending auditing standards.

Inspection and enforcement actions take place after audits have occurred (and potential investor harm in the case of insufficient audit performance). They reinforce future adherence to current auditing standards. Given the differences in the existing estimates standards discussed previously, devoting additional resources to inspections and enforcement activities without improving the relevant performance requirements for auditors would increase auditors' compliance with what the Board and many stakeholders view as standards that could be improved.

As mentioned earlier, the PCAOB issued seven Staff Audit Practice Alerts between 2007 and 2014 that addressed, to varying degrees, auditing accounting estimates.¹⁰¹ The PCAOB has considered issuing additional practice alerts or other staff guidance specific to the use of third parties such as pricing services.¹⁰² This approach could provide targeted guidance to auditors in a relatively short period of time. However, guidance issued by the staff would be limited to discussing the auditor's application of the existing standards and, given the inconsistencies in these standards discussed herein, guidance would be an ineffective tool and not a long-term solution.

The Board's approach reflects its conclusion that, in these circumstances, standard setting is needed to fully achieve the benefits resulting from improvement in the auditing of estimates.

¹⁰¹ See Staff Audit Practice Alert Nos. 2-4, 7, 9-10, 12.

¹⁰² Other standard setters have issued guidance relating to their existing standards. For example, the IAASB issued International Auditing Practice Note 1000, *Special Considerations in Auditing Financial Instruments* (Dec. 16, 2011), to provide guidance to auditors when auditing fair value measurements of financial instruments.

2. *Other Standard-Setting Alternatives Considered*

The Board considered certain standard-setting alternatives, including (1) developing a separate standard on auditing the fair value of financial instruments, or (2) enhancing the existing estimates standards through targeted amendments.

a. *Developing a Separate Standard on Auditing the Fair Value of Financial Instruments*

The Board considered, but is not proposing, a separate standard that would specifically address auditing the fair value of financial instruments. While this approach could provide a framework for auditors specific to an area that may pose significant auditing challenges, the addition of a separate standard could result in confusion and potential inconsistencies in the application of other standards. Existing PCAOB standards already include requirements for auditing fair value measurements and for auditing derivatives and securities. Additionally, the auditing issues pertinent to accounting estimates, including financial instruments, inherently overlap. Instead, the proposal includes a special topics appendix, which separately discusses certain matters relevant to financial instruments without repeating requirements that relate more broadly to all estimates, such as evaluating audit evidence or audit committee communications.

b. *Enhancing the Existing Estimates Standards through Targeted Amendments*

The Board considered, but is not proposing, amending rather than replacing the three existing standards relating to auditing accounting estimates, fair value measurements, derivatives, and securities. This approach could result in fewer changes to firms' existing audit methodologies. However, retaining multiple standards with similar requirements would not eliminate redundancy and could result in confusion and potential inconsistencies in the application of the standards. In addition, the nature and extent of amendments that might be made to the existing standards could essentially result in new standards. The approach presented in the proposed standard is designed to be clearer and result in more effective audits.

As previously discussed, the SCP solicited comments on standard-setting alternatives. Comments that were supportive of a single standard generally pointed to the conceptual overlap in auditing accounting estimates and fair value measurements. Some commenters stated that issues related to fair value measurements were unique and warranted a separate auditing standard but did not specify how the auditing approach could or should differ for accounting estimates and fair value measurements. In response to those commenters who noted differences related to fair value

measurements, the proposed standard includes a special topics appendix that addresses certain matters relevant to auditing the fair value of financial instruments.

3. *Key Policy Choices*

Given a preference for a single, comprehensive standard applicable to all accounting estimates, including fair value measurements, in significant accounts and disclosures, the Board considered different approaches to addressing key policy issues.

a. Include a Disclosure Requirement in the Proposed Standard

The increasing prevalence and significance of accounting estimates, many with subjective assumptions, measurement uncertainty, and complex processes, may exacerbate the problems discussed through this release. The proposed new standard can only go so far in addressing these issues, since subjectivity cannot be eliminated through additional performance requirements in auditing standards. This could be interpreted to suggest the need for disclosure of additional information to investors to at least make them aware of such uncertainty.

The Board considered including specific discussion in the auditor's report related to certain estimates (for example, those that give rise to significant risk). Information asymmetry may hinder the well-functioning of markets and create inefficiency in capital allocation.¹⁰³ One way to ameliorate these informational asymmetry problems is through more disclosure. This alternative would entail adding to the standard a requirement for specific disclosures in the auditor's report related to certain estimates. For instance, one could require disclosures about auditor-developed ranges of the values of estimates, or whether the company used a third-party to assist them in developing an estimate.

¹⁰³ For instance, adverse selection (or hidden information) problems may arise in the presence information asymmetry (e.g., by leading to an undersupply of higher-quality products). When buyers and sellers have asymmetric information about market transactions, the trades that are transacted are likely to be a subset of the feasible, welfare-improving trades. Many trades that would voluntarily occur if all parties had full information will not take place. See, e.g., Akerlof, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*. See also Lambert et al. *Information Asymmetry, Information Precision, and the Cost of Capital* 21 ("[T]he degree of information asymmetry in the economy influences the amount of market illiquidity, which also raises the cost of capital.").

This, in and of itself, would not eliminate the subjectivity inherent in many accounting estimates, but these additional disclosures would provide more information to investors, potentially reducing the information asymmetry between, on one hand, investors and, on the other hand, auditors and management. The net effect on investors could be positive, as it could allow them to make a more informed decision about their investment allocation.

However, the Board also considered whether requiring auditor disclosures relating to estimates would be duplicative of the proposed requirement to disclose critical audit matters ("CAMs"). The Board is considering adopting changes to the auditor's report that would generally require auditor reporting of CAMs: matters communicated or required to be communicated to the audit committee that relate to accounts or disclosures that are material to the financial statements and involved especially challenging, subjective or complex auditor judgment.¹⁰⁴ Because that new standard, if adopted and approved by the SEC, would require auditor reporting about financial statement estimates and fair value measurements in circumstances that meet that definition, this proposed standard does not include any additional reporting requirements.

b. Require the Auditor to Develop an Independent Expectation

Given the variety of types of accounting estimates and the ways in which they are developed, the Board is proposing to retain the three common approaches from the existing standards for auditing accounting estimates, including fair value measurements. In addition, the proposal would continue to require the auditor to determine what substantive procedures are responsive to the assessed risks of material misstatement.

The Board considered, but is not proposing, requiring the auditor to develop an independent expectation for certain estimates, or when an estimate gives rise to a significant risk. Some members of the Board's advisory groups advocated a requirement for the auditor to develop an independent expectation in addition to testing management's process. In addition, some SAG members suggested a requirement for the auditor to develop an independent expectation rather than test management's process.

¹⁰⁴ See *The Auditor's Report on an Audit of Financial Statements When the Auditor Expresses an Unqualified Opinion and Related Amendments to PCAOB Standards*, PCAOB Release No. 2017-001 (June 1, 2017).

Although requiring an independent expectation could help reduce the risk of anchoring bias, it may not be feasible in many situations. For many accounting estimates, the data and significant assumptions underlying the estimate often depend on internal company information. Also, developing a customized method or model for a particular company's estimate may not be practical, and a more general method or model could be less precise than the company's own model. In those situations, the auditor may not have a reasonable alternative to testing the company's process.

Moreover, some commenters on the SCP cautioned against prescribing a specific approach for testing accounting estimates, noting that the selection should be based on a number of matters, including the identified and assessed risks of material misstatement. Those commenters also noted that facts and circumstances and the nature of the accounting estimate often dictate which approach or approaches are chosen by the auditor.

c. Require Additional Audit Procedures When an Accounting Estimate Gives Rise to a Significant Risk

The Board considered including additional requirements when an accounting estimate gives rise to a significant risk, either more broadly or specifically when a wide range of measurement uncertainty exists. Alternatives considered included:

- Establishing that certain estimates are presumed to give rise to a significant risk (e.g., mandating that the allowance for loan losses represents a significant risk). The Board further considered comments on the SCP that suggested that, if the Board were to determine that certain estimates are presumed to give rise to a significant risk, the presumption should be rebuttable.
- Establishing specific procedures that would depend on the risk determined to be significant (e.g., the use of a complex model determined to give rise to a significant risk would result in the auditor being required to perform specific procedures on that model).
- Including requirements similar to those in International Standard on Auditing 540, *Auditing Accounting Estimates, Including Fair Value Accounting Estimates, And Related Disclosures* ("ISA 540") and AU-C Section 540, *Auditing Accounting Estimates, Including Fair Value*

Accounting Estimates, And Related Disclosures ("AU-C 540")¹⁰⁵ that would require the auditor to evaluate how management has considered alternative outcomes and why it has rejected them when significant measurement uncertainty exists. This was suggested by some who commented on the SCP as an alternative to establishing that certain estimates are presumed to give rise to a significant risk.

Including additional requirements when an estimate gives rise to a significant risk would mandate the auditor to direct additional attention to that risk. AS 2301, however, already requires an auditor to perform substantive procedures, including tests of details that are specifically responsive to the assessed risks. This includes circumstances when the degree of complexity or judgment in the recognition or measurement of financial information related to the risk, especially those measurements involving a wide range of measurement uncertainty, give rise to a significant risk.¹⁰⁶ Thus, the alternatives discussed above would be duplicative of this existing requirement in some ways and could result in additional audit effort without significantly improving audit quality. Additionally, including prescriptive requirements for significant risks could result in the auditor performing only the required procedures when more effective procedures exist, or could provide disincentives for the auditor to deem a risk significant in order to avoid performing the additional procedures.

The SCP requested comment on whether certain types of accounting estimates or fair value measurements should be presumed to be a significant risk. Of the commenters that responded to this topic, many argued that a presumption of significant risk in all cases for certain accounting estimates would not be appropriate. Moreover, requiring additional audit procedures would not reduce the inherent uncertainty in certain estimates.

Accordingly, the Board is not proposing these alternatives in favor of retaining the existing requirement in AS 2301.

V. Special Considerations for Audits of Emerging Growth Companies

The proposed standard and amendments would apply to audits of issuers, as defined in Section 2(a)(7) of Sarbanes-Oxley. As discussed below, the PCAOB is seeking comment on whether the proposed amendments should apply to audits of

¹⁰⁵ See paragraphs 15-16 of ISA 540 and AU-C 540.

¹⁰⁶ See AS 2301.11 and AS 2110.71f.

emerging growth companies ("EGCs"), as defined in Section 3(a)(80) of the Securities and Exchange Act of 1934 ("Exchange Act").

Pursuant to Section 104 of the Jumpstart Our Business Startups ("JOBS") Act, any rules adopted by the Board subsequent to April 5, 2012, generally do not apply to the audits of EGCs unless the SEC "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 will promote efficiency, competition, and capital formation."¹⁰⁷ As a result of the JOBS Act, the rules and related amendments to PCAOB standards the Board adopts are generally subject to a separate determination by the SEC regarding their applicability to audits of EGCs.

General data on EGCs¹⁰⁸ indicate that, among other things, a majority of EGCs are smaller public companies that are relatively new to the SEC reporting process. As a result, there is less information available to investors regarding such companies relative to the broader population of public companies. Therefore, EGCs are susceptible to the same issues described throughout this release, perhaps being affected even more by information asymmetry problems. When confronted with information asymmetry, investors may require a larger risk premium, and thus increase the cost of capital to companies.¹⁰⁹ Reducing information asymmetry, therefore, can lower the cost of capital

¹⁰⁷ See Pub. L. No. 112-106 (Apr. 5, 2012). See 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 proposed amendments do not fall within either of these two categories.

¹⁰⁸ See *White Paper on Characteristics of Emerging Growth Companies as of November 15, 2016* (Mar. 28, 2017) ("EGC White Paper"), available on the Board's website.

¹⁰⁹ See, e.g., Lambert et al., *Information Asymmetry, Information Precision, and the Cost of Capital* 21 ("[M]arket illiquidity influences the amount of information that is reflected in prices [and] ... reduces investors' average precision and thus raises the cost of capital. Moreover, the degree of information asymmetry in the economy influences the amount of market illiquidity, which also raises the cost of capital.").

to companies, including EGCs, by decreasing the risk premium required by investors.¹¹⁰ Additionally, the Board believes that accounting estimates are common in the financial statements of many EGCs.¹¹¹ Therefore, investors in EGCs may benefit as much as, if not more than, investors in other types of issuers as a result of the proposed amendments.

Academic research suggests that EGCs may have a higher degree of information asymmetry relative to the broader population of operating issuers. Although the degree of information uncertainty surrounding a particular issuer is unobservable, 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.¹¹² To the extent that EGCs can be characterized as exhibiting one or more of these properties, they may have a greater degree of information asymmetry relative to the broader population of issuers, hence enhancing the need for applying the proposed amendments to audits of EGCs.

There were 1,947 companies that identified themselves as EGCs in at least one SEC filing since 2012 and have filed audited financial statements with the SEC in the 18

¹¹⁰ For a discussion of how increasing reliable public information about a company can reduce risk premium, see Easley and O'Hara, *Information and the Cost of Capital* 1553.

¹¹¹ See EGC White Paper, which states, among other things, that the five SIC codes with the highest total assets as a percentage of the total assets for the EGC filer populations are (i) real estate investment trusts; (ii) state commercial banks; (iii) pharmaceutical preparations; (iv) federally chartered savings institutions; and (v) crude petroleum and natural gas. The financial statements of companies operating in these industries would likely have accounting estimates that include, for example, impairments, allowances for loan losses, and depreciation.

¹¹² See, e.g., David Aboody and Baruch Lev, *Information Asymmetry, R&D, and Insider Gains*, 55 *Journal of Finance* 2747 (2002); Michael J. Brennan and Avanidhar Subrahmanyam, *Investment Analysis and Price Formation in Securities Markets*, 38 *Journal of Financial Economics* 361 (1995); Varadarajan V. Chari, Ravi Jagannathan, and Aharon R. Ofer, *Seasonalities in Security Returns: The Case of Earnings Announcements*, 21 *Journal of Financial Economics* 101 (1988); and Raymond Chiang, and P. C. Venkatesh, *Insider Holdings and Perceptions of Information Asymmetry: A Note*, 43 *Journal of Finance* 1041 (2012).

months preceding the measurement date.¹¹³ Approximately 97% of EGCs are audited by firms that also audit non-EGCs that are issuers and 38% of EGC filers were audited by firms that provided audit reports for more than 100 issuers and were required to be inspected on an annual basis by the PCAOB.¹¹⁴ Any new PCAOB standards and amendments to existing standards determined not to apply to the audits of EGCs, therefore will require auditors to differentiate requirements between clients and develop different methodologies. There is potential for continuing confusion, as the three existing PCAOB standards would remain in effect for audits of EGCs and firms potentially would have to keep two different methodologies. This would run counter to the proposal's objective of improving audit practice by setting forth a more uniform, risk-based approach to auditing accounting estimates, including fair value measurements.

Questions:

12. The Board requests comment generally on the analysis of the impacts of the proposal on EGCs. Are there reasons why the proposal should not apply to audits of EGCs? What impact would the proposal likely have on EGCs, and how would this affect efficiency, competition, and capital formation?
13. Are there additional economic considerations associated with this proposal that the Board should consider? If so, what are those considerations?

VI. Applicability of the Proposed Requirements to Audits of Brokers and Dealers

The proposed standard and amendments would apply to audits of brokers and dealers, as defined in Sections 110(3)-(4) of Sarbanes-Oxley. The information asymmetry between the management of brokers and dealers and their customers about the brokers' and dealers' financial condition may be significant and of particular interest to customers, as a broker or dealer may have custody of customer assets, which could become inaccessible to the customers in the event of the insolvency of the broker or dealer. In addition, unlike the owners of brokers and dealers, who themselves may be managers and thus may be subject to minimal or no information asymmetry, customers of brokers and dealers may, in some instances, be large in number and may not be expert in the management or operation of brokers and dealers. Such information

¹¹³ See EGC White Paper.

¹¹⁴ *Id.*

asymmetry between the management and the customers of brokers and dealers makes the role of auditing important to enhance the reliability of financial information, especially given that the use of estimates, including fair value measurements, is prevalent among brokers and dealers. The provision to regulatory agencies of reliable and accurate accounting estimates on brokers' and dealers' financial statements may enable these agencies to better monitor these important market participants. Better audits may also help prevent accounting fraud that affects brokers' and dealers' customers and that may be perpetrated, for example, through artificial valuations of securities. Therefore, the proposal may also benefit customers and regulatory authorities of brokers and dealers by increasing confidence that brokers and dealers are able to meet their obligations to their customers and are in compliance with regulatory requirements.

Accordingly, the discussion in Section IV of the need for the proposed standard and amendments, as well as the costs, benefits, alternatives considered, and potential unintended consequences to auditors and the companies they audit, also applies to audits of brokers and dealers. In addition, with respect to the impact of the proposal on customers of brokers and dealers, the expected improvements in audit quality described in Section IV.C.1 would benefit such customers, along with investors, capital markets and auditors, while the proposed requirements are not expected to result in any direct costs or unintended consequences to customers of brokers and dealers. The Board is seeking comment on any factors specifically related to audits of brokers and dealers that may affect the application of the proposal to those audits.

Question:

14. Are there any factors specifically related to audits of brokers and dealers that may affect the application of the proposal to those audits?

VII. Effective Date

The Board seeks comment on the amount of time auditors would need before the proposed new auditing standard and amendments become effective, if adopted by the Board and approved by the SEC. Specifically, the Board is considering whether compliance with an adopted standard and amendments should be required for audits of fiscal years beginning in the year after approval by the SEC (or for audits of fiscal years beginning two years after the year of SEC approval if that approval occurs in the fourth quarter).

Questions:

15. How much time following SEC approval would accounting firms need to implement the proposed requirements?

16. Would the effective date as described above provide challenges for auditors? If so, what are those challenges, and how should they be addressed?

VIII. List of Appendices

The Board's proposal includes this release and the following appendices:

- Appendix 1 contains the text of the proposed standard;
- Appendix 2 contains the text of other related proposed amendments to PCAOB auditing standards and rules; and
- Appendix 3 details certain aspects of the proposed standard and amendments and provides additional questions for commenters.

IX. Opportunity for Public Comment

The Board is seeking comments on all aspects of its proposal, as well as specific comments on the proposed standard and amendments. Among other things, the Board is seeking comment on the economic analysis relating to its proposal, including potential costs. To assist the Board in evaluating such matters, the Board is requesting relevant information and empirical data regarding the proposed standard and amendments.

Written comments should be sent to the Office of the Secretary, PCAOB, 1666 K Street, NW, Washington, DC 20006-2803. Comments also may be submitted by e-mail to comments@pcaobus.org or through the Board's website at www.pcaobus.org. All comments should refer to PCAOB Rulemaking Docket Matter No. 043 in the subject or reference line and should be received by the Board no later than August 30, 2017. Written comments on the proposed requirements in the companion release on the auditor's use of the work of specialists should refer to PCAOB Rulemaking Docket Matter No. 044 in the subject or reference line.

The Board will consider all comments received. After the close of the comment period, the Board will determine whether to adopt final rules, with or without changes from the proposal. Any final rules adopted will be submitted to the SEC for approval. Pursuant to Section 107 of Sarbanes-Oxley, proposed rules of the Board do not take effect unless approved by the SEC. Standards are rules of the Board under Sarbanes-Oxley.

On the 1st day of June, in the year 2017, 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

June 1, 2017

APPENDIX 1

[AS 2501 is proposed to be retitled and amended by replacing the paragraphs with the following:]

Proposed Auditing Standard AS 2501: *Auditing Accounting Estimates, Including Fair Value Measurements*

Introduction

.01 This standard establishes requirements for auditing accounting estimates (including fair value measurements) in significant accounts and disclosures in financial statements.

.02 An accounting estimate is a measurement or recognition in the financial statements of (or a decision to not recognize) an account, disclosure, transaction, or event that generally involves subjective assumptions and measurement uncertainty. For purposes of this standard, a fair value measurement is a form of accounting estimate.

Objective

.03 The objective of the auditor is to obtain sufficient appropriate audit evidence to determine whether accounting estimates are reasonable in the circumstances, have been accounted for and disclosed in conformity with the applicable financial reporting framework, and are free from bias that results in material misstatement.

Identifying and Assessing Risks of Material Misstatement

.04 AS 2110, *Identifying and Assessing Risks of Material Misstatement*, establishes requirements regarding the process of identifying and assessing risks of material misstatement. This process includes (1) identifying accounting estimates in significant accounts and disclosures; (2) understanding the process by which accounting estimates are developed;¹ and (3) identifying and assessing the risks of material misstatement related to accounting estimates, which includes determining whether the components of

¹ See AS 2110.28 (as proposed to be amended – see Appendix 2).

estimates in significant accounts and disclosures are subject to significantly differing risks,² and which accounting estimates are associated with significant risks.

Note: AS 2110.60 and .60A (as proposed to be amended – see Appendix 2) set forth risk factors relevant to the identification of significant accounts and disclosures involving accounting estimates. Paragraph .A1 in Appendix A of this standard sets forth matters that the auditor should take into account for identifying and assessing risks of material misstatement related to the fair value of financial instruments.

Responding to the Risks of Material Misstatement

.05 AS 2301, *The Auditor's Responses to the Risks of Material Misstatement*, requires the auditor to design and implement appropriate responses that address risks of material misstatement. This includes applying substantive procedures to accounting estimates in significant accounts and disclosures.

Note: The auditor's response involves testing whether the significant accounts and disclosures are in conformity with the applicable financial reporting framework.³

Note: If different components of an accounting estimate in a significant account or disclosure are subject to significantly differing risks of material misstatement, the auditor's responses should include procedures that are responsive to the differing risks of material misstatement.

Note: The auditor's responses to the assessed risks of material misstatement, particularly fraud risks, should involve the application of professional skepticism in gathering and evaluating audit evidence.⁴

.06 AS 2301 provides that as the assessed risk of material misstatement increases, the evidence from substantive procedures that the auditor should obtain also increases.

² See AS 2110.63.

³ See AS 2301.36 (as proposed to be amended – see Appendix 2).

⁴ See AS 2301.07.

The evidence provided by substantive procedures depends upon the mix of the nature, timing, and extent of those procedures.⁵

.07 In performing substantive procedures⁶ to respond to the identified and assessed risks of material misstatement associated with accounting estimates, the auditor should test an accounting estimate using one or a combination of the following approaches:

- a. Test the company's process used to develop the accounting estimate (see paragraphs .09-.20 of this standard);
- b. Develop an independent expectation for comparison to the company's estimate (see paragraphs .21-.26 of this standard); and
- c. Evaluate audit evidence from events or transactions occurring after the measurement date related to the accounting estimate for comparison to the company's estimate (see paragraphs .27-.29 of this standard).

Note: The auditor may use any of the three approaches (individually or in combination). However, the auditor's understanding of the process the company used to develop the estimate, and the results of tests of relevant controls, should necessarily inform the auditor's decisions about the approach he or she takes to auditing an estimate.

Use of an Auditor's Specialist

.08 If the auditor engages a specialist to assist in obtaining or evaluating audit evidence, the auditor should also comply with the requirements of [Proposed Auditing Standard AS 1210, *Using the Work of an Auditor-Engaged Specialist* – See PCAOB Release No. 2017-003]. If the auditor uses a specialist employed by the auditor to assist in obtaining or evaluating audit evidence, the auditor should also comply with the

⁵ See AS 2301.37.

⁶ AS 2301.36 states that the auditor should perform substantive procedures for each relevant assertion of each significant account and disclosure, regardless of the assessed level of control risk.

requirements set forth in [Proposed Appendix C to AS 1201, *Supervision of the Audit Engagement* – See PCAOB Release No. 2017-003].⁷

Testing the Company's Process Used to Develop the Accounting Estimate

.09 Testing the company's process involves performing procedures to test and evaluate the methods, data, and significant assumptions used in developing the estimate, in order to form a conclusion about whether the estimate is reasonable in the circumstances, in conformity with the applicable financial reporting framework, and free from bias that results in material misstatement.⁸

Evaluating the Company's Methods

.10 The auditor should evaluate whether the methods used by the company⁹ to develop the accounting estimates are:

- a. In conformity with the requirements of the applicable financial reporting framework; and
- b. Appropriate for the nature of the related account or disclosure and the business, industry, and environment in which the company operates.

Note: Evaluating whether the methods are in conformity with the requirements of the applicable financial reporting framework includes

⁷ See paragraph .16 of AS 2101, *Audit Planning*, which describes the auditor's responsibility to determine whether specialized skill or knowledge is needed to perform appropriate risk assessments, plan or perform audit procedures, or evaluate audit results.

⁸ See also paragraphs .24-.27 of AS 2810, *Evaluating Audit Results*, which describe the auditor's responsibilities for evaluating the qualitative aspects of the company's accounting practices, including the effect of management bias on the financial statements.

⁹ See also AS 2110.12, which describes the auditor's responsibilities for obtaining an understanding of the company's selection and application of accounting principles, including accounting principles used in the relevant industry.

evaluating whether the data and significant assumptions are appropriately applied under the applicable financial reporting framework.

.11 If the company has changed the method for determining the accounting estimate, the auditor should determine the reasons for such change and evaluate the appropriateness of the change. This includes evaluating changes in methods that represent changes in accounting principles in accordance with AS 2820, *Evaluating Consistency of Financial Statements*.¹⁰ In circumstances where the company has determined that different methods result in significantly different estimates, the auditor should obtain an understanding of the reasons for the method selected by the company and evaluate the appropriateness of the selection.¹¹

Testing Data Used

.12 AS 1105, *Audit Evidence*, requires the auditor, when using information produced by the company as audit evidence, to evaluate whether the information is sufficient and appropriate for purposes of the audit by performing procedures to: (1) test the accuracy and completeness of the information or to test the controls over the accuracy and completeness of that information, and (2) evaluate whether the information is sufficiently precise and detailed for purposes of the audit.¹²

.13 If the company uses data from an external source, the auditor should evaluate the relevance and reliability of the data in accordance with AS 1105.

.14 The auditor should also evaluate whether the data was appropriately used by the company in developing the accounting estimate by evaluating whether:

¹⁰ See also AS 2820.06, which describes the auditor's responsibility for evaluating a change in accounting estimate effected by a change in accounting principle.

¹¹ See also AS 2301.05d, which requires the auditor to evaluate whether the company's selection and application of significant accounting principles, particularly those related to subjective measurements, are indicative of bias that could lead to material misstatement of the financial statements.

¹² See AS 1105.10.

- a. The data is relevant to the measurement objective for the accounting estimate;
- b. The data is internally consistent with its use by the company in other estimates tested; and
- c. The source of the company's data has changed from the prior year and, if so, whether the change is appropriate.

Identification of Significant Assumptions

.15 The auditor should identify which of the assumptions used by the company are significant assumptions to the accounting estimate, that is, the assumptions that are important to the recognition or measurement of the accounting estimate in the financial statements. Factors that are relevant to identifying significant assumptions include whether the assumptions:

- a. Are sensitive to variation, such that minor changes in the assumption can cause significant changes in the estimate;
- b. Are susceptible to manipulation or bias;
- c. Involve unobservable data or company adjustments of observable data;
- d. Depend on the company's intent and ability to carry out specific courses of action;¹³ or
- e. Otherwise are related to an identified and assessed risk of material misstatement of the estimate.

Note: If the company has identified significant assumptions used in an accounting estimate, the auditor's identification of significant assumptions should also include those assumptions.¹⁴

¹³ See paragraph .17 of this standard.

¹⁴ See *also* paragraph .18 of this standard, which sets forth requirements related to critical accounting estimates identified by management.

Evaluating the Reasonableness of Significant Assumptions

.16 The auditor should evaluate the reasonableness of the significant assumptions used by the company to develop the estimate, both individually and in combination. This includes evaluating whether:

- a. The company has a reasonable basis for the significant assumptions used and, when applicable, for its selection of assumptions from a range of potential assumptions; and
- b. The significant assumptions are consistent with the following, where applicable:
 - i. Relevant industry, regulatory, and other external factors, including economic conditions;
 - ii. The company's objectives, strategies, and related business risks;¹⁵
 - iii. Existing market information;
 - iv. Historical or recent experience, taking into account changes in conditions and events affecting the company; and
 - v. Other significant assumptions used by the company in other estimates tested.

Note: If the auditor evaluates the reasonableness of a significant assumption by developing an expectation of that assumption, the auditor should have a reasonable basis for that expectation.

Note: Paragraph .A10 in Appendix A of this standard sets forth additional requirements related to evaluating unobservable inputs used in the valuation of financial instruments.

¹⁵ The understanding of the company and its environment obtained in performing the procedures required by AS 2110.07-.09 can provide information relevant to evaluating the reasonableness of significant assumptions pursuant to paragraphs .16b.i and .16b.ii of this standard.

.17 When a significant assumption is based on the company's intent and ability to carry out a particular course of action, the auditor should take into account the following factors in evaluating the reasonableness of the assumption:

- a. The company's past history of carrying out its stated intentions;
- b. The company's written plans or other relevant documentation, such as budgets or minutes;
- c. The company's stated reasons for choosing a particular course of action; and
- d. The company's ability to carry out a particular course of action, which includes consideration of whether:
 - i. The company has the financial resources and other means to carry out the action;
 - ii. Legal, regulatory, or contractual restrictions could affect the company's ability to carry out the action; and
 - iii. The company's plans require the action of third parties and, if so, whether those parties are committed to those actions.

.18 For critical accounting estimates,¹⁶ the auditor should obtain an understanding of how management analyzed the sensitivity of its significant assumptions to change, based on other reasonably likely outcomes that would have a material effect.¹⁷ The

¹⁶ See paragraph .A3 of AS 1301, *Communications with Audit Committees*.

¹⁷ See U.S. Securities and Exchange Commission, Financial Reporting Release No. 72, *Interpretation: Commission Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations* (Dec. 19, 2003), 68 FR 75056 (Dec. 29, 2003), at Section V ("Critical Accounting Estimates") for management's responsibilities related to critical accounting estimates.

auditor should take that understanding into account when evaluating the reasonableness of the significant assumptions and potential management bias.¹⁸

Company's Use of a Specialist or Third-Party Pricing Information

.19 *Using the Work of a Company Specialist.* When a specialist employed or engaged by the company assists the company in developing an accounting estimate, the auditor should also take into account the work of the specialist in determining the evidence needed in testing the company's process. This includes testing and evaluating the company specialist's work in conjunction with testing the company's process.

Note: [Proposed Appendix B to AS 1105 – See PCAOB Release No. 2017-003] describes the auditor's responsibilities for using the work of a company's specialist as audit evidence to support a conclusion regarding a relevant assertion of a significant account or disclosure.

.20 *Using Pricing Information from a Third Party for Valuation of Financial Instruments.* When the auditor is auditing the fair values of financial instruments, the company's use of pricing information from third-party pricing sources affects the necessary procedures for testing the company's process. When third-party pricing information used by the company is significant to the valuation of financial instruments, the auditor should evaluate whether the company has used that information appropriately and whether it provides sufficient appropriate audit evidence. Paragraphs .A2-.A9 in Appendix A of this standard set forth procedures for evaluating whether third-party pricing information provides sufficient appropriate audit evidence.¹⁹

Developing an Independent Expectation of the Estimate

.21 Developing an independent expectation involves the auditor using some or all of his or her own methods, data, and assumptions to develop an expectation of the estimate for comparison to the company's estimate. The auditor's responsibilities with

¹⁸ See AS 2810. 27.

¹⁹ If the third party is a service organization that is part of the company's information system over financial reporting, AS 2601, *Consideration of an Entity's Use of a Service Organization*, describes the auditor's responsibilities for obtaining an understanding of controls at the service organization.

respect to developing an independent expectation depend on the source of the methods, data, and assumptions used, as discussed below.

Note: In developing an independent expectation, the auditor should take into account the requirements of the applicable financial reporting framework and the auditor's understanding of the company's process, including the significant assumptions used by the company, so that the auditor's expectation considers the factors relevant to the estimate.

Independent Assumptions and Methods of the Auditor

.22 When the auditor independently derives assumptions or uses his or her own method in developing an independent expectation, the auditor should have a reasonable basis for the assumptions and method used.

Data and Assumptions Obtained from a Third Party

.23 If the auditor uses data or assumptions obtained from a third party in developing an independent expectation, the auditor should evaluate the relevance and reliability of the data and assumptions obtained in accordance with AS 1105.

Note: If the auditor develops an independent expectation of the fair value of financial instruments using pricing information from a third party, the auditor should evaluate whether the pricing information provides sufficient appropriate audit evidence. Paragraphs .A2-.A9 in Appendix A of this standard set forth procedures for evaluating whether third-party pricing information provides sufficient appropriate audit evidence.

Use of Company Data, Assumptions, or Methods

.24 If the auditor uses data produced by the company, significant assumptions used by the company, or the company's methods in developing an independent expectation, the auditor should:

- a. Test the data in accordance with paragraphs .12-.14 of this standard;
- b. Evaluate the reasonableness of the significant assumptions in accordance with paragraphs .16-.18 of this standard; and
- c. Evaluate the company's methods in accordance with paragraphs .10-.11 of this standard.

Note: If the company's data, assumptions, or methods were those of a company's specialist, the auditor should also comply with the requirements in [Proposed Appendix B to AS 1105 – See PCAOB Release No. 2017-003].

Developing an Independent Expectation as a Range

.25 If the auditor's independent expectation consists of a range rather than a point estimate, the auditor should determine that the range is appropriate for identifying a misstatement of the accounting estimate and supported by sufficient appropriate audit evidence.²⁰

Comparing the Auditor's Independent Expectation to the Company's Accounting Estimate

.26 The auditor should compare the auditor's independent expectation to the company's estimate and should evaluate the differences in accordance with AS 2810.13.²¹

Evaluating Audit Evidence from Events or Transactions Occurring After the Measurement Date

.27 Events and transactions that occur after the measurement date can provide relevant evidence to the extent they reflect conditions at the measurement date.²²

²⁰ See *generally* AS 2810.13, which describes the auditor's responsibilities for evaluating misstatements relating to accounting estimates.

²¹ See *also* paragraph .30 of this standard.

²² Evaluating audit evidence from events or transactions occurring after the measurement date, as contemplated in this standard, is a substantive test and thus differs from the review of subsequent events performed pursuant to AS 2801, *Subsequent Events*. See *also* paragraph .11 of AS 1015, *Due Professional Care in the Performance of Work* (as proposed to be amended – see Appendix 2), which provides that the auditor's evaluation of accounting estimates is to be based on information that could reasonably be expected to be available through the date of the auditor's report.

.28 When the auditor obtains audit evidence from events or transactions that occur after the measurement date, the auditor should evaluate whether the audit evidence is sufficient, reliable, and relevant to the company's accounting estimate and whether the evidence supports or contradicts the company's estimate.

.29 In evaluating whether an event or transaction provides evidence relevant²³ to the accounting estimate at the measurement date, the auditor should take into account changes in the company's circumstances and other relevant conditions between the event or transaction date and the measurement date.

Note: As the length of time from the measurement date increases, the likelihood that events and conditions have changed during the intervening period also increases.

Evaluating Audit Results

.30 AS 2810 requires the auditor to evaluate the results of audit procedures performed on accounting estimates. This includes:

- a. Evaluating identified misstatements;²⁴
- b. Evaluating the qualitative aspects of the company's accounting practices, including bias in management's judgments about the amounts and disclosures in the financial statements;²⁵
- c. Evaluating bias in accounting estimates;²⁶ and
- d. Evaluating the presentation of the financial statements, including the disclosures and whether the financial statements contain the information

²³ AS 1105.07 provides factors regarding the relevance of audit evidence.

²⁴ See AS 2810.10-.23, which discuss accumulating and evaluating identified misstatements.

²⁵ See AS 2810.24-.26, which discuss evaluating the qualitative aspects of the company's accounting practices.

²⁶ See AS 2810.27.

essential for a fair presentation of the financial statements in conformity with the applicable financial reporting framework.²⁷

.31 Evaluating bias in accounting estimates includes evaluating bias in estimates individually and in aggregate. It also includes evaluating whether bias results from the cumulative effect of changes in estimates.²⁸

²⁷ See AS 2810.31.

²⁸ See AS 2810.27.

APPENDIX A—Special Topics

Identifying and Assessing Risks of Material Misstatement Related to the Fair Value of Financial Instruments

.A1 To identify and assess risks of material misstatement related to the fair value of financial instruments, the auditor should obtain an understanding of the nature of the financial instruments being valued. Matters that the auditor should take into account include:

- a. The terms and characteristics of the financial instrument;
- b. The extent to which the fair value of the financial instrument is based on inputs that are observable directly or indirectly; and
- c. Other factors affecting the valuation of the financial instrument, such as credit or counterparty risk, market risk, and liquidity risk.

Note: In general, fair values of financial instruments based on trades of identical financial instruments in an active market have a lower risk of material misstatement than fair values derived from observable trades of similar financial instruments or unobservable inputs.

Use of Pricing Information from Third Parties as Audit Evidence

.A2 When the auditor uses pricing information from a third party to develop an independent expectation or tests pricing information provided by a third party used by management,¹ the auditor should perform procedures to determine whether the pricing information provides sufficient appropriate² audit evidence to respond to the risks of material misstatement.

¹ If the third party is a service organization that is part of the company's information system over financial reporting, AS 2601, *Consideration of an Entity's Use of a Service Organization*, describes the auditor's responsibilities for obtaining an understanding of controls at the service organization.

² See paragraph .06 of AS 1105, *Audit Evidence*, which states that appropriateness is the measure of the quality of audit evidence, i.e., its relevance and

- .A3 The following paragraphs address pricing information from:
- a. Organizations that routinely provide uniform pricing information to users, generally on a subscription basis ("pricing services");³ and
 - b. Brokers or dealers.

Using Pricing Information from Pricing Services

.A4 The reliability of audit evidence depends on the nature and source of the evidence and the circumstances under which it is obtained.⁴ The following factors affect the reliability of pricing information provided by a pricing service:

- a. The experience and expertise of the pricing service relative to the types of financial instruments being valued, including whether the financial instruments being valued are routinely priced by the pricing service;
- b. Whether the methodology used by the pricing service in determining fair value of the financial instrument being tested is in conformity with the applicable financial reporting framework; and
- c. Whether the pricing service has a relationship with the company by which company management has the ability to directly or indirectly control or significantly influence the pricing service.

reliability. To be appropriate, audit evidence must be both relevant and reliable in providing support for the conclusions on which the auditor's opinion is based.

³ The requirements in [Proposed Appendix B to AS 1105 for an auditor using the work of a company's specialist or Proposed AS 1210, *Using the Work of an Auditor-Engaged Specialist* for an auditor using the work of an auditor-engaged specialist – See PCAOB Release No. 2017-003] apply when a pricing service is engaged to individually develop a price for a specific financial instrument not routinely priced for its subscribers.

⁴ See AS 1105.08.

.A5 The relevance of audit evidence refers to its relationship to the assertion or to the objective of the control being tested.⁵ The following factors affect the relevance of pricing information provided by a pricing service:

- a. Whether the fair values are based on quoted prices in active markets for identical financial instruments;
- b. When the fair values are based on transactions of similar financial instruments, how those transactions are identified and considered comparable to the financial instrument being valued; and
- c. When no recent transactions have occurred for either the financial instrument being valued or similar financial instruments, or the price was developed using a quote from a broker or dealer, how the fair value was developed, including whether the inputs used represent the assumptions that market participants would use when pricing the financial instrument.

.A6 When the fair values are based on transactions of similar financial instruments, the auditor should perform additional audit procedures to evaluate the process used by the pricing service.

.A7 When there are no recent transactions either for the financial instrument being valued or for similar financial instruments, the auditor should perform additional audit procedures, including evaluating the appropriateness of the valuation method and the reasonableness of observable and unobservable inputs used by the pricing service.

Using Pricing Information from Multiple Pricing Services

.A8 When pricing information is obtained from multiple pricing services, less information is needed about the particular methods and inputs used by the individual pricing services when the following conditions are met:

- a. There are recent trades of the financial instrument or of financial instruments substantially similar to the financial instrument being tested;

⁵ See AS 1105.07.

- b. The particular financial instrument is routinely priced by several pricing services;
- c. Prices obtained from multiple pricing services are reasonably consistent, taking into account the nature and characteristics of the financial instrument, the methods used, and market conditions; and
- d. The pricing information for the financial instrument is generally based on inputs that are observable.

Note: When the above conditions are not met, the auditor should perform additional audit procedures, including evaluating the appropriateness of the valuation method and the reasonableness of observable and unobservable inputs for a representative price.

Using Pricing Information from a Broker or Dealer

.A9 When the company's fair value measurement is based on a quote from a broker or dealer ("broker quote"), the relevance and reliability of the evidence provided by the broker quote depend on whether:

- a. The broker or dealer is free of relationships with the company by which company management can directly or indirectly control or significantly influence the broker or dealer;
- b. The broker or dealer making the quote is a market maker that transacts in the same type of financial instrument;
- c. The broker quote reflects market conditions as of the financial statement date;
- d. The broker quote is binding on the broker or dealer; and
- e. There are any restrictions, limitations, or disclaimers in the broker quote and, if so, their nature.⁶

⁶ See AS 1105.08 (as proposed to be amended – see Appendix 2).

Note: Broker quotes generally provide more relevant and reliable evidence when they are timely, binding quotes, without any restrictions, limitations, or disclaimers, from unaffiliated market makers transacting in the same type of financial instrument. If the broker quote does not provide sufficient appropriate audit evidence, the auditor should perform procedures to obtain relevant and reliable pricing information from another pricing source pursuant to the requirements of this appendix.

Unobservable Inputs

.A10 When the valuation of a financial instrument includes unobservable inputs that are significant to the valuation, the auditor should obtain an understanding of how unobservable inputs were determined and evaluate the reasonableness of the unobservable inputs by taking into account the following:

- a. Whether modifications made to observable information generally reflect the assumptions that market participants would use when pricing the financial instrument, including assumptions about risk; and
- b. How management determined its fair value measurement, including whether it appropriately considered the information available.

APPENDIX 2—Proposed Amendments to PCAOB Auditing Standards Related to the Proposed Auditing Standard

In connection with the Proposed Auditing Standard AS 2501, *Auditing Accounting Estimates, Including Fair Value Measurements* ("proposed auditing standard"), the Board is proposing amendments to several of its auditing standards to conform to the requirements of the proposed auditing standard.

The proposed auditing standard would retitle and replace AS 2501, *Auditing Accounting Estimates*; supersede AS 2502, *Auditing Fair Value Measurements and Disclosures*) and AS 2503, *Auditing Derivative Instruments, Hedging Activities, and Investments in Securities*; and rescind AI 16, *Auditing Accounting Estimates: Auditing Interpretations of AS 2501*.

Language that would be deleted by the proposed amendments is ~~struck through~~. Language that would be added is underlined. The presentation of proposed amendments to PCAOB standards by showing deletions and additions to existing sentences, paragraphs, and footnotes is intended to assist the reader in easily comprehending the Board's proposed changes to the auditing standards and interpretation. The Board's proposed amendments consist of only the deleted or added language. This presentation does not constitute or represent a proposal of all or of any other part of the auditing standard or interpretation as amended by this proposal.

The Board is requesting comments on all aspects of the proposed amendments.¹

¹ A number of the Board's pending rulemaking projects include proposals that would supersede, amend or delete paragraphs of PCAOB auditing standards for which other proposed amendments are included in this appendix. These projects include *The Auditor's Report on an Audit of Financial Statements When the Auditor Expresses an Unqualified Opinion and Related Amendments to PCAOB Standards*, PCAOB Release No. 2017-001 (June 1, 2017) and *Proposed Amendments Relating to the Supervision of Audits Involving Other Auditors and Proposed Auditing Standard – Dividing Responsibility for the Audit with Another Accounting Firm*, PCAOB Release No. 2016-002 (Apr. 12, 2016). If, prior to the conclusion of this rulemaking, the Board adopts standards and related amendments that affect the other proposed amendments in this release, the Board may make conforming changes to these other proposed amendments.

Auditing Standards Proposed to be Amended²

PCAOB Standard	Paragraph, Section, or Appendix	Subject Heading of Paragraph(s) or Appendix Affected	Action	Page
AS 1015, <i>Due Professional Care in the Performance of Work</i>	.11	Reasonable Assurance	Amend AS 1015.11; Make conforming amendment to footnote 5.	p. A2-6
AS 1105, <i>Audit Evidence</i>	.08	Relevance and Reliability	Amend	p. A2-7
AS 1105	Appendix A	Audit Evidence Regarding Valuation of Investments Based on Investee Financial Condition or Operating Results	Add	p. A2-7

² This table is a reference tool for the proposed amendments that follow. "Add" refers to a new paragraph, appendix, or other text to be added to existing PCAOB standards. "Amend" refers to substantive changes to existing PCAOB standards. "Make conforming amendment" refers to technical changes to existing PCAOB standards, such as changes to cross-references and defined terms.

PCAOB Standard	Paragraph, Section, or Appendix	Subject Heading of Paragraph(s) or Appendix Affected	Action	Page
AS 1301, <i>Communication with Audit Committees</i>	.12	Accounting Policies and Practices, Estimates, and Significant Unusual Transactions	Make conforming amendment	p. A2-10
AS 1301	.13	Auditor's Evaluation of the Quality of the Company's Financial Reporting	Make conforming amendment	p. A2-11
AS 1301	Appendix B	Appendix B- Communications with Audit Committees Required By Other PCAOB Rules and Standard	Make conforming amendment	p. A2-12
AS 2110, <i>Identifying and Assessing Risks of Material Misstatement</i>	.28	Information and Communication	Amend	p. A2-13
AS 2110	.52	Discussion of the Potential for Material Misstatement Due to Fraud	Amend	p. A2-15

PCAOB Standard	Paragraph, Section, or Appendix	Subject Heading of Paragraph(s) or Appendix Affected	Action	Page
AS 2110	.60A	Identifying Significant Accounts and Disclosures and Their Relevant Assertions	Add	p. A2-16
AS 2301, <i>The Auditor's Responses to the Risks of Material Misstatement</i>	.36	Substantive Procedures	Amend	p. A2-17
AS 2301	.38	Substantive Procedures	Make conforming amendment	p. A2-17
AS 2301	.40	Nature of Substantive Procedures	Make conforming amendment	p. A2-18
AS 2401, <i>Consideration of Fraud in a Financial Statement Audit</i>	.54	Additional Examples of Audit Procedures Performed to Respond to Assessed Fraud Risks Relating to Fraudulent Financial Reporting	Make conforming amendment	p. A2-18

PCAOB Standard	Paragraph, Section, or Appendix	Subject Heading of Paragraph(s) or Appendix Affected	Action	Page
AS 2401	.63	Audit Procedures Performed to Specifically Address the Risk of Management Override of Controls	Make conforming amendment	p. A2-19
AS 2401	.64	Audit Procedures Performed to Specifically Address the Risk of Management Override of Controls	Amend	p. A2-20
AS 2805, <i>Management Representations</i>	.06	Obtaining Written Representations	Amend	p. A2-20
AS 4105, <i>Reviews of Interim Financial Information</i>	.B1	Appendix B – Unusual or Complex Situations to Be Considered by the Accountant When Conducting a Review of Interim Financial Information	Make conforming amendment	p. A2-21

AS 1015, *Due Professional Care in the Performance of Work*

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Reasonable Assurance

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The independent auditor's objective is to obtain sufficient appropriate evidential matter to provide him or her with a reasonable basis for forming an opinion. The nature of most evidence derives, in part, from the concept of selective testing of the data being audited, which involves judgment regarding both the areas to be tested and the nature, timing, and extent of the tests to be performed. In addition, judgment is required in interpreting the results of audit testing and evaluating audit evidence. Even with good faith and integrity, mistakes and errors in judgment can be made. Furthermore, many accounting presentations contain accounting estimates, the measurement of which is inherently uncertain and depends on the outcome of future events. The auditor exercises professional judgment in evaluating the reasonableness of accounting estimates in significant accounts and disclosures based on information that could reasonably be expected to be available through the date of the auditor's report ~~prior to the completion of field work.~~⁵ As a result of these factors, in the great majority of cases, the auditor has to rely on evidence that is persuasive rather than convincing.

⁵ See AS 2501, *Auditing Accounting Estimates*. See AS 2501, *Auditing Accounting Estimates, Including Fair Value Measurements*, which discusses the auditor's responsibility to obtain sufficient appropriate audit evidence to determine whether accounting estimates are reasonable in the circumstances, have been accounted for and disclosed in conformity with the applicable financial reporting framework, and are free from bias that results in material misstatement.

AS 1105, *Audit Evidence*

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Sufficient Appropriate Audit Evidence

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Relevance and Reliability

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.08 *Reliability.* The reliability of evidence depends on the nature and source of the evidence and the circumstances under which it is obtained. For example, in general:

- Evidence obtained from a knowledgeable source that is independent of the company is more reliable than evidence obtained only from internal company sources.
- The reliability of information generated internally by the company is increased when the company's controls over that information are effective.
- Evidence obtained directly by the auditor is more reliable than evidence obtained indirectly.
- Evidence provided by original documents is more reliable than evidence provided by photocopies or facsimiles, or documents that have been filmed, digitized, or otherwise converted into electronic form, the reliability of which depends on the controls over the conversion and maintenance of those documents.

Note: If a third party provides evidence to an auditor subject to restrictions, limitations, or disclaimers, the auditor should evaluate the effect of the restrictions, limitations, or disclaimers on the reliability of that evidence.

Appendix A—Audit Evidence Regarding Valuation of Investments Based on Investee Financial Condition or Operating Results

.A1 This appendix describes the auditor's responsibilities for obtaining sufficient appropriate audit evidence in certain situations in which the valuation of an investment selected for testing is based on the investee's financial condition or operating results. The nature and extent of audit procedures necessary to obtain sufficient appropriate audit evidence in these situations depend on:

- a. The significance of the investee's financial condition and operating results to the valuation of the investment;
- b. The risk of material misstatement of the associated investment; and

- c. The availability of financial statements of the investee and if so, their relevance and reliability, including whether the financial statements were audited.

Note: Examples of situations in which the valuation of an investment is based on the investee's financial condition or operating results include: (1) certain investments accounted for by the equity method;¹ (2) investments accounted for by the cost method for which there is a risk of material misstatement regarding impairment; and (3) investments measured at fair value for which the investee's financial condition or operating results are a significant input into the fair value determination.

Note: As the significance of the investee's financial condition and operating results to the valuation of the investment and the risk of material misstatement of the associated investment increase, the persuasiveness of the evidence needed by the auditor also increases.

.A2 The auditor should read available financial statements of the investee to obtain an understanding of:

- a. Whether the investee's financial statements were prepared under the same financial reporting framework the company uses;
- b. The period covered by the financial statements;
- c. The extent to which the investee's financial condition or operating results affect the valuation of the company's investment; and
- d. If the investee's financial statements were audited, whether the report of the investee's auditor indicates that audit was performed under PCAOB standards and expressed an unqualified opinion.

.A3 The auditor should:

- a. Perform procedures to identify significant transactions between the company and the investee and to evaluate the accounting for and disclosure of those transactions;
- b. With respect to subsequent events and transactions of the investee occurring after the date of the investee's financial statements but before the date of the company's auditor's report, read available interim financial

statements of the investee and other available information and make inquiries of the investee to identify subsequent events and transactions that could be material to the company's financial statements;²

- c. If the period covered by the company's financial statements differs from the period of the investee's financial statements, evaluate the effects of that difference on the company's financial statements, taking into account the requirements of the applicable financial reporting framework, and the relevance of the evidence provided by the investee's financial statements; and
- d. If the valuation of the company's investment reflects factors³ other than the financial condition and operating results reported in the investee's financial statements, perform procedures with respect to those factors.

.A4 If the investee's audited financial statements are significant to the valuation of the company's investment, the auditor should determine whether the audit of the investee provides sufficient appropriate audit evidence for the audit of the company's financial statements by performing the following procedures:

- a. Obtain and evaluate information about the professional reputation and standing of the investee's auditor; and
- b. Obtain information about the procedures the investee's auditor performed and the results thereof or review the audit documentation of the investee's auditor.

Note: In an audit of an investment company,⁴ in which an investee fund's financial statements are significant to the valuation of the investee fund presented by the investment company at fair value or an accepted alternative,⁵ unless the auditor has doubt about the reputation and standing of the investee's auditor, the auditor may test the investment company's procedures for understanding the characteristics of underlying investments of the investee fund and assessing the investee fund's valuation process, rather than obtain information about the audit of the investee or review audit documentation.

.A5 If the investee's financial statements are not audited or the audited financial statements do not provide sufficient appropriate audit evidence, the investor's auditor should perform, or request that the investor arrange with the investee to have another

auditor apply, additional audit procedures as necessary to obtain sufficient appropriate audit evidence.

¹ This section does not apply to investments accounted for under the equity method if (1) the investor's equity in the underlying net assets and its share of the earnings or losses of the investee are recorded based on investee financial statements that are audited by an auditor other than the principal auditor and (2) the other auditor is supervised under AS 1201, *Supervision of the Audit Engagement*, or the work and report of the other auditor are used under AS 1205, *Part of the Audit Performed by Other Independent Auditors*. AS 1201 or AS 1205, as applicable, sets forth requirements in those situations.

² See paragraphs .05-.06 of AS 2801, *Subsequent Events*, for examples of events and transactions that require disclosure to the financial statements.

³ Examples of such factors may include valuation multiples and basis differences, including differences in applicable financial reporting frameworks.

⁴ An example of an investment company that invests in other investment companies is a fund of funds.

⁵ The applicable financial reporting framework may permit the use of another method for valuing these investments, for example, Financial Accounting Standards Board Accounting Standards Codification, Topic 820, *Fair Value Measurement*, Paragraph 10-35-59, which allows using net asset value per share to estimate the value of an investment.

AS 1301, *Communication with Audit Committees*

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Results of the Audit

Accounting Policies and Practices, Estimates, and Significant Unusual Transactions

.12 The auditor should communicate to the audit committee the following matters:

* * *

c. **Critical accounting estimates.**

- (1) A description of the process management used to develop critical accounting estimates;¹⁷
- (2) Management's significant assumptions used in critical accounting estimates that have a high degree of subjectivity;¹⁸ and
- (3) Any significant changes management made to the processes used to develop critical accounting estimates or significant assumptions, a description of management's reasons for the changes, and the effects of the changes on the financial statements.¹⁹

¹⁷ ~~See AS 2501, Auditing Accounting Estimates, which discusses the auditor's responsibilities to obtain and evaluate sufficient appropriate audit evidence to support significant accounting estimates in an audit of financial statements. See AS 2501, Auditing Accounting Estimates, Including Fair Value Measurements, which discusses the auditor's responsibility to obtain sufficient appropriate audit evidence to determine whether accounting estimates are reasonable in the circumstances, have been accounted for and disclosed in conformity with the applicable financial reporting framework, and are free from bias that results in material misstatement.~~

¹⁸ *Id.*

¹⁹ *Id.*

* * *

Auditor's Evaluation of the Quality of the Company's Financial Reporting

.13 The auditor should communicate to the audit committee the following matters:

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- c. Conclusions regarding critical accounting estimates. The basis for the auditor's conclusions regarding the reasonableness of the critical accounting estimates.²³

²³ ~~See AS 2501, which discusses the auditor's responsibilities to obtain and evaluate sufficient appropriate audit evidence to support significant accounting estimates in an audit of financial statements. See AS 2501, which discusses the auditor's responsibility to obtain sufficient appropriate audit evidence to determine whether accounting estimates are reasonable in the circumstances, have been accounted for and disclosed in conformity with the applicable financial reporting framework, and are free from bias that results in material misstatement.~~ See AS 2501, which discusses the auditor's responsibility to obtain sufficient appropriate audit evidence to determine whether accounting estimates are reasonable in the circumstances, have been accounted for and disclosed in conformity with the applicable financial reporting framework, and are free from bias that results in material misstatement.

* * *

APPENDIX B—COMMUNICATIONS WITH AUDIT COMMITTEES REQUIRED BY OTHER PCAOB RULES AND STANDARDS

This appendix identifies other PCAOB rules and standards related to the audit that require communication of specific matters between the auditor and the audit committee.

- AS 6115, *Reporting on Whether a Previously Reported Material Weakness Continues to Exist*, paragraphs .60, .62, and .64
- AS 2201, *An Audit of Internal Control Over Financial Reporting That Is Integrated with An Audit of Financial Statements*, paragraphs .78-.81, .91, .C7, and .C14
- AS 2110, *Identifying and Assessing Risks of Material Misstatement*, paragraphs .05f and .54-.57
- AS 2410, *Related Parties*, paragraphs .07 and .19
- Attestation Standard No. 1, *Examination Engagements Regarding Compliance Reports of Brokers and Dealers*, paragraphs 34 and 35
- Attestation Standard No. 2, *Review Engagement Regarding Exemption Reports of Brokers and Dealers*, paragraph 15
- PCAOB Rule 3524, *Audit Committee Pre-approval of Certain Tax Services*
- PCAOB Rule 3525, *Audit Committee Pre-approval of Non-audit Services Related to Internal Control Over Financial Reporting*

- PCAOB Rule 3526, *Communication with Audit Committees Concerning Independence*
- AS 2401, *Consideration of Fraud in a Financial Statement Audit*, paragraphs .79-.81
- AS 2405, *Illegal Acts by Clients*, paragraphs .08, .17, and .20
- AS 1305, *Communications About Control Deficiencies in an Audit of Financial Statements*, paragraphs .04-.07 and .09
- ~~AS 2502, *Auditing Fair Value Measurements and Disclosures*, paragraph .50~~
- AS 2805, *Management Representations*, paragraph .05
- AS 2710, *Other Information in Documents Containing Audited Financial Statements*, paragraphs .04 and .06
- AS 4101, *Responsibilities Regarding Filings Under Federal Securities Statutes*, paragraph .13
- AS 4105, *Reviews of Interim Financial Information*, paragraphs .08-.09, .30-.31, and .33-.36

AS 2110, *Identifying and Assessing Risks of Material Misstatement*

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Information and Communication

.28 *Information System Relevant to Financial Reporting.* The auditor should obtain an understanding of the information system, including the related business processes, relevant to financial reporting, including:

- a. The classes of transactions in the company's operations that are significant to the financial statements;
- b. The procedures, within both automated and manual systems, by which those transactions are initiated, authorized, processed, recorded, and reported;

- c. The related accounting records, supporting information, and specific accounts in the financial statements that are used to initiate, authorize, process, and record transactions;
- d. How the information system captures events and conditions, other than transactions,¹⁶ that are significant to the financial statements; ~~and~~
- e. Whether the related accounts involve accounting estimates and if so, the processes used to develop accounting estimates, including:
 - (1) The methods used, which may include models;
 - (2) The data and assumptions, including the source from which they are derived; and
 - (3) The extent to which the company uses specialists or other third parties, including the nature of the service provided and the extent to which the third parties use company data and assumptions; and
- f. The period-end financial reporting process.

Note: Appendix B discusses additional considerations regarding manual and automated systems and controls.

Note: The requirements in AS 2601 with respect to the auditor's responsibilities for obtaining an understanding of controls at the service organization apply when the company uses a service organization that is part of the company's information system over financial reporting.

Note: For critical accounting estimates,¹⁷ paragraph .18 of AS 2501, *Auditing Accounting Estimates, Including Fair Value Measurements*, provides that the auditor should obtain an understanding of how management analyzed the sensitivity of its significant assumptions to change, based on other reasonably likely outcomes that would have a material effect¹⁸ and take that understanding into account when evaluating the reasonableness of significant assumptions and potential management bias.

¹⁷ See paragraph .A3 of AS 1301, *Communications with Audit Committees*.

¹⁸ See U.S. Securities and Exchange Commission, Financial Reporting Release No. 72, Interpretation: Commission Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations (Dec. 19, 2003), 68 FR 75056 (Dec. 29, 2003), at Section V ("Critical Accounting Estimates").

* * *

Discussion of the Potential for Material Misstatement Due to Fraud

.52 The discussion among the key engagement team members about the potential for material misstatement due to fraud should occur with an attitude that includes a questioning mind, and the key engagement team members should set aside any prior beliefs they might have that management is honest and has integrity. The discussion among the key engagement team members should include:

- An exchange of ideas, or "brainstorming," among the key engagement team members, including the engagement partner, about how and where they believe the company's financial statements might be susceptible to material misstatement due to fraud, how management could perpetrate and conceal fraudulent financial reporting, and how assets of the company could be misappropriated, including (a) the susceptibility of the financial statements to material misstatement through related party transactions, ~~and~~ (b) how fraud might be perpetrated or concealed by omitting or presenting incomplete or inaccurate disclosures, and (c) how the financial statements could be manipulated through management bias in accounting estimates in significant accounts and disclosures;
- A consideration of the known external and internal factors affecting the company that might (a) create incentives or pressures for management and others to commit fraud, (b) provide the opportunity for fraud to be perpetrated, and (c) indicate a culture or environment that enables management to rationalize committing fraud;
- A consideration of the risk of management override; and
- A consideration of the potential audit responses to the susceptibility of the company's financial statements to material misstatement due to fraud.

* * *

Identifying Significant Accounts and Disclosures and Their Relevant Assertions

.60 To identify significant accounts and disclosures and their relevant assertions in accordance with paragraph .59e, the auditor should evaluate the qualitative and quantitative risk factors related to the financial statement line items and disclosures. Risk factors relevant to the identification of significant accounts and disclosures and their relevant assertions include:

- Size and composition of the account;
- Susceptibility to misstatement due to error or fraud;
- Volume of activity, complexity, and homogeneity of the individual transactions processed through the account or reflected in the disclosure;
- Nature of the account or disclosure;
- Accounting and reporting complexities associated with the account or disclosure;
- Exposure to losses in the account;
- Possibility of significant contingent liabilities arising from the activities reflected in the account or disclosure;
- Existence of related party transactions in the account; and
- Changes from the prior period in account and disclosure characteristics.

.60A Additional risk factors relevant to the identification of significant accounts and disclosures involving accounting estimates include the following:

- a. The degree of uncertainty associated with the future occurrence or outcome of events and conditions underlying the significant assumptions;
- b. The complexity of the process for developing the accounting estimate;

- c. The number and complexity of significant assumptions associated with the process;
- d. The degree of subjectivity associated with significant assumptions (for example, because of significant changes in the related events and conditions or a lack of available observable inputs); and
- e. If forecasts are important to the estimate, the length of the forecast period and degree of uncertainty regarding trends affecting the forecast.

AS 2301, *The Auditor's Responses to the Risks of Material Misstatement*

* * *

Substantive Procedures

.36 The auditor should perform substantive procedures for each relevant assertion of each significant account and disclosure, regardless of the assessed level of control risk.

Note: Performing substantive procedures for the relevant assertions of significant accounts and disclosures involves testing whether the significant accounts and disclosures are in conformity with the applicable financial reporting framework.

* * *

.38 Internal control over financial reporting has inherent limitations,¹⁸ which, in turn, can affect the evidence that is needed from substantive procedures. For example, more evidence from substantive procedures ordinarily is needed for relevant assertions that have a higher susceptibility to management override or to lapses in judgment or breakdowns resulting from human failures.⁴⁹

¹⁸ AS 2201.A5.

⁴⁹ ~~See, e.g., paragraph .14 of AS 2502, Auditing *Fair Value Measurements and Disclosures*.~~

Nature of Substantive Procedures

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.40 Taking into account the types of potential misstatements in the relevant assertions that could result from identified risks, as required by paragraph .09.b., can help the auditor determine the types and combination of substantive audit procedures that are necessary to detect material misstatements in the respective assertions.¹⁹

¹⁹ See, e.g., AS 2501, Auditing Accounting Estimates, Including Fair Value Measurements, which discusses the auditor's responsibility to obtain sufficient appropriate audit evidence to determine whether accounting estimates are reasonable in the circumstances, have been accounted for and disclosed in conformity with the applicable financial reporting framework, and are free from bias that results in material misstatement.

AS 2401, Consideration of Fraud in a Financial Statement Audit

* * *

Responding to Assessed Fraud Risks

* * *

Responses Involving the Nature, Timing, and Extent of Procedures to Be Performed

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Additional Examples of Audit Procedures Performed to Respond to Assessed Fraud Risks Relating to Fraudulent Financial Reporting

.54 The following are additional examples of audit procedures that might be performed in response to assessed fraud risks relating to fraudulent financial reporting:

* * *

- *Management estimates.* The auditor may identify a fraud risk involving the development of management estimates. This risk may affect a number of accounts and assertions, including asset valuation, estimates relating to specific transactions (such as acquisitions, restructurings, or disposals of

a segment of the business), and other significant accrued liabilities (such as pension and other postretirement benefit obligations, or environmental remediation liabilities). The risk may also relate to significant changes in assumptions relating to recurring estimates. ~~As indicated in AS 2501, *Auditing Accounting Estimates*, estimates are based on subjective as well as objective factors and there is a potential for bias in the subjective factors, even when management's estimation process involves competent personnel using relevant and reliable data.~~

In addressing an identified fraud risk involving accounting estimates, the auditor may want to supplement the audit evidence otherwise obtained (~~see AS 2501.09 through .14~~ see AS 2501, *Auditing Accounting Estimates, Including Fair Value Measurements*). In certain circumstances (for example, evaluating the reasonableness of management's estimate of the fair value of a derivative), it may be appropriate to engage a specialist or develop an independent estimate for comparison to management's estimate. Information gathered about the entity and its environment may help the auditor evaluate the reasonableness of such management estimates and underlying judgments and assumptions.

A retrospective review of similar management judgments and assumptions applied in prior periods (see paragraphs .63 through .65) may also provide insight about the reasonableness of judgments and assumptions supporting management estimates.

* * *

Audit Procedures Performed to Specifically Address the Risk of Management Override of Controls

* * *

.63 *Reviewing accounting estimates for biases that could result in material misstatement due to fraud.* In preparing financial statements, management is responsible for making a number of judgments or assumptions that affect accounting estimates²⁴ and for monitoring the reasonableness of such estimates on an ongoing basis. Fraudulent financial reporting often is accomplished through intentional misstatement of accounting estimates. AS 2810.24 through .27 discuss the auditor's responsibilities for assessing bias in accounting estimates and the effect of bias on the financial statements.

~~²⁴ See AS 2501, *Auditing Accounting Estimates*, paragraphs .02 and .16, for a definition of accounting estimates and a listing of examples.~~

~~.64 The auditor should perform a retrospective review of significant accounting estimates reflected in the financial statements of the prior year the accounting estimates in significant accounts and disclosures²⁴ by comparing the prior year's estimates to actual results, if any, to determine whether management's judgments and assumptions relating to the estimates indicate a possible bias on the part of management. The significant accounting estimates selected for testing should include those that are based on highly sensitive assumptions or and are otherwise significantly affected by judgments made by management. With the benefit of hindsight, a retrospective review should provide the auditor with additional information about whether there may be a possible bias on the part of management in making the current-year estimates. This review, however, is not intended to call into question the auditor's professional judgments made in the prior year that were based on information available at the time.~~

~~²⁴ See AS 2110.60, which describes requirements related to the identification of significant accounts and disclosures.~~

AS 2502, *Auditing Fair Value Measurements and Disclosures*

AS 2502, *Auditing Fair Value Measurements and Disclosures* as amended, is superseded.

AS 2503, *Auditing Derivative Instruments, Hedging Activities, and Investments in Securities*

AS 2503, *Auditing Derivative Instruments, Hedging Activities, and Investment in Securities* as amended, is superseded.

AS 2805, *Management Representations*

* * *

Obtaining Written Representations

* * *

.06 In connection with an audit of financial statements presented in accordance with generally accepted accounting principles, specific representations should relate to the following matters:

* * *

Recognition, Measurement, and Disclosure

* * *

S-1. The appropriateness of the methods, the consistency in application, the accuracy and completeness of data, and the reasonableness of significant assumptions used by the company in developing accounting estimates.

AS 4105, *Reviews of Interim Financial Information*

* * *

Appendix B - Unusual or Complex Situations to Be Considered by the Accountant When Conducting a Review of Interim Financial Information

.55

B1. The following are examples of situations about which the accountant would ordinarily inquire of management:

- Business combinations
- New or complex revenue recognition methods
- Impairment of assets
- Disposal of a segment of a business
- Use of derivative instruments and hedging activities
- Sales and transfers that may call into question the classification of investments in securities, including management's intent and ability with respect to the remaining securities classified as held to maturity
- Computation of earnings per share in a complex capital structure
- Adoption of new stock compensation plans or changes to existing plans
- Restructuring charges taken in the current and prior quarters

- Significant, unusual, or infrequently occurring transactions
- Changes in litigation or contingencies
- Changes in major contracts with customers or suppliers
- Application of new accounting principles
- Changes in accounting principles or the methods of applying them
- Trends and developments affecting accounting estimates,³⁶ such as allowances for bad debts and excess or obsolete inventories, provisions for warranties and employee benefits, and realization of unearned income and deferred charges
- Compliance with debt covenants
- Changes in related parties or significant new related-party transactions
- Material off-balance-sheet transactions, special-purpose entities, and other equity investments
- Unique terms for debt or capital stock that could affect classification

³⁶~~The accountant may wish to refer to the guidance in AS 2501, *Auditing Accounting Estimates*, paragraphs .05 and .06~~

AI 16, *Auditing Accounting Estimates: Auditing Interpretations of AS 2501*

AI 16, *Auditing Accounting Estimates: Auditing Interpretations of AS 2501*, as amended, is rescinded.

APPENDIX 3

Additional Discussion of Proposed Standard and Proposed Amendments

<u>Outline of Contents of This Appendix</u>	<u>Page</u>
I. Introduction	A3-1
II. Proposed Standard	A3-4
III. Proposed Amendments to PCAOB Standards	A3-42

I. Introduction

This appendix discusses in detail the new auditing standard proposed by the Public Company Accounting Oversight Board ("PCAOB" or "Board") relating to the auditing of accounting estimates, including fair value measurements ("proposed standard"), along with related amendments to other PCAOB standards ("proposed amendments").¹

The proposed standard would retitle and replace AS 2501, *Auditing Accounting Estimates* ("existing accounting estimates standard"); supersede AS 2502, *Auditing Fair Value Measurements and Disclosures* ("existing fair value standard"), and AS 2503, *Auditing Derivative Instruments, Hedging Activities, and Investments in Securities* ("existing derivatives standard");² and rescind AI 16, *Auditing Accounting Estimates: Auditing Interpretations of AS 2501*.

The proposal builds on the common approaches in the three existing standards and is intended to strengthen PCAOB auditing standards in the following respects:

- Add or revise requirements and provide direction to prompt auditors to devote greater attention to addressing potential management bias in

¹ The proposed standard and the proposed amendments are collectively referred to as the "proposal."

² The existing accounting estimates standard, existing fair value standard, and existing derivatives standard are referred to collectively herein as the "existing estimates standards."

accounting estimates, while reinforcing the need for professional skepticism.

- Extend certain key requirements in the existing fair value standard, the newest and most comprehensive of the existing estimates standards, to all accounting estimates in significant accounts and disclosures to reflect a more uniform approach to substantive testing.
- Further integrate the risk assessment standards to focus auditors on estimates with greater risk of material misstatement.
- Make other updates to the requirements for auditing accounting estimates to provide additional clarity and specificity.
- Provide specific requirements and direction to address certain aspects unique to auditing fair values of financial instruments, including the use of information from pricing sources (e.g., pricing services and brokers or dealers).

As previously discussed, the Staff Consultation Paper, *Auditing Accounting Estimates and Fair Value Measurements* ("SCP") discussed various issues and potential requirements related to auditing accounting estimates, including fair value measurements, and solicited comments on certain of those issues.³ Significant comments received in response to the matters raised in the SCP are discussed below.

As noted earlier, the PCAOB has observed that, in many cases, specialists are used to either develop or assist in evaluating various accounting estimates. In a companion release, the Board is proposing amendments to PCAOB auditing standards to strengthen the requirements that apply when auditors use the work of specialists in an audit. In that release, the Board is proposing to amend AS 1105, *Audit Evidence*, to add a new appendix that addresses the auditor's responsibilities when using the work of a company's specialists as audit evidence; amend AS 1201, *Supervision of the Audit Engagement*, to add a new appendix on supervising the work of auditor-employed specialists; and replace AS 1210, *Using the Work of a Specialist*, with an updated

³ See SCP, *Auditing Accounting Estimates and Fair Value Measurements* (Aug. 19, 2014), available on the Board's website.

standard on using the work of auditor-engaged specialists (collectively, "specialist proposal").⁴ Certain provisions of the proposed auditing standard in this release include references to proposed amendments in the companion release in order to illustrate how the proposed requirements in the two releases would work together.

Comparison with Standards of the International Auditing and Assurance Standards Board and the Auditing Standards Board

This appendix includes a comparison of the proposed requirements with the analogous requirements of the following extant standards issued by the International Auditing and Assurance Standards Board ("IAASB") and the Auditing Standards Board ("ASB") of the American Institute of Certified Public Accountants ("AICPA"):

- IAASB Standards – International Standard on Auditing 540, *Auditing Accounting Estimates, Including Fair Value Accounting Estimates, and Related Disclosures* ("ISA 540"); and
- ASB Standards – AU-C Section 540, *Auditing Accounting Estimates, Including Fair Value Accounting Estimates, and Related Disclosures* ("AU-C Section 540").

The comparison may not represent the views of the IAASB or ASB regarding the interpretation of their standards. Additionally, the information presented in this appendix does not include the application and explanatory material in the IAASB standards or ASB standards.⁵

⁴ See *Proposed Amendments to Auditing Standards for the Auditor's Use of the Work of Specialists*, PCAOB Release No. 2017-003 (June 1, 2017) ("Specialists Release").

⁵ Paragraph A59 of ISA 200, *Overall Objectives of the Independent Auditor and the Conduct of an Audit in Accordance with International Standards on Auditing*, indicates that the application and other explanatory material section of the ISAs "does not in itself impose a requirement" but "is relevant to the proper application of the requirements of an ISA." Paragraph .A64 of AU-C Section 200, *Overall Objectives of the Independent Auditor and the Conduct of an Audit in Accordance with Generally Accepted Auditing Standards*, states that, although application and other explanatory material "does not in itself impose a requirement, it is relevant to the proper application

On April 20, 2017, the IAASB published an exposure draft of Proposed ISA 540 (Revised), *Auditing Accounting Estimates and Related Disclosures* ("ED-540").⁶ ED-540 includes new requirements related to the auditor's risk assessment procedures and revised and expanded requirements regarding the auditor's response to the assessed risks of material misstatement for accounting estimates. ED-540 also includes amendments to other IAASB standards, including amendments to ISA 500, *Audit Evidence*, to address the audit implications of external information sources as audit evidence.

The Board will monitor developments related to this project, including input received by the IAASB from commenters on ED-540.

II. Proposed Standard

A. Scope and Objective

See proposed paragraphs .01-.03

The proposed standard establishes requirements for performing substantive procedures when auditing accounting estimates in significant accounts and disclosures.

The required procedures are intended to be applied to respond to the risks of material misstatement related to accounting estimates in significant accounts and disclosures in financial statements, as identified and assessed pursuant to the requirements of AS 2110, *Identifying and Assessing Risks of Material Misstatement*.

The proposed standard provides a description of the accounting estimates that would be covered by the standard. This description reflects the general characteristics of the variety of accounting estimates, including fair value measurements, included in financial statements. The description includes both the measurement and recognition

of the requirements of an AU-C section."

⁶ See IAASB Exposure Draft, Proposed International Standard on Auditing 540 (Revised), *Auditing Accounting Estimates and Related Disclosures* (Apr. 20, 2017) (available at <http://www.ifac.org/publications-resources/proposed-international-standard-auditing-540-revised-auditing-accounting>).

principles relevant to accounting estimates and takes into account circumstances where a decision not to recognize a transaction or event may be based on a calculation or other analysis (for example, when it is determined that no impairment loss exists based on a comparison of the asset's fair value to its carrying value).

The objective of the proposed standard emphasizes the fundamental aspects of auditing accounting estimates under the existing accounting estimates standard, the existing fair value standard and the existing derivatives standard, specifically, testing and evaluating whether accounting estimates (1) are reasonable in the circumstances, (2) have been accounted for and disclosed in conformity with the applicable financial reporting framework, and (3) are free from bias that results in material misstatement.

Comparison with Standards of Other Standard Setters

The scope and objective of ISA 540 and AU-C Section 540 have some commonality with the corresponding paragraphs of the proposed standard. However, the accounting estimates covered by the proposed standard are expressly linked to significant accounts and disclosures. Also, the objective in the proposed standard encompasses management bias, although the proposed standard, ISA 540, and AU-C Section 540 all have requirements addressing management bias.

Question:

17. Are the scope and objective of the proposed standard clear?

B. Responding to Risks of Material Misstatement

See proposed paragraphs .05-.07

AS 2301, *The Auditor's Responses to the Risks of Material Misstatement*, requires the auditor to design and implement appropriate responses that address risks of material misstatement. The proposed standard provides that applying substantive procedures to accounting estimates in significant accounts and disclosures is part of implementing an appropriate audit response. It also includes the provision from AS 2301 that, as the assessed risk of material misstatement increases, the evidence that the auditor should obtain also increases. The evidence provided by substantive procedures depends on the mix of the nature, timing, and extent of those procedures. The proposed standard also emphasizes that the auditor's response involves testing whether the significant accounts and disclosures are in conformity with the applicable financial reporting framework.

The proposed standard is also designed to prompt auditors to plan and perform audit procedures that are responsive to the respective risks. The proposed standard does not prescribe detailed procedures or the extent of procedures, beyond the requirement to respond to the risk. Instead, it describes the basic requirements for testing and evaluating estimates so that auditors can tailor their procedures to respond to the risks.

By aligning with the risk assessment standards and setting forth a framework for testing and evaluating procedures, the proposed standard is designed to require more audit effort for accounting estimates with higher risk of material misstatement, and less audit effort for estimates with lower risk of material misstatement. As noted in the proposed standard, specific risk factors associated with the estimates – for example, subjective assumptions, measurement uncertainty, or complex processes or methods⁷ – would affect the auditor's risk assessment and in turn, the required audit effort. For example:

- Under this proposal, testing depreciation expense for a group of assets of the same type with similar usage and condition would generally require less audit effort than testing an asset retirement obligation that involves significant assumptions about costs not yet incurred based on estimation of the probability of future events.
- In testing the valuation of assets acquired and liabilities assumed in a business combination, more audit effort would need to be directed to assets and liabilities whose valuation involves more subjective assumptions, such as identifiable intangible assets and contingent consideration, than to assets with readily determinable values.

The proposed standard also emphasizes the need for auditors to respond to differing risks of material misstatement in the components of an accounting estimate. For example, in allowance for credit losses, risks of material misstatement could vary based on types of assets, nature of the collateral, if any, or size of the outstanding amount. Similarly, in warranty reserves, differing risks of material misstatement may arise from the claim history of multiple types of products, or differences in warranty

⁷ See paragraph .60A of the proposed amendment to AS 2110 in Appendix 2 of this proposal for examples of specific risk factors.

terms. Given the susceptibility of many accounting estimates to management bias, the proposed standard also reminds auditors of their existing responsibility to apply professional skepticism when designing and implementing an appropriate audit response.

As discussed in more detail below, the proposed standard would retain the three basic approaches in existing standards for testing accounting estimates:

- Testing the company's process used to develop the accounting estimate;
- Developing an independent expectation of the estimate for comparison to the company's estimate; and
- Evaluating audit evidence from events or transactions occurring after the measurement date related to the accounting estimate for comparison to the company's estimate.

As under the existing PCAOB standards, the proposed standard would allow the auditor to determine the approach or approaches that are appropriate for the particular accounting estimate.⁸ Section IV.D.3 of this release discusses comments received on this topic in the SCP and the Board's consideration of potential alternatives.

Comparison with Standards of Other Standard Setters

Based on the assessed risk of material misstatement, ISA 540 requires the auditor to determine whether management has appropriately applied the requirements of the applicable financial reporting framework relevant to the accounting estimate.

In responding to the assessed risks of material misstatement, ISA 540 requires the auditor to undertake one or more of the following, taking into account the nature of the accounting estimate:

⁸ The proposed standard would also carry forward the point from existing PCAOB standards that the auditor's understanding of the process management used to develop the estimate, along with results of tests of relevant controls, should inform the auditor's decisions about the approach he or she takes to auditing an estimate.

- a. Determine whether events occurring up to the date of the auditor's report provide audit evidence regarding the accounting estimate.
- b. Test how management made the accounting estimate and the data on which it is based. In doing so, the auditor shall evaluate whether:
 - i. The method of measurement used is appropriate in the circumstances; and
 - ii. The assumptions used by management are reasonable in light of the measurement objectives of the applicable financial reporting framework.
- c. Test the operating effectiveness of the controls over how management made the accounting estimate, together with appropriate substantive procedures.
- d. Develop a point estimate or a range to evaluate management's point estimate.

540. AU-C Section 540 contains requirements that are substantively the same as ISA

Questions:

18. Are there challenges in tailoring the scalability of the auditor's response to identified risks of material misstatement as described in the proposal? If so, what are they and how can they be addressed?
19. Should the proposed standard limit the auditor's selection of an approach and, if so, under what circumstances?

C. Testing the Company's Process Used to Develop the Accounting Estimate

See proposed paragraph .09

A company's process for developing an accounting estimate generally involves selecting and applying a particular method, using internal and external data and one or more assumptions. Similar to the existing fair value standard, the auditor's responsibility under the proposed standard would be to evaluate the methods (including, when

applicable, the model), data, and significant assumptions used to develop the estimate and determine whether the estimate is reasonable in the circumstances, in conformity with the applicable financial reporting framework, and free from bias that results in material misstatement.

Some commenters on the SCP identified the need for further emphasizing professional skepticism in this area and the audit implications of management bias. A number of those commenters also supported emphasizing the importance of the auditor's consideration of contrary or disconfirming information. The proposed standard emphasizes the importance of assessing the potential for management bias when performing procedures to test the company's process. This includes taking into account relevant audit evidence, including contradictory evidence that may exist, for example, when evaluating the reasonableness of significant assumptions, both individually and in combination, pursuant to the proposed requirements.

1. *Evaluating the Company's Methods*

See proposed paragraphs .10 -.11

The methods used by companies to develop accounting estimates typically depend on the measurement objective of the estimate. For example, for some estimates, including certain fair value measurements, the method may involve the use of a model or other valuation approach, such as one based on expected future cash flows. For other types of estimates, such as obsolescence reserves, the method used could be based on a calculation involving historical trends and other relevant data.

Similar to the existing fair value standard, the proposed standard would require the auditor to evaluate whether the methods used by the company are (1) in conformity with the applicable financial reporting framework,⁹ and (2) appropriate for the nature of the related account or disclosure and the company's business, industry, and environment.¹⁰ The proposed standard would also clarify that evaluating whether the methods are in conformity with the requirements of the applicable financial reporting framework includes evaluating whether the data and significant assumptions are

⁹ See AS 2502.15.

¹⁰ See AS 2502.18.

appropriately applied. The proposed standard would extend the requirements of the existing fair value standard in this area to the other types of accounting estimates in significant accounts and disclosures. As previously discussed, some firms' methodologies require their auditors to perform these procedures to evaluate the company's method when reviewing and testing its process for developing accounting estimates, including estimates other than fair value measurements.

Under the proposed standard, the necessary audit procedures to evaluate the method used by the company would be targeted to and commensurate with the assessed risks associated with the estimate. Risks associated with the company's methods may vary with the type of estimate and the company's process for determining the estimate. For example, the risks associated with a method that uses a commercially available valuation model may relate to whether the model is appropriate for the related estimate under the applicable financial reporting framework, whereas the risks associated with a method that uses an internally-developed company model may include additional risks associated with how the model was developed. In this example, the internally-developed model scenario would require greater audit effort to respond to the broader range of risks, as compared to the commercially available model scenario. In either case, the auditor would evaluate whether the method was used appropriately, including whether adjustments, if any, to the output of the model were appropriate.

The SCP discussed potential requirements related to evaluating the method used by the company to develop accounting estimates, including a potential requirement to evaluate whether the method is accepted within the company's industry. Commenters on this topic supported requiring the auditor to evaluate the appropriateness of a company's methods, but some were concerned that requiring the auditor to also evaluate whether the methods are accepted within the industry could pose challenges in practice. These commenters noted, for example, that what is accepted within an industry may not be objectively determinable or relevant for all accounting estimates, and would be based on facts and circumstances. Accordingly, the proposed standard would require a more general evaluation—whether the company's method is appropriate for the nature of the related account and the business, industry, and environment in which the company operates.

The proposed standard would also address circumstances in which a company has changed its method for developing an accounting estimate by requiring the auditor to determine the reasons for such change. Additionally, the proposed requirement would remind the auditor of the existing responsibility to evaluate the appropriateness of the change, including evaluating changes in methods that represent changes in

accounting principles, in accordance with AS 2820, *Evaluating Consistency of Financial Statements*. It is important for the auditor to understand the basis for the company's change to its method, as changes that are not based on new information or other changes in the company's circumstances could be indicative of management bias. Moreover, changes to the method could result in a change to the corresponding estimate and affect the consistency of the financial statements. By reinforcing the auditor's responsibilities to evaluate the appropriateness of changes in method for developing the accounting estimates, the procedures in the proposed standard are more closely aligned with existing requirements of AS 2820.

Comparison with Standards of Other Standard Setters

ISA 540 provides that the auditor shall determine whether the methods for making the accounting estimate are appropriate and have been applied consistently, and whether changes, if any, in accounting estimates or in the method for making them from the prior period are appropriate in the circumstances. Further, ISA 540 provides that as part of testing how management made the accounting estimate, and the data on which it is based, the auditor shall evaluate whether the method of measurement used is appropriate in the circumstance.

AU-C Section 540 contains requirements that are substantively the same as ISA 540.

Question:

20. Are the proposed requirements for evaluating the company's method used to develop accounting estimates clear? Are there other matters that are important to evaluating a method that should be included in the proposed requirements?

2. *Testing Data Used*

See proposed paragraphs .12-.14

Companies generally use either internal data or data from external sources to develop accounting estimates, depending on the nature of the estimate and the information available. Examples of external data include economic, market, or industry data. Examples of internal data include the company's historical warranty claims and historical losses on defaulted loans.

Under the proposed standard, the auditor would have a responsibility to evaluate the data used by the company and the manner in which the company used it. These requirements build on requirements in the existing fair value standard and in AS 1105.

To evaluate the data used by the company, the auditor would look to existing requirements in AS 1105. For external data, this includes evaluating the relevance and reliability of the data. For internal data, the auditor would look to the requirements in AS 1105 to test the accuracy and completeness of the information produced by the company or to test the controls over the accuracy and completeness of that information.¹¹ These requirements are similar to those in the existing fair value standard.¹²

The proposed standard would also require the auditor to evaluate whether the data was used appropriately by the company, based in part on procedures in the existing fair value standard.¹³ Specifically, the auditor would evaluate whether (1) the data is relevant to the measurement objective for the accounting estimate; (2) the data is internally consistent with its use by the company in other estimates tested; and (3) the source of the company's data has changed from the prior year and, if so, whether the change is appropriate.

Evaluating whether data is relevant to the measurement objective includes, for example, considering whether more recent or more precise internal or external data is available to the company. For instance, use of industry default rates that are not representative of the specific geographic locations where the company operates may be less relevant than the company's historical default rates.

¹¹ See AS 1105.10.

¹² See AS 2502.39, which includes requirements for the auditor to evaluate whether the data on which the estimate is based is accurate, complete, and relevant, and provides that the auditor's tests may include reviewing information for internal consistency, including whether such information is consistent with management's intent and ability to carry out specific courses of action.

¹³ *Id.*

Consistent with similar procedures in the existing fair value standard,¹⁴ an evaluation of the internal consistency of data with its use by the company in other estimates tested by the auditor might reveal potential contradictory evidence.

Evaluating whether the source of the company's data has changed from the prior year and if so, whether the change is appropriate is also important because a change in the source of the data could significantly affect the estimate. While a new source of data might result in an estimate that better reflects a company's specific circumstances, a change in data source could also be used by a company to achieve a desired financial result. Thus, devoting audit attention to changes in the data source could help the auditor identify potential management bias.

Comparison with Standards of Other Standard Setters

The corresponding ISA 540 requirements are discussed in Section II.C.1 of this appendix.

AU-C section 540 provides that in testing how management made the accounting estimate, and the data on which it is based, the auditor should evaluate whether the data on which the estimate is based is sufficiently reliable for the auditor's purposes.

Questions:

21. Are there any further requirements regarding testing internal data or evaluating the relevance and reliability of external data that the Board should consider?
22. Are the proposed requirements to evaluate whether data was appropriately used by the company clear? Are there other criteria the auditor should assess to make this evaluation? If so, what are they?

¹⁴

Id.

3. *Identification and Evaluation of Significant Assumptions*

See proposed paragraph .15-.18

The existing estimates standards set forth requirements for identifying significant assumptions and evaluating those assumptions for reasonableness, both individually and in combination.¹⁵ The proposed standard would build on the existing requirements and set forth criteria for the auditor to identify which of the assumptions used by the company are significant. Those criteria include factors that are intended to prompt auditors to consider assumptions that are susceptible to management bias.

The company's significant assumptions may be expressly identified by the company or implicit in the nature of the estimate or in the method used to develop the estimate. For example, the company's default risk is often implicit in the pricing assumptions used to determine the fair value of company debt.

The proposed standard would provide that significant assumptions are those that are "important to the recognition or measurement of the estimate in the financial statements." It also provides factors that are relevant to identifying significant assumptions, building on the factors specified in the existing estimates standards,¹⁶ to assist the auditor in making this determination. One such factor includes whether the assumption is sensitive to variation, such that minor (i.e., relatively small) changes in the assumption can cause significant changes in the estimate. For example, a fraction of a percent increase in a discount rate used in a discounted cash flow model could have a significant effect on a calculated reserve. Another factor includes whether the assumption specifically relates to an identified and assessed risk of material misstatement. Assumptions that drive or are associated with identified risks of material misstatement would generally be considered significant assumptions. This factor was added to prompt auditors to design and perform testing of significant assumptions that is responsive to the identified and assessed risks of material misstatement, as discussed previously.

¹⁵ See generally AS 2502.26-.36 and AS 2501.11.

¹⁶ See generally AS 2502.33 and 2501.09.

The SCP solicited views on whether the auditor should be required to identify the assumptions used by management that are significant to the accounting estimate. The SCP also listed some identifying characteristics of significant assumptions. Some commenters indicated that presenting factors for identifying significant assumptions (as described in the SCP) might be helpful to the auditor, and those commenters asked for further clarification regarding some of the factors in the SCP. Some commenters expressed concern, however, that a requirement to identify significant assumptions used by management might lead the auditor to identify too many assumptions as significant simply because they have one of the identifying characteristics. Some commenters opposed requiring the auditor to identify assumptions beyond those used by management, noting difficulty in practical application.

The proposed requirement links the identification of significant assumptions used by management to the auditor's risk assessment, allowing the auditor to better determine which assumptions are significant to the estimate, while focusing on areas that could result in a material misstatement. It does not require the auditor to identify assumptions beyond those used by management (including those implicit in a particular method or estimate). Rather, it provides a general description of what a significant assumption is along with factors to aid the auditor in identifying them.

The proposed standard would also retain the requirement in existing estimate standards for the auditor to evaluate significant assumptions used by management for reasonableness, both individually and in combination.¹⁷ The proposed standard would provide that evaluating significant assumptions for reasonableness includes evaluating whether the company has a reasonable basis for those assumptions and, when applicable, the company's selection of assumptions from a range of potential assumptions. This provision recognizes that, in many cases, estimates are developed using a range of assumptions, and focuses audit attention on how the company selects its assumptions. The evaluation for reasonableness also includes evaluating consistency of the significant assumptions with, among other things, the company's historical data, the economic environment, and market information.

Under the proposed standard, the auditor would evaluate whether the company has a reasonable basis for the significant assumptions used and whether the significant assumptions are consistent with factors such as the company's objectives; historical

¹⁷ See, e.g., AS 2502.28.

experience (e.g., prior years' assumptions and past practices), taking into account changes in conditions affecting the company; and other significant assumptions in other estimates tested (e.g., assumptions are consistent with each other and other information obtained).

In circumstances where the auditor evaluates the reasonableness of a significant assumption by developing an expectation of that assumption, the proposed standard would also require the auditor to have a reasonable basis for that expectation. In practice, auditors often develop their own expectation of a significant assumption as a means to evaluate the reasonableness of the company's assumption. The proposed standard would clarify the auditor's responsibility for supporting that expectation.

In addition, evaluating the reasonableness of significant assumptions under the proposed standard would require the auditor to take into account factors, to the extent applicable, that affect the company's intent and ability to carry out a particular course of action when such action is relevant to the significant assumption. By doing so, the proposed standard would extend a similar requirement in the existing fair value standard for determining whether a significant assumption that is based on the company's intent and ability to carry out a particular course of action is reasonable¹⁸ to other accounting estimates in significant accounts and disclosures.

Evaluating the reasonableness of significant assumptions was discussed in the SCP, including potential factors or conditions that the auditor takes into account when making his or her evaluation. Specifically, the SCP included a potential requirement for the auditor to evaluate the consistency of each significant assumption with the following, if applicable (1) relevant industry, regulatory, and other external factors, including economic conditions; (2) the company's objectives, strategies, and related business risks; (3) existing market information; (4) historical or recent experience, taking into account changes in conditions and events affecting the company; and (5) other interdependent assumptions used by the company.

Some commenters on this topic agreed that the factors presented in the SCP could be helpful to auditors, while other commenters stated that the factors were too general. A few commenters expressed concern that the potential requirement could result in auditors focusing on factors that may not necessarily be important for each

¹⁸ See AS 2502.17 and .36.

significant assumption. The factors presented in the proposed requirement are largely consistent with those included in the existing fair value standard. Further, the proposed requirement provides that the auditor should evaluate whether significant assumptions are consistent with the factors presented where those factors are applicable. This would help mitigate the risk that auditors would focus on factors that are not important to a significant assumption.

The proposed standard would also require additional audit attention to critical accounting estimates, which are accounting estimates where (1) 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 (2) the impact of the estimate on financial condition or operating performance is material.¹⁹ Specifically, for critical accounting estimates, the proposed standard would require the auditor to obtain an understanding of how management analyzed the sensitivity of its significant assumptions²⁰ to change, based on other reasonably likely outcomes that would have a material effect. The requirement in the proposed standard looks to the corresponding management responsibilities under the SEC's Financial Reporting Release No. 72, *Interpretation: Commission Guidance Regarding Management's Discussion and Analysis of Financial Condition and Results of Operations*. Notably, the auditor is not expected to evaluate the company's compliance with the SEC's requirements, but rather to use the auditor's understanding of management's analysis for critical accounting estimates in evaluating the reasonableness of the significant assumptions and potential for management bias in accordance with paragraph .27 of AS 2810, *Evaluating Audit Results*.

Comparison with Standards of Other Standard Setters

ISA 540 provides that as part of testing how management made the accounting estimate, and the data on which it is based, the auditor shall evaluate whether the

¹⁹ See paragraph .A3 in Appendix A of AS 1301, *Communications with Audit Committees*.

²⁰ For the purposes of this requirement, significant assumptions identified by the company may not necessarily include all of those identified by the auditor as significant.

assumptions used by management are reasonable in light of the measurement objectives of the applicable financial reporting framework. Further, for accounting estimates that give rise to significant risks, ISA 540 requires the auditor to evaluate: (a) how management considered alternative assumptions or outcomes and why it rejected them, or how management has otherwise addressed estimation uncertainty in making accounting estimates; (b) whether the significant assumptions used by management are reasonable; and (c) where relevant to the reasonableness of the significant assumptions used by management or the appropriate application of the applicable financial reporting framework, management's intent to carry out specific courses of action and its ability to do so.

AU-C Section 540 contains requirements that are substantively the same as ISA 540.

The IAASB and ASB do not have requirements for the auditor to identify significant assumptions used by management.

Question:

23. Are the proposed requirements for the auditor to identify significant assumptions and to evaluate whether the company has a reasonable basis for significant assumptions used clear? Do those requirements pose any practical difficulties and, if so, how could the proposed standard be revised to address those difficulties?

4. *Company's Use of a Specialist or Third-Party Pricing Information*

See proposed paragraphs .19-.20

The proposed standard would require the auditor to take into account the work of a company's specialist used in developing an accounting estimate when determining the evidence needed in testing the company's process. As noted earlier, in a companion release, the Board is proposing to amend its standards regarding the auditor's use of the work of specialists, including specialists employed or engaged by the company ("company's specialist").²¹ The proposed amendments in the specialist

²¹ See Specialists Release, PCAOB Release No. 2017-003.

proposal are intended to, among other things, align the requirements for using the work of a company's specialist more closely with the risk assessment standards and this proposed standard on auditing accounting estimates, including fair value measurements.

Notably, the proposed standard references the proposed amendments to AS 1105 in the specialist proposal that would require the auditor to look to the corresponding requirements in proposed Appendix B to AS 1105 for testing and evaluating the work of a company's specialist when that work is used to support a conclusion regarding a relevant assertion, such as a relevant assertion related to an accounting estimate. With respect to the procedures to be performed in testing and evaluating the data, assumptions, and methods used by the specialist, proposed Appendix B to AS 1105 in the specialist proposal would require the auditor to, among other things, assess the knowledge, skill, and ability of the company's specialist and the specialist's relationship to the company.²²

The proposed standard also recognizes that the company's use of pricing information from third-party pricing sources affects the necessary procedures for testing and evaluating the company's process. Therefore, when third-party pricing information used by the company is significant to the valuation of financial instruments, the proposed standard would require the auditor to evaluate whether the company has used that information appropriately and whether it provides sufficient appropriate audit evidence.

D. Developing an Independent Expectation of the Estimate

See proposed paragraph .21

The proposed standard would allow the auditor to develop an independent expectation of an estimate, consistent with the existing estimates standards.²³ The proposed standard, however, would more clearly set forth the auditor's responsibilities, which depend on the sources of the methods, data, and assumptions used by the auditor. Those sources include (1) independent assumptions and methods of the

²² *Id.*

²³ See AS 2501.12, AS 2502.40, and AS 2503.40.

auditor, (2) data and assumptions obtained from a third party, and (3) the company's data, assumptions, or methods.

Under the existing fair value standard, when developing an independent estimate of fair value, the auditor may use management's assumptions, but is required to evaluate those assumptions for reasonableness, consistent with the procedures performed when testing management's process.²⁴ Alternatively, instead of using the company's assumptions, the auditor may use his or her own assumptions to develop an independent estimate. In that situation, the auditor is still required to understand the company's significant assumptions so that his or her independent estimate takes into consideration all significant variables and to evaluate any significant difference from management's estimate.²⁵ The auditor also is required to test company data used to develop the independent estimate.²⁶

Similarly, under the existing accounting estimates standard, an auditor can independently develop an expectation using other key factors or alternative assumptions about those factors based on the auditor's understanding of the facts and circumstances.²⁷

The proposed standard would retain the general approach in the existing estimates standards for developing an independent expectation, but the requirements are more explicitly tailored to the different sources of the methods, data, and assumptions used by the auditor, as set forth in the table below and discussed further in the sections that follow.

²⁴ See generally AS 2502.28-.39.

²⁵ See AS 2502.40.

²⁶ *Id.*

²⁷ See AS 2501.12.

Auditor's Independent Expectation Developed Using:	Auditor Responsibility Under the Proposed Standard
Assumptions and methods of the auditor	Have a reasonable basis for the assumptions and methods
Data and assumptions obtained from a third party	Evaluate the relevance and reliability of the data and assumptions
Company data, assumptions or methods	Test and evaluate in the same manner as when testing the company's process

This approach provides more appropriate direction to auditors in light of the various ways in which auditors determine an independent expectation of accounting estimates.

Additionally, while retaining the requirement under the existing fair value standard for an auditor to understand management's assumptions to ensure that his or her independent estimate takes into consideration all significant variables,²⁸ the proposed standard would also expressly require the auditor to take into account the requirements of the applicable financial reporting framework. The proposed standard includes this new requirement because, by taking into account the requirements of the applicable financial reporting framework, the auditor might identify additional considerations relevant to the estimate that the company did not take into account in its own process for developing estimates.

Notably, the proposed standard would refrain from using certain terms used in the existing estimates standards, such as requiring auditors to "corroborate" information, which might lead to confirmation bias or anchoring bias when auditing accounting estimates. Instead, the proposed standard uses more neutral terms, such as "evaluate" and "compare." For example, the proposed standard would require the auditor to compare the auditor's independent expectation to the company's accounting estimate instead of developing an independent fair value estimate "for corroborative purposes."²⁹

²⁸ See AS 2502.40.

²⁹ *Id.*

The SCP discussed retaining the requirements from the existing estimates standards for developing an independent estimate, but indicated that a new standard could present separate requirements that depend on the source of the data and assumptions to provide greater clarity regarding the procedures to be performed for developing an independent estimate. Commenters on this topic supported providing differential direction depending on the source of data and assumptions but expressed concern about potential requirements to test the accuracy and completeness of data and assumptions from external sources. As discussed more fully below, the proposed standard would require the auditor to evaluate the relevance and reliability of data and assumptions obtained from third parties in accordance with AS 1105, but does not require the auditor to test the accuracy and completeness of this information.

Comparison with Standards of Other Standard Setters

When the auditor develops a point estimate or a range to evaluate management's point estimate, ISA 540 provides that: (i) If the auditor uses assumptions or methods that differ from management's, the auditor shall obtain an understanding of management's assumptions or methods sufficient to establish that the auditor's point estimate or range takes into account relevant variables and to evaluate any significant differences from management's point estimate; and (ii) If the auditor concludes that it is appropriate to use a range, the auditor shall narrow the range, based on audit evidence available, until all outcomes within the range are considered reasonable.

AU-C Section 540 contains requirements that are substantively the same as ISA 540.

Question:

24. Are the proposed requirements described above for developing an independent expectation clear? Are there other matters relevant to the proposed requirements that the Board should consider?

1. *Independent Assumptions and Methods of the Auditor*

See proposed paragraph .22

The proposed standard recognizes that, when developing an independent expectation of an estimate, the auditor can independently derive assumptions or use a different method than the company. In either situation, the auditor should have a reasonable basis for the assumptions and methods used. Such a reasonable basis

would reflect consideration of the nature of the estimate; relevant requirements of the applicable financial reporting framework; the auditor's understanding of the company, its environment, and the company's process for developing the estimate; and other relevant audit evidence, regardless of whether the evidence corroborates or contradicts management's assumptions.

The proposed standard takes into account observations from the PCAOB's oversight activities where auditors, in developing an independent expectation, used assumptions for which they had no reasonable basis or that were not appropriate under the circumstances.

Questions:

25. Is the proposed requirement that the auditor have a reasonable basis for the assumptions and method used when the auditor independently derives assumptions, or uses his or her own method in developing an independent expectation, clear? Are there other matters relevant to the proposed requirement that the Board should consider?
 26. Are there instances today when auditors generate or accumulate data directly and use that data to develop an independent estimate, rather than obtain data from a third party or the company under audit? If so, please describe those instances and how the proposed requirements should address them.
2. *Data and Assumptions Obtained from a Third Party*

See proposed paragraph .23

In developing an independent expectation of an accounting estimate, auditors often obtain data or assumptions from a third party. The existing estimates standards do not establish specific requirements for the auditor with respect to information obtained from third parties. The proposed standard would direct the auditor to the existing requirements in AS 1105 under those circumstances to evaluate the relevance and reliability of such data or assumptions. This is consistent with the requirements for evaluating data from external sources discussed in Section II.C.2 of this appendix.

The proposed standard would also direct the auditor to comply with the requirements of proposed AS 1210, *Using the Work of an Auditor-Engaged Specialist* when the third party is a specialist engaged by the auditor.³⁰ The proposed standard does not set forth specific requirements related to methods obtained from a third party that is not a specialist, as the Board understands that auditors typically use either the company's methods or their own methods in developing an independent expectation.

Appendix A of the proposed standard would apply when the auditor develops an independent expectation of the fair value of financial instruments using pricing information from a third party. These requirements are discussed further in Section II.G.4 of this appendix.

Question:

27. Are there instances when auditors obtain methods from third parties in developing an independent expectation of an accounting estimate? If so, please describe those instances and whether and how the proposed requirements should address them.

3. *Use of Company Data, Assumptions, or Methods*

See proposed paragraph .24

The proposed standard would retain the existing requirements for the auditor to test data from the company and evaluate the company's significant assumptions for reasonableness, when used by the auditor to develop an independent estimate.³¹ The proposed standard would also require the auditor to evaluate the company's method, if the auditor uses that method to develop an independent expectation. Under the proposed standard, the auditor would test the data, significant assumptions, or method using the corresponding procedures that apply when the auditor tests the company's process to establish a reasonable basis for using company information in an independent expectation. The proposed standard recognizes that auditors may use a portion or a combination of data, assumptions, and method provided by the company in

³⁰ See paragraph .08 of the proposed standard.

³¹ See AS 2502.40.

developing their expectations. If the company's data, assumptions, or methods are those of a company's specialist, the auditor would also be required to comply with the requirements in proposed Appendix B to AS 1105 when using the work of a company specialist as audit evidence.³²

Comparison with Standards of Other Standard Setters

ISA 540 provides that if the auditor uses assumptions or methods that differ from management's, the auditor shall obtain an understanding of management's assumptions or methods sufficient to establish that the auditor's point estimate or range takes into account relevant variables and to evaluate any significant differences from management's point estimate.

AU-C Section 540 contains requirements that are substantively the same as ISA 540.

Question:

28. Are the proposed requirements for developing an independent expectation when using the company's data, assumptions, or methods clear?

4. *Developing an Independent Expectation as a Range*

See proposed paragraph .25

The existing estimates standards provide for the development of an independent point estimate as one approach for testing accounting estimates, but do not discuss developing an independent expectation as a range of estimates. AS 2810 provides for developing a range of possible estimates for purposes of the auditor's evaluation of misstatements relating to accounting estimates.³³

The SCP discussed whether a potential new standard could include a specific requirement when an auditor develops an independent estimate as a range of

³² See Specialists Release, PCAOB Release No. 2017-003.

³³ See AS 2810.13.

estimates. The potential requirement put forth in the SCP emphasized that the estimate is limited to outcomes within the range that are supported by sufficient appropriate audit evidence. Some commenters expressed concern that the requirement, as described in the SCP, may imply precision within a range of estimates that may not be feasible or attainable or could be interpreted to mean that the range should be limited to materiality. Several commenters were supportive of requiring (or including as an option) a sensitivity analysis, while others stated that auditors might be limited in their ability to perform such an analysis and recommended continuing to allow for auditor judgment in this area.

The proposed standard would require that, if the auditor's independent expectation consists of a range rather than a point estimate, the auditor should determine that the range is appropriate for identifying a misstatement of the company's accounting estimate and is supported by sufficient appropriate audit evidence. For example, the range developed by the auditor would include only reasonable outcomes supported by sufficient appropriate audit evidence. This is consistent with the principles in AS 2810,³⁴ and acknowledges that, although outcomes of certain accounting estimates could vary widely (even beyond the auditor's established level of materiality), a range that includes unsupported outcomes would not provide a suitable basis for identifying a misstatement.

Comparison with Standards of Other Standard Setters

ISA 540 provides that if, in the auditor's judgment, management has not adequately addressed the effects of estimation uncertainty on the accounting estimates that give rise to significant risks, the auditor shall, if considered necessary, develop a range with which to evaluate the reasonableness of the accounting estimate.

AU-C Section 540 contains requirements that are substantively the same as ISA 540.

³⁴ AS 2810.13 states, among other things, that if a range of reasonable estimates is supported by sufficient appropriate audit evidence and the recorded estimate is outside of the range of reasonable estimates, the auditor should treat the difference between the recorded accounting estimate and the closest reasonable estimate as a misstatement.

Question:

29. Is the proposed requirement for an auditor's range clear? Are there other matters relevant to the auditor developing a range that the Board should consider?
5. *Comparing the Auditor's Independent Expectation to the Company's Accounting Estimate*

See proposed paragraph .26

Consistent with existing estimates standards, the proposed standard would require the auditor to compare the auditor's independent expectation to the company's estimate and evaluate the differences in accordance with AS 2810.13.³⁵

E. Evaluating Audit Evidence from Events or Transactions Occurring After the Measurement Date

See proposed paragraphs .27-.29

The existing estimates standards recognize that events and transactions occurring after the balance-sheet date can provide relevant audit evidence regarding accounting estimates and, therefore, allow the auditor to test accounting estimates by reviewing subsequent events and transactions.³⁶ However, these standards caution that changes in circumstances occurring after the balance-sheet date may limit the audit evidence provided by subsequent events if the events or transactions reflect those changes.³⁷

³⁵ See Section II.F of this appendix for additional discussion on evaluating audit results.

³⁶ See generally AS 2502.41 and AS 2501.13, which provide that events and transactions occurring after the balance-sheet date but before the date of the auditor's report may provide audit evidence regarding accounting estimates as of the balance-sheet date.

³⁷ See generally AS 2502.42.

The SCP discussed the use of subsequent events as audit evidence. Commenters to the SCP on this topic were supportive of retaining the approach including certain refinements as discussed in the SCP.

The proposed standard would provide that events and transactions that occur after the measurement date can provide relevant evidence to the extent they reflect conditions at the measurement date. For example, the sale of a bond shortly after the balance-sheet date (which in this case is also the measurement date) may provide relevant evidence regarding the company's fair value measurement of the bond as of the balance sheet date if the intervening market conditions remain the same. As another example, when a business combination occurred during the year, events occurring subsequent to the measurement date, such as the cash settlement of short-term receivables, may provide relevant evidence about the accounting estimate as of the measurement date if they reflect conditions at the measurement date. In those situations, the audit procedures would be focused on evaluating the relevance and reliability of the evidence provided by the subsequent event, including the extent to which the subsequent event reflects conditions existing at the measurement date.

The proposed standard would retain the existing approach and more clearly align the procedures with the auditor's existing responsibilities under AS 1105 to evaluate the relevance and reliability of audit evidence. Specifically, consistent with AS 1105, the proposed standard would require the auditor to evaluate whether the audit evidence from events or transactions occurring after the measurement date is sufficient, reliable, and relevant to the company's accounting estimate and whether the evidence supports or contradicts the company's estimate.

Additionally, the proposed standard would direct the auditor to take into account changes in the company's circumstances and other relevant conditions between the event or transaction date and the measurement date. It also notes that as the length of time from the measurement date increases, the likelihood that events and conditions have changed during the intervening period also increases.

Comparison with Standards of Other Standard Setters

The corresponding ISA 540 requirements are discussed in Section II.B.1 of this appendix.

AU-C Section 540 contains requirements that are substantively the same as ISA 540.

Question:

30. Are there additional factors that the auditor should take into account when evaluating the relevance of the audit evidence obtained from events or transactions occurring after the measurement date?

F. Evaluating Audit Results

See proposed paragraphs.30-.31

The proposed standard would incorporate existing requirements for evaluating the results of audit procedures performed on accounting estimates. Paragraphs .30-.31 of the proposed standard reiterate the existing requirement of AS 2810 as a reminder for the auditor to evaluate the results of such audit procedures, including whether, based on sufficient appropriate audit evidence, the accounting estimates and related disclosures are reasonable and in conformity with the applicable financial reporting framework.³⁸ This includes evaluating potential bias in accounting estimates.

Comparison with Standards of Other Standard Setters

ISA 540 provides that the auditor shall evaluate, based on the audit evidence, whether the accounting estimates in the financial statements are either reasonable in the context of the applicable financial reporting framework, or are misstated. Further, ISA 540 requires the auditor to review the judgments and decisions made by management in the making of accounting estimates to identify whether there are indicators of possible management bias.

AU-C Section 540 contains requirements that are substantively the same as ISA 540.

³⁸ See generally AS 2810.10-.27 and .31.

G. Appendix A – Special Topics

1. Introduction

As previously discussed, the proposal builds on the existing fair value standard and sets forth more uniform requirements in a single standard applicable to both accounting estimates and fair value measurements. Additionally, the proposal also recognizes certain aspects unique to determining the fair value of financial instruments that were more broadly discussed in the SCP. Some commenters pointed to these considerations as reasons to maintain a separate auditing standard for fair value measurements. For example, financial instruments are valued using standardized approaches and methodologies that are generally well understood in the financial reporting frameworks. These approaches and methodologies also primarily use market-based inputs and assumptions such as interest rates or credit spreads, rather than the company-specific inputs more common to other accounting estimates. Further, valuation techniques used for fair value measurements and other accounting estimates also differ.

Taking these distinctions into account, Appendix A of the proposed standard would require the auditor to perform specific procedures when auditing the fair value of financial instruments. These procedures address the unique risks of material misstatement associated with estimating the fair value of certain financial instruments, including how values are determined, and provide direction to the auditor in responding to those risks. For example, the proposed standard recognizes the importance of information from third-party pricing services and brokers or dealers as sources of fair value measurements for financial instruments. Commenters responding to this topic in the SCP generally agreed that the use of third-party pricing sources is important and should be addressed in the new standard.

Given the pervasiveness of pricing information provided by third parties, Appendix A focuses on the various ways this information can be used by both the company and the auditor. The proposed standard also incorporates and builds on topics discussed in the existing derivatives standard, including certain procedures for auditing the valuation of derivatives and securities measured at fair value.³⁹

³⁹ See generally AS 2503.35-.44.

The proposal is also informed by other outreach. For example, meetings of the Pricing Sources Task Force ("Task Force")⁴⁰ discussed, among other things, the various methodologies used by third-party pricing sources to value financial instruments and the challenges that this can pose in practice to auditors. Additionally, the proposed standard has been informed by publications of other standard setters⁴¹ that are used in practice.

Question:

31. Are there other matters relevant to financial instruments that should be considered or included in Appendix A of the proposed standard?
2. *Identifying and Assessing Risks of Material Misstatement Related to the Fair Value of Financial Instruments*

See proposed paragraph .A1

The proposed standard would require the auditor to obtain an understanding of the nature of the financial instruments being valued to identify and assess the risks of material misstatement related to their fair value. It also recognizes that different types of financial instruments are subject to different risks of material misstatement. For example, the risk of material misstatement of the valuation of debt securities issued by a company with good credit standing may differ from the risk of material misstatement associated with an asset-backed security collateralized by cash flows of lower quality loans. The proposed requirement is consistent with certain requirements in AS 2110 for identifying and assessing risks of material misstatement and incorporates many of the considerations in the existing derivatives standard related to risks inherent in derivatives and investment securities.⁴² The approach in the proposed standard generally reflects practice in that auditors normally take the nature of the financial instrument into account

⁴⁰ Meetings with the Task Force were held in May, June, and September of 2011.

⁴¹ See IAASB International Auditing Practice Note 1000, *Special Considerations in Auditing Financial Instruments* (Dec. 16, 2011).

⁴² See generally AS 2503.08.

when identifying and assessing the related risks of material misstatement. Additionally, obtaining an understanding of the nature of financial instruments allows the auditor to better group the instruments based on identified and assessed risks. Understanding the nature of the financial instruments being valued also helps the auditor assess whether their fair values were determined in conformity with the applicable financial reporting framework.

The proposed standard also recognizes that fair values of financial instruments based on trades of the same instruments in an active market generally have a lower risk of material misstatement than the fair values of instruments based on similar instruments or unobservable inputs. As such, the necessary audit response would also differ. This is consistent with the views of some commenters on the SCP, who stated that financial instruments with lower inherent risk should not be subject to the same procedures as those with higher risk.

Question:

32. Are there other matters that the auditor should take into account when obtaining an understanding of the nature of the financial instruments being valued? If so, what are they?
3. *Use of Pricing Information from Third Parties as Audit Evidence*

See proposed paragraphs .A2-.A3

As discussed above, pricing information from third-party sources, such as pricing services and brokers or dealers, is frequently used by both companies and auditors in determining or auditing fair value measurements of financial instruments. Pricing services routinely provide uniform pricing information to their users, generally on a subscription basis. This pricing information may be generated at various points in time and is available to all subscribers including both companies and audit firms. In some cases, a pricing service may be engaged by a company or auditor to individually develop a price for a specific financial instrument not routinely priced for its subscribers (for example, because of an issuer's default, a delisting, or a major change in liquidity of the related asset class). Under those circumstances, the pricing service may be providing services more akin to a specialist; therefore, the requirements in proposed

Appendix B to AS 1105 or proposed AS 1210 would apply, depending on whether the pricing service is engaged by the company or the auditor.⁴³

In addition, as is currently the case under AS 2503,⁴⁴ a pricing service would continue to be a service organization if it meets the criteria of AS 2601, *Consideration of an Entity's Use of a Service Organization*.⁴⁵ In those instances, the auditor would look to the requirements of AS 2601 regarding his or her responsibilities for understanding and evaluating controls of the pricing service and apply the requirements of the proposed standard when performing substantive testing.

Most commenters on this topic, which was discussed in the SCP, suggested that differentiating between pricing services and specialists was appropriate, and some supported an approach that would distinguish them based on the nature of services provided to the auditor. Some of these commenters suggested additional considerations, such as whether company-specific information was used or relied upon by the third party in developing an estimate. A few commenters suggested that there is no need for a new standard to differentiate between a third-party pricing source and a specialist, as both use data, assumptions, and methods (which could include models) in their estimation processes. As discussed above, the proposed standard provides direction to distinguish between a pricing service and a specialist.

Under the proposed standard, the auditor would have a responsibility to perform procedures (as described in .A4-.A9) to determine whether the pricing information obtained from a third party provides sufficient appropriate audit evidence to respond to the risks of material misstatement, consistent with existing requirements in AS 1105.⁴⁶ This approach emphasizes that the auditor's response and the extent of evidence obtained should be commensurate with the assessed risk. The SCP discussed evaluating the relevance and reliability of information obtained from a third-party pricing

⁴³ See Specialists Release, PCAOB Release No. 2017-003.

⁴⁴ See AS 2503.12.

⁴⁵ See AS 2601.03.

⁴⁶ See *generally* paragraphs AS 1105.04-.08.

source, including related factors that the auditor could take into account. The relevant comments are included in the sections below.

The proposed standard would also provide that the procedures in Appendix A apply to pricing information obtained from pricing sources used by management in their estimation process as well as from those obtained by the auditor for the purpose of developing an independent expectation.⁴⁷ This approach focuses on assessing the relevance and reliability of the pricing information obtained, rather than of the third party itself, and is better aligned with the auditor's assessment of risk.

Evaluating audit evidence from third-party sources, including pricing services and broker or dealers, was discussed in the SCP. Commenters on this topic favored a risk-based approach to procedures performed to evaluate pricing information from third parties. With respect to the third parties used, a few commenters indicated that the auditor should be required to use a third-party pricing source different from management's source in all cases. Other commenters, however, indicated that third-party pricing services generally provide independent pricing information that lacks management bias and is free from influence from any one issuer. Those commenters argued that the auditor should not be required to use a third-party source different from management's source, or that a different pricing source should be required only in exceptional circumstances. The proposed standard would allow the auditor to evaluate information from a pricing source used by the company, in which case the auditor would apply the procedures in paragraphs .A4-.A7 of the proposed standard for evaluating the relevance and reliability of that information.

Additionally, some commenters suggested that a new standard should continue to allow the auditor to stratify financial instruments into groups with similar characteristics and risks, for purposes of performing audit procedures. Like the existing estimates standards, the proposed standard does not require audit procedures to be applied to each individual financial instrument. Several commenters on the SCP noted

⁴⁷ An auditor's ability to use pricing information obtained from pricing sources used by the company may be limited by other requirements, such as interpretive releases issued by the SEC. See, e.g., SEC, *Codification of Financial Reporting Policies Section 404.03, Accounting, Valuation and Disclosure of Investment Securities*, Accounting Series Release No. 118 (Dec. 23, 1970), which provides requirements for audits of SEC-registered investment companies.

that a third-party pricing source might limit the extent of information provided to an auditor. If, as a result of limitations imposed by a third-pricing pricing source, the auditor is unable to perform the procedures required in Appendix A, the auditor would be required to perform alternative audit procedures (for example, engaging a specialist to assist the auditor in developing an independent expectation) to obtain sufficient appropriate evidence.

Question:

33. Are there other sources of pricing information for financial instruments that should be addressed in the proposed standard?

4. *Using Information from Pricing Services*

See proposed paragraphs .A4-.A7

The proposed standard would provide the following factors that affect the reliability of pricing information provided by a pricing service. These factors build on existing requirements for evaluating the reliability of audit evidence under AS 1105.⁴⁸

- *The experience and expertise of the pricing service relative to the types of financial instruments being valued, including whether the financial instruments being valued are routinely priced by the pricing service.* Pricing information that is routinely provided by a pricing service that has experience and expertise relative to the type of instrument being valued is generally more reliable than a price developed by a pricing service that has limited access to market information relative to an asset class or financial sector.
- *Whether the methodology used by the pricing service in determining fair value of the financial instrument being tested is in conformity with the applicable financial reporting framework.* Pricing services use different methodologies to determine fair value. The proposed standard would recognize that, in order to evaluate the reliability of audit evidence provided by the pricing service, the methodology used by the pricing

⁴⁸

See AS 1105.08.

service should be in conformity with the applicable financial reporting framework.

- *Whether the pricing service has a relationship with the company by which company management has the ability to directly or indirectly control or significantly influence the pricing service.* In general, pricing information provided by a pricing service has less potential to be biased because the information is broadly available to the public through subscription. The reliability of such pricing information as evidence, however, decreases if the company being audited has the ability to directly or indirectly control, or significantly influence, the pricing service.

The proposed standard would also provide direction on evaluating the relevance of pricing information provided by a pricing service, building on the requirements related to the relevance of audit evidence under AS 1105.⁴⁹ Under the proposed standard, the procedures to be performed generally depend on whether there is available information about trades in the same or similar securities.

Fair values based on quoted prices in active markets for identical financial instruments. The relevance of pricing information depends on the extent to which the information reflects market data. Recent trades of the identical financial instrument generally provide relevant audit evidence.

Fair values based on transactions of similar financial instruments. Only a fraction of the population of financial instruments is traded actively. For many financial instruments, the available audit evidence consists of market data for trades of similar financial instruments or trades of the identical instruments in an inactive market. How a pricing service identifies and considers transactions comparable to the financial instrument being valued affects the relevance of the pricing information provided as audit evidence. The proposed standard would require the auditor to perform additional audit procedures to evaluate the process used by the pricing service, when the fair values are based on transactions of similar instruments. The procedures performed by the auditor will vary in nature depending on the process used by the pricing service (for example, whether the pricing service uses matrix pricing or an algorithm). Thus, the proposed standard does not specify the nature of the audit procedures to be performed

⁴⁹ See AS 1105.07.

in these circumstances. Procedures may include for example, evaluating how comparable transactions are selected and monitored or how matrix pricing is developed.

No recent transactions have occurred for the same or similar financial instruments. When no recent transactions have occurred for either the financial instrument being valued or similar financial instruments, pricing services may develop prices using broker quotes or models. How a pricing service develops prices for these financial instruments, including whether the inputs used represent the assumptions that market participants would use when pricing the financial instruments, affects the relevance of the pricing information provided as audit evidence.

When pricing information from a pricing service indicates no recent trades for the financial instrument being valued or similar instruments, the proposed standard would require the auditor to perform additional audit procedures, including evaluating the appropriateness of the valuation method and the reasonableness of the observable and unobservable inputs used by the pricing service. The nature of the procedures to evaluate the valuation methods and inputs would vary based on the type of inputs and valuation methods involved. For example, evaluating the reasonableness of a fair value based on the estimated cash flows from a pool of securitized mortgage loans would differ from evaluating an input derived from adjusted observable data. Similarly, evaluating the reasonableness of a complex algorithm would differ from evaluating a conventional discounted cash flow calculation.

When an auditor is unable to obtain information from a pricing service about the method or inputs used to develop the fair value of a financial instrument when no recent transactions have occurred for either the financial instrument being valued or for similar financial instruments, the auditor would be required to perform additional procedures, such as obtaining and evaluating pricing information from a different pricing source, obtaining evidence about the inputs used from public data about similar trades, or developing an independent expectation with the assistance of an auditor's specialist.

Some commenters on this topic agreed that a new standard should provide factors to assist the auditor in evaluating evidence obtained from third-party pricing sources, and some suggested additional factors, such as the extent of documented controls. Other commenters, however, stated that a new standard should emphasize assessing the competence and objectivity of the third party rather than evaluating the relevance and reliability of the evidence obtained. Still other commenters indicated that a new standard should acknowledge that limitations may exist on the extent of information third-party pricing sources can disseminate widely to issuers and auditors.

Some commenters suggested that information from third-party pricing sources is developed free of the influence from any single company and should be considered sufficient appropriate audit evidence under AS 1105.

The proposed standard is also aligned with the existing requirements in AS 1105. By taking into account the unique characteristics of information obtained from pricing services, the proposed requirements provide more direction for evaluating audit evidence and emphasize that the extent of evidence obtained should be commensurate with the assessed risk of material misstatement.

The procedures set forth in the proposed standard reflect certain practices for using pricing services observed at the largest audit firms. As discussed earlier, the largest firms typically use a centralized group within the firm to assist in performing procedures related to testing the fair value of financial instruments, and the proposed standard would continue to allow such assistance.⁵⁰

Questions:

34. Are the requirements for using information from a pricing service clear? Are there other requirements that should be considered? For example, are there other methods used by pricing services to generate pricing information that are not currently addressed in the proposed standard?
35. Do the requirements included in the proposed standard pose operational challenges for audit firms that use centralized groups? If so, what are they and how could they be addressed in the proposed standard?

⁵⁰ Centralized groups within the firm that assist audit teams with evaluating the specific methods and assumptions related to a particular instrument, identifying and assessing risks of material misstatement, or evaluating differences between a company's price and a pricing services' price generally would be subject to the supervision requirements of AS 1201.

5. *Pricing Information from Multiple Pricing Services*

See proposed paragraph .A8

The existing derivatives standard acknowledges that an auditor might obtain estimates from more than one pricing service when auditing valuation assertions, but does not specify how the auditor evaluates those estimates.⁵¹ The centralized pricing groups at the largest audit firms generally obtain pricing information from multiple pricing services. One commenter on the SCP suggested that if multiple third parties provide values within a narrow range, further auditor consideration should be unnecessary.

The proposed standard would set forth certain conditions under which less information is needed about the particular methods and inputs used by the individual pricing services. In general, these factors relate to situations in which there is reasonably consistent pricing information available from several sources with ample observable inputs. For example, pricing information developed using the same market data in active markets may vary only slightly depending on the pricing services' methodologies. When the conditions included in the proposed standard exist, less information would be needed about the particular methods and inputs used by an individual pricing service for the particular financial instrument or instruments, and the pricing information obtained generally would be more relevant and reliable. Conversely, when the conditions included in the proposed standard do not exist, the auditor would be required to perform additional audit procedures, including evaluating the appropriateness of the valuation method, and the reasonableness of observable and unobservable inputs for a representative price. A representative price would not necessarily be the closest price to the price used by the company, but rather one that, based on available information about the pricing services and instrument, would likely reflect the market price for the instrument.

Question:

36. Is the auditor's responsibility when evaluating relevance and reliability of pricing information from multiple pricing services clear?

⁵¹ See generally AS 2503.38.

6. *Using Pricing Information from a Broker or Dealer*

See proposed paragraph .A9

Broker quotes are sometimes used by companies as a basis for the fair value measurement of a financial instrument. The existing derivatives standard⁵² discusses using broker quotes to obtain estimates of fair value measurements. The proposed standard would retain the basic approach in the existing derivatives standard, with refinements to align more closely the other procedures in this standard for using information from a third party. The proposed standard includes factors that address the relevance and reliability of a broker quote, similar to those discussed in the SCP. For example, broker quotes generally provide more relevant and reliable evidence when they are timely, binding quotes, without restrictions, limitations or disclaimers, from unaffiliated market makers transacting in the same type of financial instrument. The proposed standard includes an additional factor not included in the SCP relating to whether the quote reflects market conditions as of the financial statement date, because that factor affects the relevance of the evidence provided. Information about whether the quote reflects market conditions as of the financial statement date could be obtained from the broker or dealer or from other sources.

If the broker quote does not provide sufficient appropriate audit evidence, the auditor would be required to perform procedures to obtain relevant and reliable pricing information from another source (for example, obtaining a quote from a different broker or obtaining pricing information from a pricing service).

Since a broker quote might include a disclaimer, the proposal addresses that the nature of the restriction, limitation, or disclaimer affects the relevance and reliability of the evidence provided by a broker quote. For example, a broker quote that states "the value provided by this quote is not an indication of fair value" generally would not provide sufficient appropriate audit evidence. On the other hand, a disclaimer that indicates that the broker or dealer is not providing a recommendation to buy or sell a security may not affect the relevance or reliability of that quote as audit evidence.

In addition, the proposal includes an amendment to AS 1105.08 to more broadly address restrictions, limitations, and disclaimers in audit evidence from third parties.

⁵² See generally AS 2503.36-.39.

Question:

37. Are there other characteristics affecting the relevance and reliability of evidence provided by a broker quote that the proposed standard should include?

7. *Unobservable Inputs*

See proposed paragraph .A10

Unobservable inputs are generally used to determine fair value when relevant observable inputs, such as market data, are not available. Financial instruments valued based on unobservable inputs generally have a higher risk of material misstatement than those based on observable market inputs. The manner in which unobservable inputs are used in a valuation of a financial instrument is largely governed by the applicable financial reporting frameworks.

The proposed standard would require the auditor to obtain an understanding of how unobservable inputs were determined and to evaluate the reasonableness of those inputs. This would involve, among other things, taking into account the assumptions that market participants would use when pricing the financial instrument, including assumptions about risk, and how management determined its fair value measurement, including whether it appropriately considered available information.

By providing factors that the auditor takes into account, the proposed standard provides additional direction in an area that is inherently subjective and judgmental in nature and therefore poses a higher risk of material misstatement.

Question:

38. Are there additional factors that the auditor should take into account when evaluating the reasonableness of unobservable inputs?

Comparison with Standards of Other Standard Setters

The IAASB and ASB do not have explicit requirements for using information from third-party pricing sources.

III. Proposed Amendments to PCAOB Standards

The Board is proposing the amendments contained in Appendix 2 to several of its existing auditing standards to conform to the proposed standard. Significant amendments are described below.

Proposed Amendments to AS 1015, *Due Professional Care in the Performance of Work*

The proposed amendments to AS 1015.11 make two technical changes with respect to the discussion of reasonable assurance when auditing accounting estimates. The first change clarifies that many (although not all) accounting presentations contain accounting estimates, the measurement of which is inherently uncertain and depends on the outcome of future events. The second change would clarify that, in auditing accounting estimates, the auditor considers information through the date of the auditor's report, which under existing standards is a date no earlier than the date on which the auditor has obtained sufficient appropriate audit evidence.⁵³

These changes are intended to be clarifications and are not expected to significantly change audit practice.

Proposed Amendments to AS 1105, *Audit Evidence*

The proposed amendments to AS 1105.08 would require the auditor to evaluate the effect of any restrictions, limitations, or disclaimers on the reliability of evidence, when a third party provides evidence to an auditor subject to disclaimers or restrictive language. Third-party information often contains disclaimers as to the use of such information and its conformity with the applicable financial reporting framework. As such, it is important that auditing standards require the auditor's evaluation of such matters.

The proposed amendment to AS 1105.08 recognizes that restrictions, limitations, or disclaimers affect the relevance and reliability of evidence obtained from third parties and sets forth requirements to address these circumstances.

⁵³ See paragraph .01 of AS 3110, *Dating of the Independent Auditor's Report*.

The proposed amendments also would add Appendix A, Audit Evidence Regarding Valuation of Investments Based on Investee Financial Condition or Operating Results, to AS 1105. The proposed amendments are intended to better align the required procedures to evaluate evidence obtained regarding valuation of investments based on the investee's financial condition or operating results with the risk assessment standards.

In general, the proposed amendments would retain and update certain requirements from AS 2503 for situations in which the valuation of an investment selected for testing is based on the investee's financial condition or operating results, including certain investments accounted for by the equity method⁵⁴ and investments accounted for by the cost method for which there is a risk of material misstatement regarding impairment. The proposed amendments would also apply to investments measured at fair value for which the investee's financial condition or operating results are a significant input into the fair value determination (for example, when the fair value of an investment is based on revenue or earnings multiple derived from the financial statements of a company). The extent of audit procedures to be performed depends, among other things, on the assessed risk of material misstatement of the investment to the investor's financial statements, the extent to which the investee's financial condition or operating results affect the valuation of the company's investment, and whether the investee has audited financial statements that provide sufficient appropriate audit evidence. When audited financial statements are significant to the valuation of the investment, the amendments would require the auditor to obtain and evaluate information about the professional reputation and standing of the investee auditor and to obtain information about the investee auditor.⁵⁵ The Board understands that, in practice,

⁵⁴ This does not apply to investments accounted for under the equity method if (1) the investor's equity in the underlying net assets and its share of the earnings or losses of the investee are recorded based on investee financial statements that are audited by an auditor other than the principal auditor and (2) the other auditor is supervised under AS 1201 or the work and report of the other auditor are used under AS 1205. In those situations, the auditor should look to the requirements of AS 1201 or AS 1205, as applicable.

⁵⁵ The proposed amendments set forth an alternative to evaluating the investee auditor (paragraph .A4) in audits of certain investment companies that invest in other funds. The investment companies covered by this alternative are subject to SEC

auditors may receive summary information from investee auditors about the work performed and results. The proposed amendments are consistent with the current practice of obtaining such summarized information, but additional procedures such as review of audit documentation may be necessary in some cases, for example, if the auditor has concerns about the professional reputation and standing of the investee auditor, information obtained from the investee auditor raises doubt about the valuation of the investment, or the investee auditor's work does not include one or more procedures necessary to support a conclusion about the valuation.⁵⁶

Questions:

39. Are the proposed requirements for evaluating audit evidence regarding the valuation of investments based on investee financial condition or operating results clear?
40. Does the proposed alternative approach for audits of certain investment companies represent a significant change in practice for those audits? If so, how? Is that alternative approach applied in other circumstances? If so, what are those circumstances?

Accounting Series Release No. 118, which provides that an auditor of the investment company would need to review all information considered by the company in the valuation of securities carried at fair value. The alternative approach in the proposed amendments recognizes that, in these situations, unless the auditor has doubt about the reputation and standing of the investee's auditor, sufficient appropriate audit evidence about the underlying investments in investee funds can be obtained through testing the investment company's procedures rather than obtaining information about the audit of the investee or reviewing audit documentation.

⁵⁶ The auditor might identify that necessary work was not performed, for example, if the audit was performed under local jurisdiction auditing standards that did not mandate certain procedures necessary to obtain sufficient appropriate evidence under PCAOB standards.

Proposed Amendments to AS 2110, Identifying and Assessing Risks of Material Misstatement

The proposal includes a number of amendments to AS 2110 as described in more detail below. These proposed amendments primarily relate to:

- Obtaining an understanding of the processes used to develop accounting estimates and evaluating the use of service organizations that are part of a company's information system;
- Discussing how the financial statements could be manipulated through management bias; and
- Assessing additional risk factors specifically for accounts and disclosures involving accounting estimates.

A. Information and Communication

The existing estimates standards contain various requirements for obtaining an understanding of the company's processes for determining accounting estimates. Because such procedures are inherently part of obtaining an understanding of a company's internal control over financial reporting, the proposed amendments would include the procedures in the corresponding section of the risk assessment procedures in AS 2110.

The proposed amendment to AS 2110.28 would require that, as part of obtaining an understanding of a company's information system and related business processes, the auditor should determine whether related accounts involve accounting estimates. If so, the proposed amendment would require the auditor to obtain an understanding of the processes used to develop accounting estimates, including:

- The methods used, which may include models;
- The data and assumptions, including the source from which they are derived; and
- The extent to which the company uses specialists or other third parties, including the nature of the service provided and the extent to which the third parties use company data and assumptions.

The proposed amendment further aligns the requirements of the proposed standard with the Board's risk assessment standards by emphasizing elements of assessing the risks of material misstatement that are specifically relevant to accounting estimates. The methods, data and assumptions used by the company in its process to develop accounting estimates, including how they are selected and applied, drive the risk associated with the estimate. The auditor's understanding is linked to understanding the information system relevant to financial reporting; therefore, the necessary effort to obtain such understanding would be governed by the general requirements in AS 2110 for obtaining a sufficient understanding of the company's internal control over financial reporting.⁵⁷ By explicitly requiring the auditor to obtain an understanding of these components of the process, the proposed amendment would promote a more robust risk assessment in this area while not representing a major change in practice. The proposed amendment to paragraph .28 of AS 2110 also includes a note which highlights that the requirements in AS 2601 with respect to the auditor's responsibilities for obtaining an understanding of controls at the service organization would apply when the company uses a service organization that is part of the company's information system over financial reporting. The proposed amendment would remind the auditor to consider whether the requirements of AS 2601 are applicable to the third party used by the company in developing an accounting estimate.

In addition, for critical accounting estimates, the proposed amendment includes a note that would require the auditor to obtain an understanding of how management analyzed the sensitivity of its significant assumptions to change, based on other reasonably likely outcomes that would have a material effect, and would require the

⁵⁷ See AS 2110.18, which provides that the auditor should obtain a sufficient understanding of each component of internal control over financial reporting to: (a) identify the types of potential misstatements, (b) assess the factors that affect the risks of material misstatement, and (c) design further audit procedures. See also AS 2110.19, which further provides that the nature, timing, and extent of procedures that are necessary to obtain an understanding of internal control depend on the size and complexity of the company; the auditor's existing knowledge of the company's internal control over financial reporting; the nature of the company's controls, including the company's use of IT; the nature and extent of changes in systems and operations; and the nature of the company's documentation of its internal control over financial reporting (footnote omitted).

auditor to take that understanding into account when evaluating the reasonableness of significant assumptions and potential management bias.⁵⁸

The SCP discussed a potential amendment that would require the auditor, as part of understanding internal control over financial reporting, to understand the company's (1) methods (including models); (2) data and assumptions; and (3) the extent to which a company uses a third party or information provided by a third party in developing the accounting estimate. Some commenters suggested the staff clarify the extent of understanding required by the auditor, particularly as it relates to situations where the company uses a third party or information provided by a third party in developing accounting estimates. Certain of these commenters expressed concern that the potential amendment, as presented in the SCP, could imply that the auditor is required to evaluate the third party's internal controls. Another commenter noted that a distinction should be made between understanding the extent to which the company uses a third party compared to the extent to which the company uses information provided by a third party in developing accounting estimates.

The proposed amendment to AS 2110 is largely consistent with the presentation in the SCP but has been revised to a more general requirement about the extent to which specialists or other third parties are used. This more general formulation clarifies that the auditor is not required to obtain an understanding about each use of each specialist individually. Rather, pursuant to the requirements of AS 2110.18, the auditor's understanding should be sufficient to "(a) identify the types of potential misstatements, (b) assess the factors that affect the risks of material misstatement, and (c) design further audit procedures."

Comparison with Standards of Other Standard Setters

ISA 540 shares some commonality with certain provisions of AS 2110 and the proposed amendment to AS 2110.28. Specifically, ISA 540 provides that, when performing risk assessment procedures and related activities to obtain an understanding of the entity and its environment, including the entity's internal control, as required by ISA 315, the auditor shall obtain an understanding of the following in order

⁵⁸ See Section II.C.3 of this appendix for an additional discussion of this requirement.

to provide a basis for the identification and assessment of the risks of material misstatement for accounting estimates:

- a. The requirements of the applicable financial reporting framework relevant to accounting estimates, including related disclosures.
- b. How management identifies those transactions, events and conditions that may give rise to the need for accounting estimates to be recognized or disclosed in the financial statements. In obtaining this understanding, the auditor shall make inquiries of management about changes in circumstances that may give rise to new, or the need to revise existing, accounting estimates.
- c. How management makes the accounting estimates, and an understanding of the data on which they are based, including:
 - i. The method, including where applicable the model, used in making the accounting estimate;
 - ii. Relevant controls;
 - iii. Whether management has used an expert;
 - iv. The assumptions underlying the accounting estimates;
 - v. Whether there has been or ought to have been a change from the prior period in the methods for making the accounting estimates, and if so, why; and
 - vi. Whether and, if so, how management has assessed the effect of estimation uncertainty.

540. AU-C Section 540 contains requirements that are substantively the same as ISA

Question:

41. Are there other matters relevant to understanding the process used to develop accounting estimates that could be included in the risk assessment standard?

B. Discussion of the Potential for Material Misstatement Due to Fraud

AS 2110.52 requires the key engagement team members to discuss the potential for material misstatement due to fraud. Specifically, this discussion entails consideration of how and where the auditor believes the company's financial statements might be susceptible to material misstatement due to fraud, how management could perpetrate and conceal fraudulent financial reporting, and how assets of the company could be misappropriated.

The proposed amendment to AS 2110.52 would also require the auditor to consider, as part of this discussion, how the financial statements could be manipulated through management bias. Given their subjective nature, accounting estimates are inherently susceptible to management bias. The proposed requirement would focus the auditor's attention on a risk that is particularly relevant to accounting estimates and further underscores the importance of applying professional skepticism in this area.

Question:

42. Is it appropriate to include how financial statements could be manipulated through management bias in accounting estimates in significant accounts and disclosures, as part of the discussion among key engagement team members of the potential for material misstatement due to fraud? If not, describe why it is not appropriate.

C. Identifying Significant Accounts and Disclosures and Their Relevant Assertions

AS 2110.60 requires that, as part of the auditor's identification of significant accounts and disclosures and their relevant assertions, the auditor should evaluate the qualitative and quantitative risk factors related to the financial statement line items and disclosures. It also includes risk factors relevant to the identification of significant accounts and disclosures and their relevant assertions.

The proposed amendment to AS 2110.60 provides the auditor with additional risks factors to consider specific to accounting estimates. The factors include:

- a. The degree of uncertainty associated with the future occurrence or outcome of events and conditions underlying the assumptions;
- b. The complexity of the process for developing the accounting estimate;

- c. The number and complexity of significant assumptions associated with the process;
- d. The degree of subjectivity associated with significant assumptions (for example, because of significant changes in the related events and conditions or a lack of available observable inputs); and
- e. If forecasts are important to the estimate, the length of the forecast period and degree of uncertainty regarding trends affecting the forecast.

The additional risk factors included in the proposed amendment describe those characteristics and conditions that are associated with accounting estimates and that can affect the auditor's determination of the likely sources of potential misstatement. Linking these factors to the existing requirements for identifying significant accounts and disclosures and their relevant assertions helps the auditor to determine which estimates are within the scope of the proposed standard and to design an appropriate audit response.

The SCP discussed whether AS 2110 should be amended to include additional factors for the auditor to take into account related to evaluating the degree of complexity or judgment in the recognition or measurement of financial information, for purposes of determining which risks are significant risks.⁵⁹ Some commenters indicated the factors should be provided as guidance and not as matters that the auditor should take into account, given that these factors may only apply to certain fair value measurements and not necessarily to the broader population of accounting estimates. Other commenters suggested general guidance around the area of measurement uncertainty and the related effect on the auditor's risk assessment.

After consideration of the comments received and other outreach, the proposed amendments to AS 2110 do not include additional factors to evaluate when determining significant risks. The existing requirement in AS 2110.71f already applies to accounting estimates that involve a wide range of measurement uncertainty. Instead, the proposed amendment to AS 2110.60 expands the list of risk factors to include specific factors for

⁵⁹ AS 2110.71 requires the auditor to evaluate certain factors in determining which risks are significant risks.

accounting estimates to prompt auditors to appropriately assess the associated risks in the related accounts and disclosures and develop appropriate audit responses.

Comparison with Standards of Other Standard Setters

ISA 540 provides that in identifying and assessing the risks of material misstatement, as required by ISA 315, the auditor shall evaluate the degree of estimation uncertainty associated with an accounting estimate.

AU-C Section 540 contains requirements that are substantively the same as ISA 540.

Question:

43. Are the additional risk factors to identify significant accounts and disclosures involving accounting estimates clear?

Proposed Amendment to AS 2301, *The Auditor's Responses to the Risks of Material Misstatement*

The proposed amendment to AS 2301.36 includes a note emphasizing that performing substantive procedures for the relevant assertions of significant accounts and disclosures involves testing whether the significant accounts and disclosures are in conformity with the applicable financial reporting framework. The note is consistent with existing requirements in AS 2820, which require the auditor to evaluate whether the financial statements are presented fairly in conformity with the applicable financial reporting framework.

As discussed in the SCP, the proposed amendment serves as a reminder for the auditor and underscores the importance of considering the disclosure requirements in the applicable financial reporting framework relevant to accounting estimates. Two commenters did not support including additional language in AS 2301.36, as discussed in the SCP. One suggested that it would be redundant of other requirements. The other suggested the amendment might have the unintended consequence of leading the auditor to assess the minimum requirements of the applicable financial reporting framework. Others that commented suggested the amendment would be helpful. The note has been included in this proposal to emphasize the importance of evaluating whether the accounting for a significant account or disclosure is in conformity with the applicable financial reporting framework.

Proposed Amendment to AS 2401, Consideration of Fraud in a Financial Statement Audit

The proposed amendment to AS 2401.64 clarifies that, when an auditor performs a retrospective review of significant accounting estimates reflected in the financial statements, the review should be performed for accounting estimates in significant accounts and disclosures. The scope of the retrospective review is consistent with the scope of the proposed standard.

In addition, the amendment requires a comparison of the prior year's estimates to actual results, if any, to determine whether management's judgments and assumptions relating to the estimates indicate a possible bias on the part of management. Comparison of the prior year's estimates to the actual results, when available, further clarifies that the scope of the review applies to those situations where actual results exist. In addition to clarifying the auditor's responsibilities for considering possible bias on the part of management, the proposed amendment recognizes that the results of a retrospective review may provide information regarding the effectiveness of the company's estimation process.

Proposed Amendment to AS 2805, Management Representations

The proposed amendment to AS 2805.06 would require the auditor to obtain specific representations related to accounting estimates in connection with an audit of financial statements presented in conformity with generally accepted accounting principles. Consistent with the existing fair value standard, the auditor would obtain representations about the appropriateness of the methods, the consistency in application, the accuracy and completeness of data, and the reasonableness of significant assumptions used by the company in developing accounting estimates.

Proposed Amendment to Rescind AI 16, Auditing Accounting Estimates: Auditing Interpretations of AS 2501

The Board is proposing to rescind AI 16. That interpretation addresses performance and reporting guidance related to fair value disclosures, primarily voluntary disclosures including fair value balance sheets. Fair value disclosure requirements in the accounting standards have changed since the issuance of this interpretation, and fair value balance sheets covered by the interpretation are rarely included in issuer financial statements. Accordingly, this interpretation is unnecessary.