



EXECUTIVE DIRECTOR

Cynthia M. Fornelli

GOVERNING BOARD

Chair
Cathy Engelbert, CEO
Deloitte LLP

Vice Chair
Joe Adams, Managing Partner and CEO
RSM US LLP

Wayne Berson, CEO
BDO USA LLP

Lynne M. Doughtie, U.S. Chairman and CEO
KPMG LLP

Michele J. Hooper, President and CEO
The Directors' Council

Stephen R. Howe, Jr., U.S. Chairman and
Managing Partner, Americas Managing Partner,
Ernst & Young LLP

J. Michael McGuire, CEO
Grant Thornton LLP

Barry C. Melancon, President and CEO
American Institute of CPAs

Robert E. Moritz, Chairman and Senior Partner
PricewaterhouseCoopers LLP

Lynn S. Paine, John G. McLean Professor of
Business Administration, Senior Associate Dean
for Faculty Development
Harvard Business School

James L. Powers, CEO
Crowe Horwath LLP

Mary Schapiro, Vice Chairman Advisory Board
Promontory Financial Group

December 1, 2015

Office of the Secretary
Public Company Accounting Oversight Board
1666 K Street, N.W.
Washington, D.C. 20006-2803

Re: Staff Consultations Papers: *Auditing Accounting Estimates and Fair Value Measurements and No. 2015-01, The Auditor's Use of the Work of Specialists*

Dear Office of the Secretary:

The Center for Audit Quality (CAQ) is an autonomous public policy organization dedicated to enhancing investor confidence and public trust in the global capital markets. The CAQ fosters high quality performance by public company auditors, convenes and collaborates with other stakeholders to advance the discussion of critical issues requiring action and intervention, and advocates policies and standards that promote public company auditors' objectivity, effectiveness, and responsiveness to dynamic market conditions. Based in Washington, D.C., the CAQ is affiliated with the American Institute of Certified Public Accountants.

This is an addendum to our comment letters to the PCAOB in response to recent Staff Consultation Papers regarding auditing accounting estimates, including fair value measurements, and using the work of specialists.¹ As stated in those letters, the CAQ is supportive of enhancements to the auditing standards related to accounting estimates that align with the PCAOB's risk assessment standards, promote audit quality by narrowing, or at least not expanding, any potential stakeholders' expectation gaps, and allow for auditors of entities of all different sizes to be able to apply the requirements consistently, while providing for flexibility in approaches.

The appendix to this letter, *Auditing Accounting Estimates and Fair Value Measurements: A Framework* (the Framework), represents a collaborative effort by members of the profession to provide the Public Company Accounting Oversight Board (PCAOB or the Board) with our views as it relates to the current standard-setting projects of the Board on auditing accounting estimates and fair value measurements as well as the use of specialists. This letter represents the observations of the CAQ, but not necessarily the views of any specific firm, individual, or CAQ Governing Board member.

In developing the Framework, the CAQ considered the views in each of the Staff Consultations Papers, as well as discussions with PCAOB staff as part of its outreach

¹ See November 3, 2014 comment letter in response to Staff Consultation Paper, *Auditing Accounting Estimates and Fair Value Measurements*, and July 31, 2015 comment letter in response to Staff Consultation Paper 2015-01, *The Auditor's Use of the Work of Specialists*.

efforts regarding auditing estimates and fair value measurements, as well as the use of specialists. The Framework also reflects input received from CAQ member firm representatives that have participated in recent PCAOB Standing Advisory Group discussions on this important topic.²

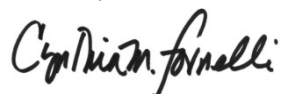
The Framework is principles-based. We believe this is critical in order to be operational under the current construct of (and sustainable to changes within) the capital markets and sensitive to the availability of data and information from specialists, pricing services and other relevant market participants.

Within the Framework, we offer suggestions for auditing accounting estimates that build upon the overarching principles described in our comment letters. Those principles state that any enhancements to existing auditing standards should:

- Recognize the relationship between the auditor's risk assessment and the audit procedures designed to sufficiently and appropriately respond to that risk;
- Consider the range of accounts (and elements of accounts) that involve varying levels of estimation uncertainty and the varying levels of complexity in measurement and risk associated with different accounting estimates;
- Recognize that accounting estimates may be subject to a significant degree of measurement uncertainty, and such inherent uncertainty will exist irrespective of the level of effort involved in auditing the accounting estimate (e.g., not imply that a level of precision exists in an inherently imprecise measurement exclusively as a result of an audit of that measurement); and
- Continue to recognize that auditors may use the work of a specialist when situations arise that require specialized knowledge and subject matter expertise in a field other than accounting or auditing.

Again, we appreciate the opportunity to share our views regarding auditing accounting estimates and fair value measurements and the use of specialists. We stand ready to assist you in any way we can, including participation in any future meetings or roundtables.

Sincerely,



Cynthia M. Fornelli
Executive Director
Center for Audit Quality

Attachment

Appendix: Auditing Accounting Estimates and Fair Value Measurements: A Framework

cc:

PCAOB

James R. Doty, Chairman
Lewis H. Ferguson, Board Member
Jeanette M. Franzel, Board Member
Jay D. Hanson, Board Member
Steven B. Harris, Board Member
Martin F. Baumann, Chief Auditor and Director of Professional Standards

²The PCAOB held Standing Advisory Group meetings on October 2, 2014, June 18, 2015, and November 13, 2015 to discuss matters related to auditing accounting estimates and fair value measurements and the use of specialists.

SEC

Mary Jo White, Chair

Luis A. Aguilar, Commissioner

Michael S. Piwowar, Commissioner

Kara M. Stein, Commissioner

James Schnurr, Chief Accountant

Wesley R. Bricker, Deputy Chief Accountant

Brian T. Croteau, Deputy Chief Accountant

Julie Erhardt, Deputy Chief Accountant

Appendix: Auditing Accounting Estimates and Fair Value Measurements: A Framework

Index

1	Overview.....	A-2
1.1	Background.....	A-2
1.2	Design of the Framework.....	A-2
2	Alignment with the Auditor’s Risk Assessment Process.....	A-3
2.1	Consideration of Thematic Elements of ISA 540.....	A-3
2.2	Performing a Risk Assessment for Accounting Estimates.....	A-4
2.3	Consideration of Management’s Process.....	A-6
2.4	Accounting Estimates with a High Level of Estimation Uncertainty.....	A-7
2.5	Consideration of Management Bias.....	A-8
2.6	Revisions of Risk Assessment.....	A-9
3	The Auditor’s Responses to the Assessed Risks of Material Misstatement.....	A-10
3.1	Testing Controls for Accounting Estimates.....	A-10
3.2	Substantive Testing Approaches.....	A-11
3.3	Considerations for Evaluating Audit Evidence.....	A-12
3.4	Evaluating the Company’s Method Used to Develop an Accounting Estimate.....	A-13
3.5	Evaluating the Reasonableness of Significant Assumptions.....	A-14
3.6	Developing a Reasonable Range for an Accounting Estimate.....	A-16
3.7	Accounting Estimates with Significant Risks.....	A-17
4	Using the Work of an Auditor’s Specialist.....	A-19
4.1	Evaluating the Knowledge, Skill, and Objectivity of an Auditor’s Specialist.....	A-19
4.2	Informing an Auditor’s Specialist of His or Her Responsibilities.....	A-21
4.3	Evaluating the Work of an Auditor’s Specialist.....	A-22
5	Using the Work of the Company’s Specialist.....	A-23
5.1	Evaluating the Knowledge, Skill and Objectivity of a Company’s Specialist.....	A-24
5.2	Evaluating the Work of a Company’s Specialist.....	A-25
6	Use of Third-Party Pricing Sources Not Acting as a Specialist.....	A-25

Appendix: Auditing Accounting Estimates and Fair Value Measurements: A Framework

1 Overview

1.1 Background

- Over the past decade, changes in financial reporting frameworks have led to an increase in the use of accounting estimates (and, in particular, fair value measurements)¹ in the preparation of financial statements. The complexity associated with certain accounting estimates also has increased during this time, as has the subjectivity that can be associated with their underlying assumptions.
- Given the many different types of accounting estimates, the varying nature of the related estimation processes, and the underlying inputs and assumptions, there may not be a ‘one-size-fits-all’ solution that enhances existing auditing standards relating to accounting estimates. It is important that any improvements to existing auditing standards result in scalable requirements and guidance that audit firms of all sizes can apply to issuers of all sizes.

1.2 Design of the Framework

- This framework is intended to enhance and clarify the existing auditing standards by:
 - Improving the linkage between the performance requirements in the PCAOB’s existing auditing standards² and the auditor’s risk assessment process when determining an appropriate audit response (e.g., PCAOB Auditing Standard No. 12, *Identifying and Assessing Risks of Material Misstatement* (AS 12) and PCAOB Auditing Standard No. 13, *The Auditor’s Responses to the Risks of Material Misstatement* (AS 13));³
 - Clarifying the objectives and scope of the standards to reduce any perceived inconsistencies in expectations for substantive testing of fair value measurements versus other accounting estimates, including instances in which the auditor uses the work of a specialist when auditing accounting estimates; and
 - Providing supplemental or application guidance to promote greater consistency and more effective application across the audit profession.
- Because of the variety of accounting estimates, this framework includes examples to illustrate key aspects of the framework. These examples are highlighted throughout this document to facilitate identification of what could be considered supplemental or application guidance. This framework also includes explanatory narrative descriptions that elaborate on the thought process behind a

¹ This framework acknowledges and adopts an approach similar to that outlined in footnote 1 of the Staff Consultation Paper on Auditing Accounting Estimates and Fair Value Measurements (Estimates Staff Consultation Paper), in that it generally uses the term “accounting estimate” to mean both accounting estimates and fair value measurements, unless noted otherwise. When discussing existing requirements of extant standards, this framework generally uses the terms “accounting estimate” and “fair value measurement” to have the same meaning as those terms have in AU sec. 328, Auditing Fair Value Measurements and Disclosures (AU 328) and AU sec. 342, Auditing Accounting Estimates (AU 342).

² When auditing accounting estimates, including fair value measurements, performance requirements are currently included in AU 328, AU 342, AU sec. 332, *Auditing Derivative Instruments, Hedging Activities, and Investments in Securities* (AU 332), and, when a specialist is involved, AU sec. 336, *Using the Work of a Specialist* (AU 336).

³ We agree with the view in the Estimates Staff Consultation Paper that any changes to the auditing standards related to accounting estimates should build upon the principles in the PCAOB’s risk assessment standards, particularly AS 12 and AS 13. In this framework we provide specific suggestions to demonstrate how auditors may apply the risk assessment requirements in the context of auditing accounting estimates and when using the work of a specialist.

Appendix: Auditing Accounting Estimates and Fair Value Measurements: A Framework

requirement to facilitate the application of auditor judgment to a variety of facts and circumstances.

- We recognize that PCAOB auditing standards typically do not include such guidance; however, we believe doing so would provide clarity in the objectives of certain aspects of the standards and lead to greater consistency in application.
- We believe this framework will help to improve audit quality regardless of how enhancements ultimately are codified in the standards (i.e., the creation of one or more new standards or enhancements to existing standards).

2 Alignment with the Auditor's Risk Assessment Process

- The CAQ believes that many of the performance requirements in the PCAOB's existing auditing standards for auditing accounting estimates and using the work of specialists are appropriate. We therefore start with the objectives of these existing auditing standards, and recommend enhancements to both better align these standards with the PCAOB's risk assessment standards and emphasize the importance of the auditor obtaining an understanding of management's processes, including management's use of specialists and other third-party sources, and system of internal control. In providing these recommended enhancements, we considered views expressed in the Staff Consultation Papers and concepts from relevant International Standards on Auditing (ISA), in addition to the existing PCAOB auditing standards.
- This framework is designed to apply to audit procedures performed over all accounting estimates, regardless of whether the auditor or the company uses the work of a specialist. The auditor's risk assessment, which includes an evaluation of the knowledge, skill, and objectivity of a company's specialist(s), will assist the auditor in designing and implementing appropriate responses to risks of material misstatement.

2.1 Consideration of Thematic Elements of ISA 540

- ISA 540,⁴ which builds upon the risk assessment guidance in ISA 315⁵ and ISA 330,⁶ illustrates thematically how the risk assessment standards could be aligned with the standards relating to accounting estimates. Similarly, revisions to PCAOB standards could build upon the principles of AS 12 and AS 13 and include incremental considerations specific to accounting estimates to guide the auditor's consideration of the subjectivity of accounting estimates, the susceptibility of accounting estimates to fraud, and other factors when performing a risk assessment.⁷
- The following are concepts from ISA 540 specific to accounting estimates that could be incorporated or enhanced within the PCAOB's risk assessment standards.⁸

⁴ ISA 540, *Auditing Accounting Estimates, Including Fair Value Estimates, and Related Disclosures*. Although the International Auditing and Assurance Standards Board is considering changes to ISA 540, the concepts in the standard as currently written provide a general basis for consideration of enhancements to PCAOB auditing standards.

⁵ ISA 315, *Identifying and Assessing the Risks of Material Misstatement Through Understanding the Entity and Its Environment*.

⁶ ISA 330, *The Auditor's Responses to Assessed Risks*.

⁷ ISA 540 illustrates the type of considerations we believe should be incorporated into the auditing standard(s) related to accounting estimates, all of which are already embodied in the PCAOB's risk assessment standards (i.e., AS 12 and AS 13).

⁸ We acknowledge that some of these items are already contained in the PCAOB's risk assessment standards.

Appendix: Auditing Accounting Estimates and Fair Value Measurements: A Framework

- Obtain an understanding of the following in order to provide a basis for the identification and assessment of the risks of material misstatement for accounting estimates:
 - The applicable financial reporting framework;
 - How management identifies those transactions, events and conditions that may give rise to the need for accounting estimates (including how management monitors and identifies changes in circumstances that may give rise to new, or the need to revise existing, accounting estimates); and
 - How management makes the accounting estimates, and an understanding of the data on which they are based, including:
 - The method or model used in making the accounting estimate;
 - Relevant controls;
 - Whether management has engaged a specialist;
 - The assumptions underlying the accounting estimates;
 - Whether there was or should have been a change from the prior period in the methods for making the accounting estimates, and if so, why; and
 - Whether, and if so, how management has assessed the effect of estimation uncertainty.
- In addition to considering conditions specific to accounting estimates in the auditor's risk assessment, supplemental guidance would serve to further clarify the auditor's expected performance in assessing risk and appropriately designing audit procedures to obtain sufficient relevant audit evidence.

2.2 Performing a Risk Assessment for Accounting Estimates

- AS 12, paragraph 59 addresses how the auditor determines which risks of misstatement represent risks of material misstatement at the financial statement and assertion level, and those risks of material misstatement that are significant risks. AS 12, paragraph 59(e) states that, in identifying and assessing risks of material misstatement, the auditor should identify significant accounts and disclosures and their relevant assertions.
- In addition, consistent with paragraph 16 of PCAOB Auditing Standard No. 9, *Audit Planning* (AS 9), based on the nature of accounting estimates contained in significant accounts and disclosures, the auditor determines whether specialized skill or knowledge in relation to one or more aspects of the accounting estimates is required to:
 - Perform an effective risk assessment;
 - Plan or perform audit procedures; or
 - Evaluate audit results.
- Generally speaking, accounting estimates are present in most accounts and disclosures in the financial statements. Risks related to the data, model, method and assumptions used exist for all accounting estimates, and the relative significance of those risks vary across the many types of accounting estimates.

Appendix: Auditing Accounting Estimates and Fair Value Measurements: A Framework

- It is not appropriate to presume that every relevant assertion associated with an accounting estimate represents a significant risk. Similarly, it is not appropriate to presume that every accounting estimate gives rise to a significant risk.
- Rather, in order to perform an appropriate risk assessment, the auditor considers the following with respect to management’s process for determining the estimate:
 - The relevant inputs;
 - The complexity of those inputs and the subjectivity of the judgments related to them; and
 - Alternative methods that may support the reasonableness of the accounting estimate in the auditor’s consideration of the risk(s) relevant to a particular significant account or disclosure.
- In addition, the auditor considers management’s ability and expertise to determine an accounting estimate (including whether management has used a specialist to assist with this determination), as well as whether the knowledge and skills of an auditor’s specialist may be needed.
- The auditing standards acknowledge that “the components of a potential significant account or disclosure might be subject to significantly differing risks.”⁹ This is particularly true for accounting estimates, and may result in the need for the auditor to disaggregate a significant account in order to perform an effective risk assessment.
- The auditing standards could expand upon the concepts in AS 12¹⁰ to clarify that the auditor considers the potential sources of risk of material misstatement within a significant account at a sufficiently disaggregated level based on auditor judgment in order to enable the auditor to appropriately determine the nature of audit procedures to perform. In other words, the auditor completes the risk assessment at a disaggregated level within the components of an account in order to design appropriate audit procedures. In determining the appropriate level at which to assess the risk of material misstatement for a particular account or components of an account, the auditor could consider the information presented in the footnote disclosures related to that particular account.
 - While we suggest the auditor disaggregate components of an account when performing a risk assessment, we do not suggest requiring disaggregation to the lowest possible unit of account level (e.g., individual security basis by CUSIP number). In many cases, after considering factors such as the similarity of the nature of the accounting estimates, the consistency of management’s process for determining accounting estimates, and the sources of risk, the auditor may conclude that certain components are sufficiently similar based on their risk, such that they do not need to be disaggregated further for purposes of designing appropriate audit procedures.

⁹ AS 12, paragraph 63.

¹⁰ Specifically the concepts in paragraph 59 regarding the identification and assessment of risks of material misstatement at the financial statement level and the assertion level.

Appendix: Auditing Accounting Estimates and Fair Value Measurements: A Framework

Illustrative Example 1: Performing a Risk Assessment: Disaggregation

In order to perform an assessment of risk over a company's allowance for loan losses (ALL), it may be necessary for the auditor to identify individual components of the accounting estimate and assess the risks relevant to each component.

An ALL typically includes a general loss reserve and a specific loss reserve. Accordingly, it may not be appropriate to view the ALL as if it were a single accounting estimate or account. The risks associated with the general loss reserve may include inaccurate inputs (e.g., historical losses by loan type) and inappropriate qualitative adjustments to the historical loss rates. The risks associated with the specific loss reserves may include unreasonable cash flow projections, inappropriate discount rates, and stale appraisals. The significance of these risks may differ for a particular company and would be addressed through individual planned audit responses.

Illustrative Example 2: Performing a Risk Assessment: Disaggregation

As it relates to investments measured and disclosed at fair value, while the materiality of the account balances are driven by the quantity and value of the underlying securities, the valuation risk associated with investments often is driven by the characteristics of the investments held (e.g., similar valuation models, significant inputs to a valuation model, nature and source of significant assumptions for a type of investment), the observability of pricing inputs and the complexity of valuation models used to estimate fair value. Individual securities within a particular category of investments may share common characteristics with other securities in another category of investments. In those situations, the auditor determines as part of understanding management's estimation process which securities contain sufficiently homogenous characteristics such that the auditor can draw conclusions about them from testing them as a group. Once that is determined, disaggregation of the significant account to a level that includes homogenous securities into a single group would be sufficient to perform an effective risk assessment. This would lead to a more effectively executed risk-based approach in which the auditor plans procedures that are designed to obtain more persuasive audit evidence that corresponds to the auditor's assessment of risk (as discussed in AS 13, paragraph 9(a)).

2.3 Consideration of Management's Process

- Assessing management's process for determining accounting estimates is an important element of the auditor's risk assessment process. In preparing accounting estimates, management selects or develops assumptions that represent their judgment of the most likely circumstances and events with respect to the relevant factors.¹¹ The significance of management's assumptions, along with other factors such as the sensitivity of the assumptions to variability, affects the

¹¹ AU 342, paragraph 05(d).

Appendix: Auditing Accounting Estimates and Fair Value Measurements: A Framework

auditor's determination of the risk of material misstatement associated with a particular accounting estimate.¹²

- In some cases, events that occur after the balance sheet date may provide more persuasive audit evidence than the auditor's consideration of information used to corroborate management's assumptions used to derive an accounting estimate. In certain of these cases, the related estimation uncertainty may be substantially reduced by the recent information available to the auditor.

2.4 Accounting Estimates with a High Level of Estimation Uncertainty

- Part of the auditor's risk assessment process includes evaluating the degree of estimation uncertainty associated with an accounting estimate. Certain accounting estimates may include a level of estimation uncertainty that exceeds the auditor's established materiality threshold; two appropriately qualified and objective professionals may arrive at different results based on the same facts because they apply different but equally reasonable assumptions. We believe it is important that the auditing standards acknowledge this and emphasize that, in those circumstances, both a comprehensive evaluation in light of the circumstances and facts involved and specific documentation regarding conclusions are important.
- For accounting estimates with a high level of estimation uncertainty, the range of reasonable outcomes may exceed the auditor's established materiality threshold. In such cases, the level of estimation uncertainty may not be able to be reduced to an amount less than the auditor's established materiality threshold regardless of the amount of relevant and reliable audit evidence accumulated. In those circumstances, the auditor evaluates whether management's disclosures adequately describe the estimation uncertainty inherent in the accounting estimate in accordance with the applicable financial reporting framework.
 - Supplemental guidance that acknowledges that there is variability and imprecision in accounting estimates having high estimation uncertainty would be beneficial. This guidance could remind auditors of their responsibility to perform sufficient appropriate procedures to be able to reasonably conclude that the accounting estimate has been determined (a) in accordance with the applicable financial reporting framework, (b) using a consistent approach from period to period (if appropriate) and (c) that there is adequate disclosure (in accordance with the applicable financial reporting framework) regarding the methods and assumptions such that the estimation uncertainty is transparent to the user. Auditors would continue to assess the facts and circumstances through the date of the auditor's report.

¹² AU 342, paragraph 05.

Appendix: Auditing Accounting Estimates and Fair Value Measurements: A Framework

Illustrative Example 3: Accounting Estimates with a High Level of Estimation Uncertainty

Certain long-term contracts that are developmental in nature are inherently complex and have high estimation uncertainty. When accounting for such contracts using the percentage of completion method, management's accounting estimate of the estimated costs of completion could have a range of outcomes that exceeds the auditor's established materiality threshold. This may be due, in part, to technological specifications within the contract. In that situation, it may not be possible to develop a reasonable range for the accounting estimate that is less than the auditor's established materiality threshold.

2.5 Consideration of Management Bias

- When evaluating management's judgments and decisions in their determination of accounting estimates as part of the auditor's risk assessment process, the auditor applies professional skepticism when identifying whether there are any indicators of management bias.
- When evaluating potential bias, including that of a company's specialist, it is important for the auditor to consider the incentives and pressures on management to manipulate the financial statements, and opportunities to do so.
- When a risk of material misstatement due to fraud has been identified related to an accounting estimate, the auditor applies AU sec. 316, *Consideration of Fraud in a Financial Statement Audit* (AU 316), in addition to this framework.
 - Examples of incentives and pressures may include the level of pressure or focus by management or investors on key performance indicators, the structure of executive compensation arrangements, and economic or industry conditions.
 - Examples of opportunities may include the susceptibility of the company's accounting systems to manipulation due to inherent risks from management override, collusion, or poorly designed or implemented internal control structures.
- When evaluating potential bias, the auditor evaluates the qualitative aspects of the company's accounting practices, including potential bias in management's judgments about the amounts and disclosures in the financial statements. In addition to applying the guidance in paragraphs 24-27 of PCAOB Auditing Standard No. 14, *Evaluating Audit Results*, and paragraphs 63-65 of AU 316, the auditor considers performing the following risk assessment procedures:
 - Review the accuracy of prior year accounting estimates to assess whether there is any indication of bias in management's estimation process.
 - Evaluate whether there is a pattern of bias in management's accounting estimates (e.g., whether management's rationale to use the various assumptions in an accounting estimate(s) is driven by its bias for a particular result).
 - When the applicable financial reporting framework does not prescribe a specific methodology, consider whether the accounting estimate typically is developed using an estimation methodology that is an industry standard or is a generally applied approach (regardless of the industry). If the auditor determines that management's method used to determine the accounting estimate is not a generally applied approach or, when

Appendix: Auditing Accounting Estimates and Fair Value Measurements: A Framework

applicable, is not consistent with methods used in the company's industry, the auditor evaluates how that compares to the facts and circumstances specific to the company and whether management's rationale to use the unique methodology is driven by its bias for a particular result.

- The auditor also should be alert to contradictory evidence when evaluating management's estimation process, and should not ignore significant assumptions within management's estimate that contradict other information known to the auditor. If contradictory evidence is identified, the auditor gives appropriate consideration to whether that evidence is indicative of management bias or could result in a material misstatement.
- If indicators of management bias are identified, the auditor evaluates how those indicators may affect the auditor's conclusion as to whether his or her risk assessment and related responses remain appropriate with respect to the affected accounting estimates. The auditor also considers whether those indicators of bias have implications for the other areas of the audit.
 - In these situations, the auditor also communicates to the audit committee the results of the auditor's evaluation of accounting estimates included in the financial statements, which are individually reasonable, that indicate a possible bias on the part of the company's management. This is consistent with paragraph 13 of PCAOB Auditing Standard No. 16, *Communicating with Audit Committees*.

2.6 Revisions of Risk Assessment

- This framework recognizes the iterative nature of the planning process and allows for the auditor to modify or tailor the substantive testing approach from the planned audit procedures to obtain sufficient appropriate audit evidence and document his or her rationale for doing so in light of changes in facts and circumstances.¹³
- This is particularly relevant in instances where the auditor obtains evidence during the course of the audit that is contradictory to the audit evidence on which the auditor originally based his or her risk assessment, or that indicates the existence of management bias that was not previously identified as part of the risk assessment process. If the auditor obtains evidence that contradicts the original risk assessment, the auditor revises the related risk assessments and modifies the planned nature, timing, or extent of substantive procedures as necessary.¹⁴

¹³ This concept is consistent with paragraph 74 of AS 12.

¹⁴ AS 13, paragraph 46.

Appendix: Auditing Accounting Estimates and Fair Value Measurements: A Framework

Illustrative Example 4: Revisions to Risk Assessment

An auditor initially determines that he or she will substantively test an accounting estimate by reviewing and testing the process used by management to develop the accounting estimate. If the auditor identifies errors or other flaws in management's process for determining the accounting estimate (e.g., income projections that are not supported by historical results and current trends in the company's business results), the auditor may determine that reviewing and testing management's process alone would not provide sufficient appropriate audit evidence about the reasonableness of management's estimate as recorded in the financial statements. If that is the case, the auditor would revise his or her planned audit approach to include other procedures, such as developing an independent expectation of the accounting estimate to corroborate the reasonableness of management's accounting estimate or reviewing subsequent events or transactions occurring prior to the date of the auditor's report.

An auditor who initially plans to substantively test an accounting estimate by reviewing and testing management's process or developing an independent expectation may revise his or her approach to review subsequent events if reliable evidence becomes available as a result of a transaction occurring after the balance sheet date.

3 The Auditor's Responses to the Assessed Risks of Material Misstatement

3.1 Testing Controls for Accounting Estimates

- As part of the risk assessment process (as discussed in section 2), the auditor obtains an understanding of management's process for determining the accounting estimate, including understanding whether and, if so, how management has used a specialist.
- If the auditor plans to rely on controls to reduce the amount of substantive procedures to perform, the auditor identifies the relevant controls for each risk of material misstatement at the relevant assertion level, and assesses the effectiveness of their design and implementation. In addition, the auditor also tests the operating effectiveness of those controls.
- If the auditor does not plan to rely on controls to reduce the amount of substantive procedures to be performed, or if the auditor determines that the controls necessary to sufficiently address the assessed risks of material misstatement for relevant assertions are missing or ineffective, the auditor assesses control risk at the maximum level.
- With regard to accounting estimates that give rise to a significant risk, the auditor should evaluate the design of the company's controls that are intended to address risks of material misstatement due to fraud and other significant risks, and determine whether those controls have been

Appendix: Auditing Accounting Estimates and Fair Value Measurements: A Framework

implemented, if the auditor has not already done so when obtaining an understanding of internal control.¹⁵ Examples of these procedures could include an evaluation of:

- How management determines the completeness, relevance and accuracy of the data used to develop accounting estimates.
- Controls related to the review and approval of accounting estimates, including the assumptions or inputs used in their development, by sufficiently competent and experienced members of management or those charged with governance.
- The segregation of duties between those committing the company to the underlying transactions and those responsible for developing and reviewing the accounting estimates, including whether the assignment of responsibilities appropriately takes into account the nature of the company and its products or services (e.g., relevant segregation of duties may include an independent function responsible for estimation and validation of fair value whose remuneration is not explicitly tied to such estimates of fair value).¹⁶

3.2 Substantive Testing Approaches

- This framework retains the three substantive testing approaches included in the existing standards.
- When determining a substantive testing approach (or combination of approaches) to address the identified risks of material misstatement, the auditor takes into account his or her understanding of the company and its environment, including its internal control, his or her understanding of management's estimation process, and the results of the auditor's risk assessment. In making this determination, the auditor assesses whether it is appropriate to use of the work of an auditor's specialist to address the identified risks of material misstatement.
- Audit procedures should be designed to address the assessed risk of material misstatement at both the overall financial statement level and at the relevant assertion level. With appropriate consideration to the above factors, the auditor uses one or a combination of the following three substantive testing approaches:
 - (a) Review and test management's significant assumptions and the model and underlying data used to develop the accounting estimate.
 - The nature, timing and extent of testing management's assumptions, the valuation model and the underlying data should be commensurate with the assessed level of risk and the relevance and reliability of the audit evidence that can be obtained through such testing.
 - (b) Develop an independent expectation of the accounting estimate to corroborate the reasonableness of management's accounting estimate.
 - Develop a point estimate or a range to evaluate management's point estimate. For this purpose:

¹⁵ Consistent with AS 12, paragraph 72.

¹⁶ Consistent with the themes in ISA 540.

Appendix: Auditing Accounting Estimates and Fair Value Measurements: A Framework

- The auditor may choose to develop an independent accounting estimate to compare to management’s estimate by either (1) using management’s assumptions or (2) developing his or her own independent assumptions. When the auditor’s independent accounting estimate uses assumptions or methods that differ from those used by management, the auditor nevertheless understands management’s assumptions. The auditor uses that understanding to verify that his or her independent accounting estimate takes all significant variables into consideration and to evaluate any significant difference from management’s accounting estimate.¹⁷ This understanding should be obtained at the level of disaggregation determined by the auditor’s risk assessment procedures, and the depth of understanding and rigor of substantive testing should be commensurate with the associated level of risk for that disaggregated group.
- (c) Review subsequent events and transactions occurring prior to the date of the auditor’s report.
- Determine whether events occurring up to the date of the auditor’s report provide relevant and reliable audit evidence for the recorded accounting estimate.

3.3 Considerations for Evaluating Audit Evidence

- The auditor applies PCAOB Auditing Standard No. 15, *Audit Evidence* (AS 15), for purposes of designing and performing procedures to obtain sufficient appropriate audit evidence. In doing so, the auditor considers evidence obtained in other areas of the audit that contradicts evidence provided by the company to support an accounting estimate. This includes situations where the auditor has chosen to develop an independent expectation of an accounting estimate. Regardless of the nature of planned audit procedures, the auditor understands management’s process for developing the accounting estimate and considers whether the auditor is aware of potentially contradictory audit evidence, either related to the estimate or from evidence obtained elsewhere in the audit.
- The existence of contradictory evidence does not necessarily indicate that management’s accounting estimate is unreasonable. The nature, relevance and source (e.g., internal management representations as opposed to an external source such as published industry data) of contradictory evidence should be considered in conjunction with other evidence obtained, including evidence corroborating management’s conclusion. The reasonable expectations of the auditor also should be considered (e.g., if variances within a certain threshold are expected, they may not be considered contradictory evidence).

¹⁷ AU 328, paragraph 40.

Appendix: Auditing Accounting Estimates and Fair Value Measurements: A Framework

- A wide range of reasonableness for an accounting estimate does not necessarily represent contradictory evidence. It may, however, reflect a higher level of estimation uncertainty, which may be an indicator of a significant risk.
- The auditor also gives appropriate consideration to information known to the auditor that contradicts management's conclusion. Once an appropriate consideration has been made, if the auditor concludes that there is sufficient corroborative evidence to support management's conclusion, the auditor documents those considerations. While the auditor considers alternative methods or assumptions not used by management, an auditor is not required to perform an exhaustive search for contradictory evidence.

3.4 Evaluating the Company's Method Used to Develop an Accounting Estimate

- When evaluating a company's method used to develop an accounting estimate, the auditor determines whether the method used by management in developing the accounting estimate is appropriate in the context of the applicable financial reporting framework. In doing so, the auditor reviews management's model, significant assumptions and other inputs and data used to develop the accounting estimate. The nature, timing and extent of these procedures should correspond with the assessed level of risk, as determined based on the process discussed in section 2, and the relevance and reliability of the audit evidence that can be obtained through such testing.
- Specifically, based on the assessed risk of material misstatement as described in section 2, the auditor evaluates whether:
 - Management has appropriately applied the requirements of the applicable financial reporting framework relevant to the accounting estimate;
 - The method(s) for making the accounting estimate(s) is appropriate and have been applied consistently from period to period, if consistency is appropriate; and
 - Changes, if any, in the accounting estimate(s) or in the method(s) for making the estimate from the prior period are appropriate in the circumstances.
- When the applicable financial reporting framework does not prescribe a particular method of measurement to be used for developing an accounting estimate, the auditor could consider the methods used within a company's industry in determining whether management's method is acceptable, if doing so is determined to be appropriate in response to the associated risk. In these instances, the auditor considers:
 - How management considered the nature of the asset or liability being estimated when selecting a particular method.
 - Whether the company operates in a particular business, industry or environment in which there are methods commonly used to make the particular type of accounting estimate.¹⁸
 - Additionally, this framework acknowledges the impact on the risk of material misstatement when management uses a method not commonly used in a particular industry or segment (and that method is unique to the issuer's industry). For example, there may be greater risks of material misstatement when

¹⁸ Consistent with the concepts in paragraph A25, ISA 540.

Appendix: Auditing Accounting Estimates and Fair Value Measurements: A Framework

management is departing from a method commonly used in a particular industry or environment.¹⁹

- If the auditor determines that management’s method used to determine the accounting estimate is not consistent with methods used in the company’s industry, the auditor considers why the method selected is being used and whether the selection of that method is an indication of management bias.
- The auditor also evaluates the adequacy of management’s disclosure about the method used to determine the accounting estimate, including whether it is in conformity with the applicable financial reporting framework. In doing so, the auditor also considers whether the applicable financial reporting framework contemplates the use of more than one estimation method, as Accounting Standards Codification Topic 820, *Fair Value Measurement*, acknowledges will be appropriate in some cases.²⁰ Evaluating whether management uses more than one estimation method – and the reasons for doing so (or not doing so) – could be useful in evaluating the range of reasonableness for accounting estimates with significant estimation uncertainty.

3.5 Evaluating the Reasonableness of Significant Assumptions

- Auditors plan and perform audit procedures to address the identified risks of material misstatement related to accounting estimates, which can arise from a variety of sources, including external factors (e.g., conditions in the company’s industry and environment) and company-specific factors (e.g., the nature of the company, its activities, and internal control over financial reporting).
- The auditor’s response to risks of material misstatement related to accounting estimates includes considering the sensitivity of the accounting estimate to its underlying significant assumptions and determining whether any significant assumptions are not supported by sufficient appropriate evidence. Although these procedures may be planned and performed at the relevant assertion and significant account level, the auditor determines whether the overall approach is responsive to the risks of material misstatement for the financial statements taken as a whole (see detailed discussion within section 2).
- This framework considers a description of significant assumptions that recognizes that “an assumption used in making an accounting estimate may be deemed to be significant if a reasonable variation in the assumption would materially affect the measurement of the accounting estimate.”²¹
 - The determination of which significant assumptions are inherently sensitive (i.e., those for which a reasonable variation in the assumption would materially affect the accounting estimate) will be informed by the auditor’s risk assessment process, including the understanding of management’s method for determining the accounting estimate, and the evaluation of the inherent estimation uncertainty within a particular accounting estimate. In other words, an auditor determines through its risk assessment procedures

¹⁹ Consistent with the concepts in paragraph A26, ISA 540.

²⁰ Paragraph 820-10-35-24B.

²¹ Consistent with the concepts in ISA 540, paragraph A107.

Appendix: Auditing Accounting Estimates and Fair Value Measurements: A Framework

the level of estimation uncertainty within an accounting estimate and the drivers of that uncertainty.

- Consistent with AU 328 paragraph 33, we believe the auditor should focus on the assumptions that management has identified as significant to the accounting estimate. AU 328 paragraph 34 states that if management has not identified particularly sensitive assumptions, the auditor considers whether to employ techniques to identify those assumptions.
- Matters that auditors may consider in evaluating the reasonableness of significant assumptions include:²²
 - Whether individual significant assumptions appear reasonable.
 - Whether the significant assumptions are interdependent and internally consistent.
 - Whether the significant assumptions appear reasonable when considered collectively or in conjunction with other assumptions, either for that accounting estimate or for other accounting estimates.
 - Whether the significant assumptions appropriately reflect observable marketplace assumptions (when applicable based on the accounting estimate's applicable financial reporting framework).
 - Whether significant assumptions that reflect management's expectations of the outcome of its objectives and strategies are consistent with:
 - The general economic environment and the company's economic circumstances.
 - The plans of the company.
 - Significant assumptions made in prior periods, if relevant.
 - Experience of, or previous conditions experienced by, the company, to the extent this historical information may be considered representative of future conditions or events.
 - Other assumptions used by management relating to the financial statements.
 - Whether significant assumptions that depend on management's ability and intent to carry out certain actions are reasonable in light of:²³
 - Management's history of carrying out its stated intentions.
 - Written plans and other documentation, including, where applicable, formally approved budgets, authorizations or minutes.
 - Management's reasons for a particular course of action.
 - The auditor's review of events occurring subsequent to the date of the financial statements and up to the date of the auditor's report.
 - Where relevant, management's ability to carry out a particular course of action given the company's economic circumstances, including the implications of its existing commitments.

²² Consistent with the concepts in ISA 540, paragraphs A77-A81.

²³ Depending on the nature of the accounting estimate and the requirements of the applicable financial reporting framework, appropriate consideration should be given to a market participant's ability and intent by applying these factors from a market participant perspective (as opposed to entity-specific).

Appendix: Auditing Accounting Estimates and Fair Value Measurements: A Framework

- When considering the matters listed above, the auditor remains alert to contradictory evidence and does not ignore evidence that contradicts other audit evidence known to the auditor. If contradictory evidence is identified, the auditor gives appropriate consideration to whether that evidence is indicative of management bias or an error, and performs further procedures, as appropriate.
- The auditor considers his or her understanding of management’s method for determining the accounting estimate when evaluating whether any significant assumptions may exist; however, the auditor need not necessarily consider all assumptions used by management in developing their accounting estimate. To do so might focus undue attention on individual assumptions rather than their impact on the development of the accounting estimate as a whole. Existing auditing standards, and this framework, require the auditor to focus his or her efforts on the assumptions that are significant to the development of the accounting estimate.
- For accounting estimates with a high level of estimation uncertainty that give rise to a significant risk, the auditor considers how management has considered alternative assumptions or outcomes, and why it has rejected them, or how management has otherwise addressed estimation uncertainty in making the accounting estimate (refer to Section 3.7).

3.6 Developing a Reasonable Range for an Accounting Estimate

- The auditor may develop a reasonable range for the accounting estimate as a primary audit procedure or in combination with other procedures, as described in AU 342. There are a variety of complex accounting estimates where the results of the auditor’s procedures indicate a range of ‘reasonable’ accounting estimates,²⁴ which could exceed the auditor’s established materiality threshold. If the auditor concludes that it is appropriate to develop a range, the auditor narrows the range, based on available audit evidence, until all outcomes within the range are considered reasonable.
 - Narrowing the range to a point where all outcomes within the range may be considered reasonable is achieved by:
 - Eliminating from the range those outcomes at the extremities of the range judged by the auditor to be unlikely to occur; and
 - Continuing to narrow the range, based on audit evidence available, until the auditor concludes that all outcomes within the range are considered reasonable. In some rare cases, the auditor may be able to narrow the range until the audit evidence indicates a point estimate.²⁵
- While a wide range may confirm that higher estimation uncertainty exists and may indicate that an accounting estimate contains a significant risk, this does not preclude the auditor, after performing sufficient appropriate procedures and obtaining sufficient appropriate evidence, from concluding that management’s accounting estimate is reasonable in accordance with the applicable financial reporting framework. Certain accounting estimates, based on their size

²⁴ As an example, ASC 275-10-50-15 identifies examples of estimates that are particularly sensitive to change in the near term, and thus could result in a range of “reasonable” accounting estimates.

²⁵ ISA 540, paragraph A95.

Appendix: Auditing Accounting Estimates and Fair Value Measurements: A Framework

and/or subjectivity, may inherently have a relatively wide range of reasonableness. The auditor considers these situations; however, not all accounting estimates can be estimated within a range smaller than the auditor's established materiality threshold simply by performing additional procedures. An auditor's assessment of certain other factors could include the following:

- Assessing evidence of management bias or lack thereof;
 - Assessing whether there were changes in the methodology used to develop the estimate and, if so, the reasons for that change. A change in the methodology can be an indicator of management bias. Similarly, a lack of a change in the methodology used to develop the accounting estimate, when facts and circumstances indicate that there should have been a change, could also be an indicator of management bias;
 - Assessing whether there were changes in significant assumptions period over period without a triggering event;
 - Evaluating the point within the reasonable range (e.g., high end vs. low end) at which the client's accounting estimate falls as compared to prior periods. Significant movement within the range may be an indicator of management bias;
 - Evaluating whether management's assumptions are inconsistent with its peers and competitors (to the extent known by the auditor);
 - Reviewing management's history of executing on its stated course of action and meeting its forecasts (e.g., budgeted operating cash flow) to evaluate the effectiveness of management's forecasting process;
 - Evaluating whether the auditor is aware of contradictory evidence related to management's accounting estimate;
 - Considering whether a specialist was used by management in developing its own accounting estimates and our assessment of the specialist's knowledge, skill, and objectivity;
 - Evaluating the transparency of management's disclosures in the financial statements regarding the estimation uncertainty of the accounting estimate and how it was derived.
- The above considerations are not applied as a checklist. The importance of each is weighed according to the particular set of facts and circumstances and the related risk assessment of the accounting estimate.

3.7 Accounting Estimates with Significant Risks

- After performing the risk assessment procedures discussed in section 2, the auditor may determine that an accounting estimate (or some component thereof) gives rise to a significant risk. When this determination is made, the auditor performs substantive procedures, including tests of details, that are specifically responsive to the risk of material misstatement. This is consistent with current requirements for significant risks in AS 13, paragraph 11.
- With respect to audit evidence for accounting estimates that give rise to significant risks, in addition to the requirements in AS 15, the auditor obtains sufficient appropriate audit evidence about whether the following are in accordance with the applicable financial reporting framework:

Appendix: Auditing Accounting Estimates and Fair Value Measurements: A Framework

- Management's decision to recognize, or to not recognize, the accounting estimates in the financial statements; and
- The selected measurement basis for the accounting estimates.
 - For example, when auditing a complex fair value measurement that is determined using a discounted cash flow analysis that includes highly sensitive management judgments, an auditor may identify this as a significant risk and would likely perform additional procedures to gather evidence to support projections prepared by the company. Additional focus also may be placed on the selected discount rate to ensure it reflects the higher level of uncertainty in the projections.
- When an accounting estimate that has a high level of estimation uncertainty is assessed as a significant risk, the auditor performs substantive procedures to meet the requirements of AS 13. These include procedures to determine whether management has assessed how the estimation uncertainty impacts the accounting estimate and related disclosures.
- The auditor's procedures should consider whether management has appropriately addressed estimation uncertainty. Examples of how management addresses estimation uncertainty could include one or more of the following:
 - Considering alternative assumptions or outcomes, and, if so, why it has rejected them;
 - Performing sensitivity analyses for significant assumptions; or
 - Considering different valuation models.
- This is not intended to suggest that one particular method of addressing estimation uncertainty (such as sensitivity analysis) is more suitable than another, or that management's consideration of estimation uncertainty needs to be conducted through a detailed process supported by extensive documentation. Rather, it is how management has assessed estimation uncertainty in selecting the method(s) and developing the assumption(s) that is important.
 - For example, management may have documentation that supports the assumptions used, but does not explicitly list all other potential assumptions that were not used. In this case, the auditor would perform procedures to understand the process management went through when identifying the assumptions used and how management determined they were the most appropriate (i.e., how management determined not to use other assumptions).
 - Accordingly, where management has not considered alternative assumptions or outcomes, it may be necessary for the auditor to discuss with management, and request support for, how it has considered the effects of estimation uncertainty on the accounting estimate.
 - In addition, the auditor's procedures also could include evaluating:
 - Whether the significant assumptions used by management are reasonable;
 - 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; and

Appendix: Auditing Accounting Estimates and Fair Value Measurements: A Framework

- The adequacy of the disclosure of their estimation uncertainty in the financial statements in the context of the applicable financial reporting framework or regulatory disclosure requirements. The auditor's evaluation of the adequacy of disclosure of estimation uncertainty increases in importance the greater the range of possible outcomes of the accounting estimate is in relation to materiality.

4 Using the Work of an Auditor's Specialist

- A specialist is a person with specialized knowledge or skill in a field of expertise other than accounting or auditing. Because income taxes and information technology, as they relate to the audit, are specialized areas of accounting and auditing, this definition should not apply to a person with specialized knowledge or skill in those areas.
- The auditor is not expected to have the expertise of a person trained for, or qualified to engage in, the practice of another profession or occupation.²⁶ During the audit, the auditor may encounter matters that, in the auditor's judgment, require such specialized skill in the audit.
- The auditor's determination of whether to use the work of a specialist in the audit is driven by the auditor's risk assessment process, as described in section 2 above. This includes considering the complexity of the accounting estimate and its significance to the financial statements, as well as the knowledge, skill, and ability of the engagement team members.
- An auditor's specialist is a specialist who performs work to assist the auditor in obtaining sufficient appropriate audit evidence. An auditor's specialist may be either employed by the auditor ("auditor's employed specialist") or a third party engaged by the auditor ("auditor's engaged specialist").

4.1 Evaluating the Knowledge, Skill, and Objectivity of an Auditor's Specialist

- If the auditor decides to use the work of an auditor's specialist (whether engaged or employed), the auditor evaluates the knowledge, skill, and objectivity of the auditor's specialist and supervises the auditor's specialist's activities. Based on this assessment, the auditor determines the nature, timing, and extent of the specialist's involvement in the audit.
- The auditor should have sufficient knowledge of the subject matter to be addressed by the auditor's specialist to enable the auditor to:
 - Communicate the objectives of that person's work;
 - Determine whether that person's procedures meet the auditor's objectives; and
 - Evaluate the results of that person's procedures as they relate to the nature, timing, and extent of other planned audit procedures and the effects on the auditor's report.²⁷
- As it relates to evaluating the knowledge and skill of an auditor's specialist, the auditor should consider the following:

²⁶ AU 336, paragraph 6.

²⁷ Consistent with AS 9, paragraph 17.

Appendix: Auditing Accounting Estimates and Fair Value Measurements: A Framework

- When a specialist is *engaged* by the auditor, the auditor performs an evaluation of the knowledge and skill of that auditor's engaged specialist in order to determine the reliability of the auditor's engaged specialist's work.
- Factors considered by the auditor include:
 - Whether the auditor's engaged specialist is subject to technical performance standards or other professional or industry requirements;
 - The auditor's engaged specialist's experience and professional reputation in the field relevant to the accounting estimate;
 - The auditor's engaged specialist's knowledge of and experience in the company's industry, when relevant to the accounting estimate;
 - The auditor's engaged specialist's competence in the matter for which the specialist's work will be used, including any areas of specialty within the specialist's field;²⁸ and
 - The auditor's engaged specialist's competence with respect to relevant accounting and auditing requirements.²⁹
- When a specialist is *employed* by the auditor, the specialist is considered a member of the engagement team and is supervised in accordance with Auditing Standard No. 10, *Supervision of the Audit Engagement*.
 - Under Quality Control Section 20, *System of Quality Control for a CPA Firm's Accounting and Auditing Practice* (QC 20), an auditor's employed specialist is subject to the firm's overall system of quality control, which includes an evaluation of an employee's independence, integrity and objectivity, personnel management, engagement performance, and monitoring, among other things.
 - This system of quality control is intended to provide a firm with reasonable assurance that employees are independent (in fact and in appearance) in all required circumstances, perform all professional responsibilities with integrity, and maintain objectivity in discharging professional responsibilities.
 - QC 20 provides engagement teams that use the work of an employed specialist with the appropriate basis to evaluate an employed specialist's knowledge, skills, and objectivity. Accordingly, the auditor can determine that their employed specialist has sufficient knowledge, skill and objectivity by concluding that the employed specialist is subject to the firm's overall system of quality control.
- As it relates to evaluating the objectivity of an auditor's specialist, the auditor considers the following:
 - For an auditor's employed specialist, as discussed above, an audit firm's system of quality control provides the auditor with the appropriate basis to evaluate the objectivity of the specialist.

²⁸ For example, a particular actuary may specialize in property and casualty insurance, but have limited expertise regarding pension calculations.

²⁹ These requirements are consistent with those listed in the PCAOB's Staff Consultation Paper No. 2015-01, *The Auditor's Use of the Work of Specialists* (Specialists Staff Consultation Paper) and in ISA 620.

Appendix: Auditing Accounting Estimates and Fair Value Measurements: A Framework

- An auditor's engaged specialist is not a part of the accounting firm's training, resource monitoring, or overall system of quality control. Accordingly, in evaluating the objectivity of an auditor's engaged specialist, the auditor views objectivity as a continuum that, based on the auditor's judgment, affects the nature, timing, and extent of the auditor's procedures and the reliability of the specialist's work as audit evidence. In evaluating the objectivity of an auditor's engaged specialist, the auditor:
 - Obtains information regarding business, employment, and financial relationships between the auditor's specialist and the company;
 - Determines, based on an evaluation of that information, whether there are any threats to the specialist's objectivity (e.g., due to an identified relationship between the specialist and the company); and
 - If threats to the specialist's objectivity are identified, the auditor evaluates the impact of the relationship on the nature timing and extent of the audit procedures, taking into consideration whether the relationship has a significant bearing on the ability of the specialist to perform his or her work objectively.
 - For example, as the auditor evaluates the objectivity of the auditor's engaged specialist along the continuum, the auditor may determine that there is a relationship between the company and the auditor's engaged specialist that may appear to impair the objectivity of the auditor's engaged specialist. In response, the auditor would perform additional procedures to further understand the relationship. The auditor also could perform additional procedures related to the estimate his or herself, such as further evaluation of the reasonableness of some or all of the assumptions, methods, or findings of the auditor's engaged specialist. If the auditor determines that the objectivity of the auditor's engaged specialist is impaired (e.g., the auditor's engaged specialist has prepared the company's valuation), the auditor would not use the work of that auditor's engaged specialist.

4.2 Informing an Auditor's Specialist of His or Her Responsibilities

- Communication (agreement) with the auditor's specialist, whether engaged or employed, is an important element in ensuring the sufficiency and appropriateness of the audit procedures performed. The auditor agrees, in writing, with the auditor's specialist about their responsibilities, which could include:
 - The responsibilities of the auditor's specialist, including: (1) the objectives of the work that the specialist is to perform; (2) the nature, timing, and extent of the work that the specialist is to perform; and (3) matters that could affect the work the specialist is to perform or the evaluation of that work, including relevant aspects of the company, its environment, and its internal control over financial reporting, and possible accounting and auditing issues related to areas in which the auditor plans to use the work of the specialist;

Appendix: Auditing Accounting Estimates and Fair Value Measurements: A Framework

- When the work of the auditor's specialist relates to an accounting estimate, whether the work of the specialist will assist the auditor in: (1) developing an independent estimate, including how the specialist's work will use methods (which may include models) or significant assumptions; or (2) testing the methods and significant assumptions used by the company;
- The nature of company-provided or third-party information to be used by the auditor's specialist, including the source of the information and whether the specialist is responsible for performing work to assist the auditor in evaluating the: (1) accuracy and completeness of company-provided information; and/or the (2) relevance and reliability of third-party information;
- Requirements of the applicable financial reporting framework that are relevant to the work of the auditor's specialist;
- The nature and extent of audit documentation the auditor's specialist will provide and, if applicable, the form of report to be issued by the auditor's specialist;
- The nature, timing, and extent of communications between the engagement partner or other engagement team members performing supervisory activities and the auditor's specialist, including any changes in the scope of the work of the specialist or any other changes to the matters addressed in the agreement; and
- The importance of professional skepticism in an audit and the need to consider contradictory information.³⁰
- In communicating the responsibilities of the auditor's specialist, the auditor also includes confirmation of the auditor's responsibilities that are relevant to the work being conducted by the auditor's specialist.
- This agreement between the auditor and the auditor's specialist can be evidenced in a memorandum or other relevant workpaper documentation in the audit workpapers.

4.3 Evaluating the Work of an Auditor's Specialist

- Once the auditor concludes that the auditor's specialist is knowledgeable, capable, objective, and has reached an agreement regarding his or her responsibilities, the auditor evaluates the reasonableness of the specialist's conclusions.
- The auditor's evaluation of the work of an auditor's specialist includes:
 - a) When the auditor's specialist assists the auditor in developing an independent estimate or testing the methods and significant assumptions used by the company, evaluating the conclusions of the specialist about:
 - 1) The appropriateness of the methods including whether those methods are (1) in conformity with the applicable financial reporting framework, (2) generally accepted within the specialist's field of expertise, and (3) applied consistently, including whether consistency is appropriate considering changes in the environment or circumstances affecting the company;

³⁰ These requirements are consistent with those listed in the Consultation Paper.

Appendix: Auditing Accounting Estimates and Fair Value Measurements: A Framework

- 2) The relevance and reasonableness of the significant assumptions and methods in the circumstances, taking into account information presented in the report or documentation of the specialist, in view of the auditor's understanding of the company, its environment, and other evidence available to the auditor; and
 - 3) When testing the company's methods and significant assumptions, the basis for selecting the methods and assumptions used in developing the estimate, including whether the company considered alternative methods and assumptions.
- b) Determining whether the procedures performed and the results and conclusions of the specialist's work:
- 1) Support or contradict the relevant financial statement assertions or conclusions regarding the design or operating effectiveness of the company's controls;
 - 2) Are consistent or inconsistent with evidence obtained from other audit procedures performed;³¹ and
 - 3) Are consistent or inconsistent with the work agreed upon between the auditor and auditor's specialist.
- c) In situations where the auditor believes that the results and conclusions of the specialist are not adequate for the auditor's purposes, the auditor agrees with the specialist on the nature and extent of further work to be performed by the auditor's specialist or perform additional audit procedures appropriate to the circumstances.³²
- As an example, the conclusion of an auditor's specialist might indicate that the cash flow assumptions used by management in an impairment evaluation support management's conclusion that its goodwill balance is not impaired. However, if the output of the specialist's calculation indicates that the calculated implied fair value of a reporting unit approximates its carrying amount, the auditor may request that the specialist perform additional procedures (e.g., a sensitivity analysis) or the auditor may perform additional audit procedures appropriate to the circumstances.

5 Using the Work of the Company's Specialist

- As noted in section 4 above, a specialist is a person with specialized knowledge or skill in a field of expertise other than accounting or auditing.
- A company's specialist is a specialist who performs work to assist the company in its preparation of the financial statements. A company's specialist may be either employed by the company ("company's employed specialist") or a third party engaged by the company ("company's engaged specialist").
- When the work of a company's specialist will be used as audit evidence for an accounting estimate, the auditor performs the procedures in the following sections in addition to

³¹ These requirements are consistent with those listed in the Consultation Paper.

³² Consistent with the requirements in ISA 620, paragraph 13.

Appendix: Auditing Accounting Estimates and Fair Value Measurements: A Framework

performing risk assessment procedures, as discussed in section 2, and performs procedures to respond to the assessed risks of material misstatement, as discussed in section 3.

- As part of assessing a company's specialist, the auditor evaluates management's internal controls related to the accounts or components of accounts in which the specialist is involved, as discussed in section 3.1. The auditor also assesses the knowledge, skill and objectivity of the company's specialist and the work performed by the company's specialist, as discussed further below. The auditor may obtain information about the knowledge, skill, and objectivity of the company's specialist as part of the risk assessment procedures, when obtaining an understanding of management's process and identifying controls for testing, or through other means.

5.1 Evaluating the Knowledge, Skill and Objectivity of a Company's Specialist

- The auditor assesses the risks of material misstatement, and designs and implements audit responses that address the risks of material misstatement when using the work of a company's specialist.
- When evaluating the knowledge and skill of a company's specialist, an auditor considers, among other things:
 - Whether the company's specialist is subject to technical performance standards or other professional or industry requirements;
 - The company's specialist's experience and professional reputation in the field relevant to the accounting estimate;
 - The company's specialist's knowledge of and experience in the company's industry, where relevant to the accounting estimate;
 - The company's specialist's competence in the matter for which the specialist's work will be used, including any areas of specialty within the specialist's field; and
 - The company's specialist's competence with respect to relevant accounting and auditing requirements.
- Evaluating the degree of objectivity of a company's specialist should be viewed as a continuum that affects the nature timing and extent of audit procedures. An auditor considers, among other things:
 - Any interests and relationships that create threats to the specialist's objectivity, such as self-interest threats, advocacy threats, familiarity threats, self-review threats, intimidation threats, and any applicable safeguards, including any professional requirements that apply to the specialist, and evaluation of whether such safeguards are adequate;
 - Threats to a specialist's objectivity posed by an employment relationship and whether there is any direct reporting by the specialist;
 - The terms of the agreement to engage the specialist, including whether, and if so, how, the payment structure is tied to a particular outcome;
 - Whether management has the ability to dictate revisions to the specialist's results before finalization (with or without the agreement of the specialist);

Appendix: Auditing Accounting Estimates and Fair Value Measurements: A Framework

- The significance of the relationship between the engaged specialist and management (i.e., whether the specialist has an extensive relationship with management, and whether the fees charged by the specialist are material to the specialist); and
- The nature of other services provided by the specialist to the company.

5.2 Evaluating the Work of a Company's Specialist

- The nature, timing and extent of the auditor's procedures over the work of a company's specialist should be based on auditor's professional judgment, and responsive to the auditor's assessment of risk and the specific facts and circumstances of an audit engagement.
- In addition to those substantive procedures listed within section 3 above, when evaluating the adequacy of the work of the company's specialist, the auditor also:
 - Considers whether significant assumptions, inputs, and methods used to develop the estimate are dependent on the use of specialized models, and;
 - Focuses his or her efforts on the assumptions that are significant to the development of the estimate and consider management controls over the estimation process.

6 Use of Third-Party Pricing Sources Not Acting as a Specialist

- We agree with the distinction made in the Estimates Staff Consultation Paper that there are different types of third-party pricing sources, some of whom provide information "that is developed for, and widely available to, the public" and some of whom provide information "that is generated specifically for the auditor" or for management, and we agree with the staff that an approach in the potential new standard that could recognize some of these differences would be appropriate. Our comments in this area focus on the former.
- The relevance and reliability of evidence obtained from third-party pricing sources³³ should be evaluated for appropriateness under AS 15. 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.
- Generally, third-party pricing sources are knowledgeable and provide independent pricing information that is free of influence from any one company and is broadly used by market participants (e.g., the same price is released to all customers, buyers and sellers, without bias).
 - Additionally, given that the pricing information provided by a third-party pricing source is used every day by market participants, and is subject to price challenges by these same market participants, there appears to be an element of monitoring inherent in the process.
- When auditors obtain independent pricing information from third-party pricing sources that is widely available for accounting estimates for which the auditor's risk assessment is determined to be of lower risk, the relevance and reliability of that information is evaluated to assess its appropriateness as audit evidence in accordance with AS 15.

³³ While this section focuses on the use of third-party pricing sources, our proposed framework could be applied to other third parties that possess skill or knowledge that is not accounting or auditing when they are not acting as a specialist.

Appendix: Auditing Accounting Estimates and Fair Value Measurements: A Framework

- When auditors obtain audit evidence from third-party pricing sources not acting as a specialist, tests for relevance and reliability could include:
 - Performing due diligence over the third-party pricing source's general methodology, including how outliers may be identified in a security group (e.g., setting a range to evaluate pricing differences outside of a reasonable range);
 - Obtaining an understanding of the pricing source's price-challenge process (e.g., the frequency of price challenges, the extent to which pricing challenges are affirmed);
 - Evaluating the competence and objectivity of the pricing source;
 - Considering the quality of the pricing source (e.g., its historical accuracy and level of experience);
 - Reviewing pricing data obtained and considering the information in relation to the financial instrument; and
 - Considering inconsistent observable market information regarding the pricing assertion (i.e., contradictory evidence).
- For securities selected for testing, when the auditor determines that the third-party pricing source's methods or assumptions reflect increased subjectivity or estimation uncertainty due to a higher risk assessment, in addition to the procedures listed above for accounting estimates of lower risk, additional procedures for relevance and reliability could include:
 - Comparing the reported price with evidence of a recent transaction for the security;
 - Comparing the reported price to other relevant observable market information; and
 - Assuming a lack of observable market information, determining the need to test management's process for determining fair value, including testing the valuation model, underlying data and the reasonableness of significant assumptions, or developing an independent estimate of the fair value of the securities selected for testing for corroborative purposes.