

FROM: Dr. Steven Glover (Professor at Brigham Young University)
Dr. Mark Taylor (Professor at Case Western Reserve University)
Dr. Yi-Jing Wu (Associate Professor at Case Western Reserve University)
Brant Christensen (Doctoral candidate at Texas A&M University)

TO: Office of the Secretary, PCAOB

DATE: October 29, 2014

SUBJECT: Comments on Staff Consultation Paper, *Auditing Accounting Estimates and Fair Value Measurements*

We appreciate the opportunity to submit our comments with respect to the Board's Staff Consultation Paper on Auditing Accounting Estimates and Fair Value Measurements (hereafter referred to as the Consultation Paper). We are delighted that the Board will consider steps that may clarify expectations and auditing standards' requirements in these areas. Our comments below are in response to questions outlined in the Consultation Paper and are based on some of our recent research.¹

Overview of the Approach Being Considered by the Staff

Question 6. Are there other considerations relating to the alternatives explored, including other alternatives not discussed in this paper, that the staff should consider in connection with this project?

Currently, audit firms use quantitative materiality benchmarks in evaluating whether the financial statements as a whole are fairly stated in all material respects. However, in a recent study, audit managers and senior managers with expertise in auditing fair values report that over 70 percent of complex fair value measurements contain measurement uncertainty with a reasonable range of possible reported values (i.e., outcomes considered reasonably likely by experts) that *exceeds* quantitative audit materiality (hereafter referred to as "significant measurement uncertainty").² In another study, 75 percent of audit partners and 80 percent of experienced investors indicate that measurement uncertainty significantly impacts the extent to which auditors are able to provide the

¹ For additional information, see:

-Christensen, B. E., Glover, S. M., & Wood, D. A. (2012). Extreme estimation uncertainty in fair value estimates: Implications for audit assurance. *Auditing: A Journal of Practice & Theory*, 31(1), 127-146.

-Christensen, B. E., Glover, S. M., & Wolfe, C. J. (2014). Do Critical Audit Matter Paragraphs in the Audit Report Change Nonprofessional Investors' Decision to Invest? *Auditing: A Journal of Practice and Theory*, forthcoming.

-Glover, S. M., Taylor, M., & Wu, Y. (2014a). The Gap between Auditing Experts' Performance and Regulatory Expectations when Auditing Complex Estimates and Fair Value Measurements: Causes and Potential Solutions Working Paper, Brigham Young University and Case Western Reserve University. Available at:

http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2504521

- Glover, S. M., Taylor, M., & Wu, Y. (2014b). Challenges in Auditing Fair Value Measurements and Other Complex Estimates: Insights from Audit Partners. Working Paper, Brigham Young University and Case Western Reserve University. Available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2515807

- Christensen, B. E., Glover, S. M., Omer, T. C., & Shelley, M. K. (2014). Understanding audit quality: Insights from audit professionals and investors. Working paper, Texas A&M University, Brigham Young University, and University of Nebraska-Lincoln. Available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2358163

² Auditing Challenging Fair Value Measurements: Evidence from the Field. Cannon, N. H. and J. C. Bedard. Working paper, Texas State University and Bentley University. Available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2220445

requisite level of audit assurance. Further, 60 percent of audit partners with expertise auditing fair value measurements indicate that the requisite level of audit assurance for a point estimate with significant measurement uncertainty requires reconsideration in the auditing standards since providing high assurance that such estimates are fairly stated in all material respects may be misleading given the significant level of subjectivity, complexity, and uncertainty. Current financial reporting standards require these volatile items to be reported as single point estimates; further, the uncertainty underpinning these items can flow to reported profit, net income, and EPS values. Recent research indicates that auditors, and perhaps PCAOB inspectors, struggle with the auditing and reporting on values containing significant measurement uncertainty.

We strongly encourage the Board to consider how auditors should reconcile the significant measurement uncertainty inherent in many estimates (and thus, also in reported profits, net income, and EPS) with the mandate to provide an audit opinion that all reported values are fairly stated within quantitative materiality thresholds. Further, our research surveying audit partners shows that more than 90 percent support revisions to existing auditing standards to provide additional guidance and clarification regarding auditing estimates with significant measurement uncertainty. Specifically, the most frequently mentioned areas for which audit partners desire additional guidance include: (1) clarification regarding what constitutes an acceptable range of estimation uncertainty and (2) clarification regarding how the auditors are to address and disclose such uncertainty. Although the Consultation Paper acknowledges that such measurement uncertainty exists, existing standards provide little guidance on how auditors are to respond in such situations, which research suggests are increasing in frequency.

Alignment with the Risk Assessment Standards

Question 11. Are there additions or revisions to the existing requirements in PCAOB standards for identifying and assessing risks of material misstatement regarding accounting estimates that should be considered?

The Consultation Paper mentions measurement uncertainty as an area of risk, but very little guidance is given to auditors regarding how they should appropriately respond, particularly in instances of significant measurement uncertainty that impacts reported estimates and company profitability. Our research indicates that audit partners frequently report that the high degree of subjectivity involved with such estimates is particularly challenging to audit. Related to this issue, one partner notes:

[The] biggest challenge is that inputs within a reasonable range could result in indicated values that differ greater than materiality. This precludes the ability to “stress-test” management’s analysis. Thus, supporting one number for an input over another is a matter of significant judgment.

Therefore, auditors, PCAOB inspectors, and users of auditor’s reports would benefit if the revised standards were to treat more explicitly this notion of significant measurement uncertainty including 1) how auditors are to obtain sufficient appropriate evidence to support estimates with such uncertainty and 2) how to message the uncertainty and related assurance to users in the auditor’s report.

Additionally, Page 20 of the Consultation Paper suggests that requirements for the auditor's testing of the company's process include "factors that the auditor evaluates in determining the reasonableness of significant assumptions..." In situations in which significant measurement uncertainty exists, determining the reasonableness of the assumptions should also include an evaluation and some form of disclosure in the auditor's report of the reasonable range around management's significant assumptions, as well as the impact of that range of inputs on final EPS and net income point estimates included in the financial statements.

Question 14. Is the potential amendment to Auditing Standard No. 12 described above clear and appropriate for both accounting estimates and fair value measurements? Are there other factors that would be relevant in the auditor's evaluation of the degree of complexity of judgment in the recognition or measurement of an accounting estimate or fair value measurement (e.g., the use of a third party for the determination of a price)?

As noted, the survey research indicates the consistent applications of audit procedures and overall audit quality would improve if the Board would define what is meant by a "wide range of measurement uncertainty," and what is to be done about such wide ranges given the SEC rules effectively only provide auditors and registrants the option of filing clean audit opinions that convey that the reported values are fairly stated in all material respects. If EPS has a "wide range of measurement uncertainty" that is multiples of auditor and user materiality, perhaps stakeholders would benefit from more clarity regarding what is meant by "fairly stated in all material respects." Our research surveying audit partners suggests that current financial statement disclosures regarding the amount of measurement uncertainty may not be sufficient and/or lack consistency among preparers. Consequently, current presentation may be misleading because financial statements users may not fully understand the reasonable range of uncertainty inherent to some estimates. Further, recent research suggests that if the auditors convey the true level of underlying uncertainty, investors are more likely to stop investing or reduce their investments in companies whose financial statements contain estimates that are characterized by significant measurement uncertainty.

A key component of the "auditor's evaluation of the degree of complexity of judgment in the recognition or measurement of an accounting estimate" would also include an evaluation of how sensitive management's point estimate is to small changes in key inputs. The revised standard would then necessarily include explicit guidance on how to interpret materiality for purposes of gathering sufficient appropriate evidence, consideration of potential audit adjustments, and how to convey the uncertainty in the audit opinion when the financial statements contain estimates and summary point estimates (e.g., EPS) that are characterized by significant measurement uncertainty that exceed auditor and user materiality thresholds.

Question 16. Are there certain types of accounting estimates or fair value measurements that should be presumed to be significant risks?

Yes, those estimates that are characterized by significant measurement uncertainty such that the reasonable range of outcomes includes bounds that can differ from the reported point estimate (and subsequent summary numbers such as EPS) by multiples of quantitative materiality. Further, recent research suggests that a critical audit mater

paragraph highlighting significant measurement uncertainty influences investor behavior. Therefore, we strongly suggest that the Board consider including significant measurement uncertainty as a critical audit matter to be disclosed in the modified audit report.

Responding to the Risks of Material Misstatement

Question 19. Should a potential new standard include specific audit procedures related to auditing disclosures of accounting estimates (e.g., disclosures on levels within the fair value hierarchy)?

Yes. Although U.S. GAAP currently requires companies to only disclose *qualitative* sensitivity analyses around significant estimates, research suggests that there is insufficient consistency and transparency around such disclosures. When the uncertainty is reported in the auditor's report, or on the face of the financial statements, research suggests that users process and react to this information differently than when it is buried in pages of complex footnote disclosures. Conveying the level of measurement uncertainty and how the auditor was able to gather evidence over the fairness of the reported values is an area where auditors can provide value to users of financial statements by ensuring that management is sufficiently detailed in its disclosures about estimates, the key inputs, and the estimate's sensitivity to changes in these inputs relative to a materiality benchmark.

Question 20. Given the existing requirements related to testing controls in Auditing Standard No. 13 (and Auditing Standard No. 5, as applicable), would specific requirements on testing internal controls over accounting estimates be useful (e.g., evaluation of design and operating effectiveness of key review controls over accounting estimates)?

Given that the irreducible uncertainty inherent to certain estimates exceeds materiality, management or the auditor may have a very difficult challenge in determining whether a control has been designed or is operating with sufficient precision to prevent and/or detect and correct a material misstatement. Considering whether such precision is even possible in situations characterized by significant measurement uncertainty is clearly an important goal; if such precision is not possible, we believe that the Board should make clear the approach that auditors should take.

Question 21. Should a potential new standard include specific audit procedures that would be applicable when the auditor identifies and assesses a risk related to accounting estimates as a significant risk? If so, are there factors regarding measurement uncertainty or any other characteristics relevant to staff considerations of potential audit requirements?

Page 29 of the Consultation Paper states that the staff has considered the approach taken in ISA 540 to provide specific audit procedures around accounting estimates. Although such procedures could be *presumed* to be required under AS 13, we suggest that the revised PCAOB standard be more similar to ISA 540 in terms of specific required audit procedures.

Substantive Procedures for Testing Accounting Estimates

Question 23. Aside from testing management's process, developing an independent estimate, or reviewing subsequent events and transactions as further discussed, should a potential new

standard allow for or require other approaches to testing accounting estimates? If so, what other approaches would be appropriate?

Although we do not suggest an alternative approach to the three listed above, the standards could include several required audit procedures *regardless* of which of the listed approaches auditors choose to follow. Specifically, and summarizing our responses to previous questions, auditors should be required to: 1) test the sensitivity of management’s estimates to changes in key inputs within a reasonable range of input values; 2) explicitly examine management’s disclosures around estimates to see how transparently the sensitivity to changes in key inputs is conveyed and how that sensitivity specifically relates to materiality benchmarks, 3) examine whether the impact of uncertainty on summary values such as EPS is clearly conveyed; and 4) include the level of measurement uncertainty in a critical audit matter when the range of reasonable values exceeds materiality.

Question 29. Is the potential requirement suggested above clear and appropriate for both accounting estimates and fair value measurements? Are there other specific characteristics of significant assumptions that should be included?

The requirement outlined on Page 35 of the Consultation Paper identifies a significant assumption as one that could “cause a significant change in the accounting estimate, based on a minor variation in the assumption.” Although that requirement helps auditors identify the most important assumptions, current standards provide little guidance on what auditors are to *do* with estimates that are derived from such volatile inputs, how they are to evaluate and report on the *reasonableness* of such estimates, and how to *reconcile* the estimates’ uncertainty with quantitative materiality thresholds.

Question 30. Are the suggested factors described above appropriate for evaluating the reasonableness of significant assumptions? Are there other factors the auditor should assess when evaluating the reasonableness of significant assumptions relevant to accounting estimates?

As noted in our response to Question 29, assessing the reasonableness of significant assumptions should include the extent to which small changes in the input drive large swings in the final point estimate.

Question 35. Are there other matters relevant to developing a range that a potential new standard could address (e.g., requiring a sensitivity analysis)?

As suggested in the response above, as part of developing an independent estimate, auditors should be required to perform sensitivity analysis to understand and document the estimate’s reasonable range of measurement uncertainty.

Use of Third Parties

Question 39. Should the potential new standard require the auditor to use a third party that is different from the third party used by management? Would such a requirement present challenges for certain types of accounting estimates and fair value measurements?

We are pleased to see the Board’s consideration of additional guidance regarding auditors’ use of valuation specialists when auditing accounting estimates and fair value measurements. Existing research suggests that audit teams frequently, if not always, involve the firm’s in-house valuation specialists when assessing the reasonableness of

significant assumptions used by third-party pricing services and outside valuation specialists to derive the estimate—regardless whether the third-party source is the same or different from one used by management. Given the involvement of the firm’s in-house specialists, the nature of the estimate, risk of misstatement, and availability and reliability of the information, the auditor may not necessarily always be required to turn to a third-party specialist that differs from one used by management. In terms of current practice, our research suggests that auditors frequently do use a different third-party pricing service from the one used by management to obtain security prices. The new standard should provide explicit guidance regarding when it is necessary for the auditor to use a third-party source that differs from the one used by management. Further, the new standard should clarify when the auditor should obtain estimates from more than one valuation specialist. Our research suggests that the frequency with which the audit team obtains estimates from more than one valuation expert differs between the use of valuation specialists and pricing services. Specifically, 45 percent of audit partners in our research report obtaining estimates from more than one pricing service while only 17 percent report obtaining multiple estimates when using valuation specialists.

Question 42. How could a potential new standard differentiate between a third-party pricing source and a specialist?

Existing standards do not clearly distinguish between auditors’ use of a third-party pricing service and valuation specialist. As noted above, our research suggests that auditors’ use of third-party pricing services versus valuation specialists differs; thus, the standards should differentiate between a third-party pricing source and a valuation specialist. Moreover, our research indicates that auditors’ decisions regarding whether to use a third-party pricing service versus a valuation specialist when auditing complex financial instruments are frequently driven by the following key factors: availability and reliability of pricing from the third-party pricing services, materiality and risk of misstatement, nature of the security, and the ability to understand the pricing service’s valuation methodology. The Board should consider these factors when differentiating between a third-party pricing source and a valuation specialist. Further, our findings indicate that when auditing complex financial instruments, auditors tend to try and use pricing services first before moving on to use valuation specialists. One audit partner in our survey provides more detail regarding the process:

The decision is primarily driven by our past experience in valuing similar securities/instruments. We would typically use a pricing service by default to the extent possible and then move to a valuation specialist in instances where a pricing service was unable to value the security or where we had concerns over the quality of what a pricing service could provide based on the nature of the security and our understanding the methodologies they employ.

The new standard can provide additional guidance regarding instances in which the auditor should obtain prices or estimates from valuation specialists instead of pricing services.

Question 43. Would the potential requirement address the various methods used by third-party pricing sources for determining fair value measurements of financial instruments (e.g., use of consensus pricing and proprietary models?)

Page 44 of the Consultation Paper notes, “pricing sources are increasingly providing products that could provide auditors with insight as to how their prices or estimates are developed.” However, existing research suggests that one of the primary challenges auditors encounter when using third-party pricing services is the reluctance of these pricing sources to share proprietary information regarding assumptions and valuation methodologies used to derive the estimate. The new standard should provide specific guidance regarding what is to be done if the pricing source will not share such proprietary information. In addition, the potential requirement is missing guidance for situations in which inconsistencies exist between valuation methodologies used by management’s third-party pricing source vs. the auditor’s pricing source.

Questions Related to Economic Impacts and Implications

Question 45. As part of considering the need for change, the staff is reviewing academic literature, including identified papers that synthesize the academic literature. Is there ongoing research or other information that the staff should consider in evaluating the economic aspects of changes in standards for auditing accounting estimates and fair value measurements?

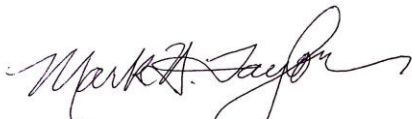
Although we were pleased to see the Board take into account the published articles listed on Page 47 of the Consultation Paper, academic research has recently generated a large number of working papers investigating the audit of estimates and fair value accounts. Because providing a comprehensive list of papers is impractical, we suggest instead that the Board review the research we have cited above as well as research by scholars including [Ann Backof](#), [Nathan Cannon](#), [Emily Griffith](#), [Jackie Hammersley](#), [Jennifer Joe](#) and others.

We appreciate the opportunity to offer our comments.

Kind regards,



Dr. Steven Glover, Brigham Young University



Dr. Mark Taylor, Case Western Reserve University



Dr. Yi-Jing Wu, Case Western Reserve University



Brant Christensen, Texas A&M University