Auditing Accounting Estimates and Fair Value Measurements: Academic Perspective

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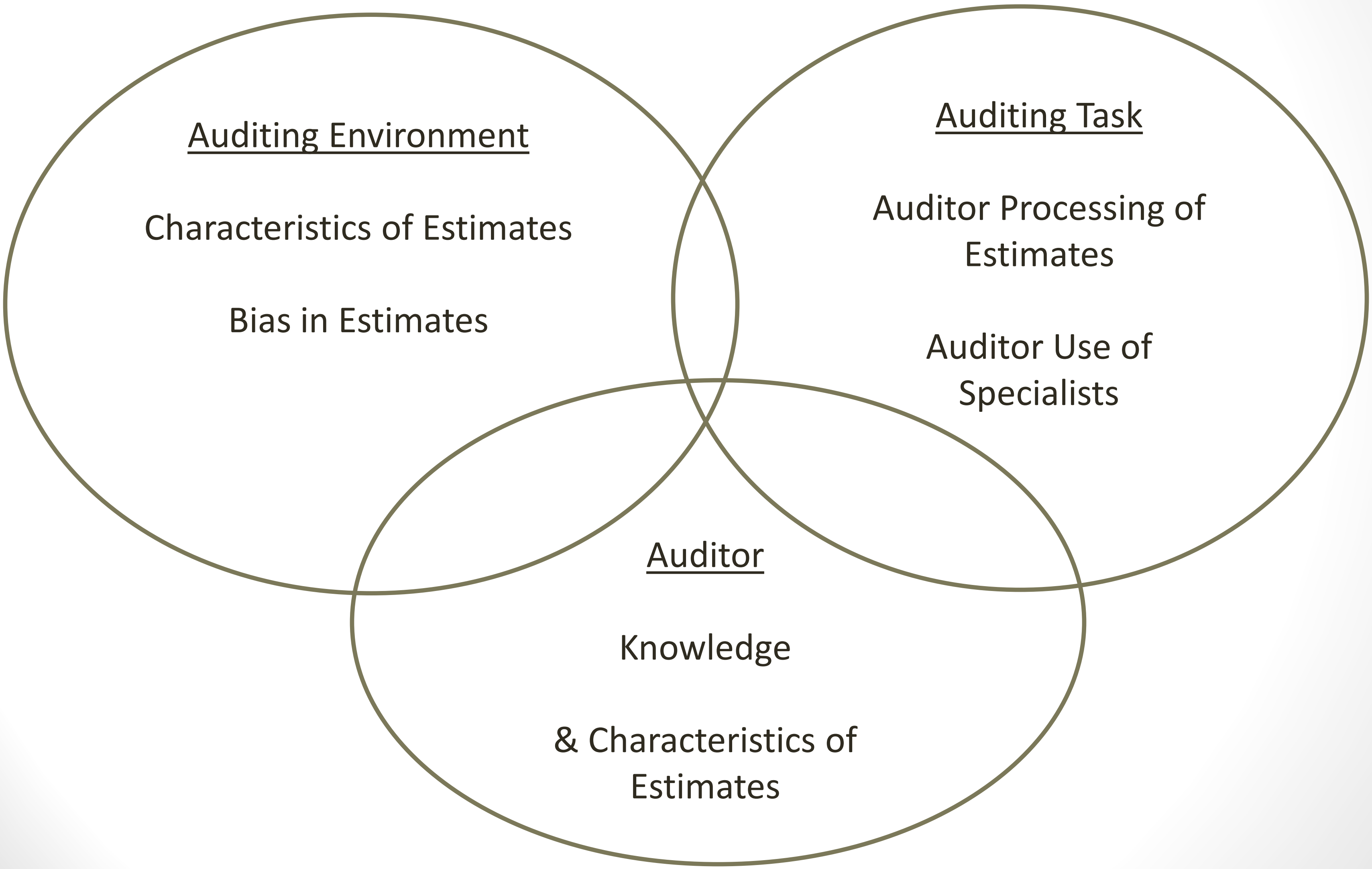
Framework


Auditing Environment
Characteristics of Estimates
Bias in Estimates
Auditing Task
Auditor Processing of Estimates
Auditor Use of Specialists
Auditor
Knowledge
& Characteristics of Estimates

Characteristics of Estimates and Fair Values Bratten et al. (2013)

- **Measurement Uncertainty**

"…well-intentioned experts can disagree on valuation or even on the best method of estimation…"

  - Choice of models, assumptions, etc. with no clear "winner"
  - Macroeconomic risks exist such that even *observed* prices may be inappropriate
- **Often Subjective**
  - Based on unobservable inputs
- **Imprecise**
  - Not necessarily best characterized by one amount but by a *range* of possible values

Materiality and the Range of Estimation Uncertainty

	Financial Instrument	Asset Impairment	Pension Plan Asset	Other FVM Type	Total
< Materiality	29.8 %	13.8 %	70. 0 %	25.0 %	28.6 %
≈ Materiality	31.9 %	24.1 %	20.0 %	16.7 %	26.5 %
2-3 x Materiality	21.3 %	10.3 %	10.0 %	16.7 %	16.3 %
4-5 x Materiality	8.5 %	10.3 %	0.0 %	16.7 %	9.2 %
> 5 x Materiality	8.5 %	41.4 %	0.0 %	25.0 %	19.4 %

Note: From Cannon and Bedard (2014). This study uses a qualitative approach to examine the experiences of high-level engagement team members with respect to highly challenging fair values measurements.

Bias in Estimates

Many academic studies have documented "bias" in accounting estimates and fair values – some in terms of timing and some in terms of valuation

- Examples include: loss reserves, warranty reserves, goodwill impairments, stock option values, loan fair values, hedge fund managers' assets valuations

- Bias may be *opportunistic* or may be *unintentional*

Market Response to Estimates (Bias)

- Estimates that are more likely to be biased are less value relevant than other financial statement items, suggesting that as estimates become less reliable they become less useful to capital market participants. (Cohen et al. 2011; Li and Sloan 2011).

- Market places lower values on level 3 estimates (Song et al. 2010)

- These estimates are ***Audited Numbers***

Auditors and Characteristics of Estimates Cannon and Bedard (2014)

- **Factors that make Fair Values Difficult to Audit**
  - Number of significant and/or complex assumptions associated with the process (64.6 %)
  - High degree of subjectivity associated with these assumptions and factors used in the process (63.6 %)
  - High degree of uncertainty associated with the future occurrence or outcome of events (42.4%)
  - Lack of objective data (42.4%)

- **Most Difficult to Audit Accounts**
  - Financial Instruments (48.5%)
  - Asset Impairments (29.3%)

- 18.2% of the sample state that in the most challenging estimates, an adjustment was proposed

Auditors and Uncertainty in Estimates

Griffin (2014)

- Subjectivity of Estimates – Inputs
  - Overall, auditors are ***more likely*** to require an adjustment (and bigger adjustments) of a Level 3 versus a Level 2 estimate (as subjectivity increases – more conservative)

- Imprecision of Estimates –Outcome (Range)
  - Auditors are ***most likely*** to require an adjustment when an outcome is imprecise (wider ranges of estimates) and the inputs are ***highly subjective*** than when the inputs are not as subjective

- *Collectively, this implies that auditors focus first on the possible dollars of that misstatement conveyed by imprecision (the range of possible outcomes) then on the "quality" of the inputs.*

Interestingly, when managers include footnote disclosure of the estimate, auditors require lower adjustments.

Auditor Knowledge Re: Estimates

- **Required Knowledge**
  - Auditing of complex estimates and fair values requires knowledge from areas including **finance, economics, product mix, management, statistics, and markets—**which are not a required part of the accounting or auditing curriculum at most universities**.**

Auditors are trained in financial accounting and auditing <u>not</u> valuation techniques/skills .

- **Knowledge Transfer**
  - Because of the complex valuation analysis inherent in, and the **<u>uniqueness</u>** of valuation settings across engagements, audit experience in one area of valuation (e.g., stock-option pricing) does not guarantee that valuation knowledge transfers to other areas (e.g., goodwill impairment) (Laro and Pratt 2005).

Auditor Knowledge of Fair Values and Complex Estimates- Findings

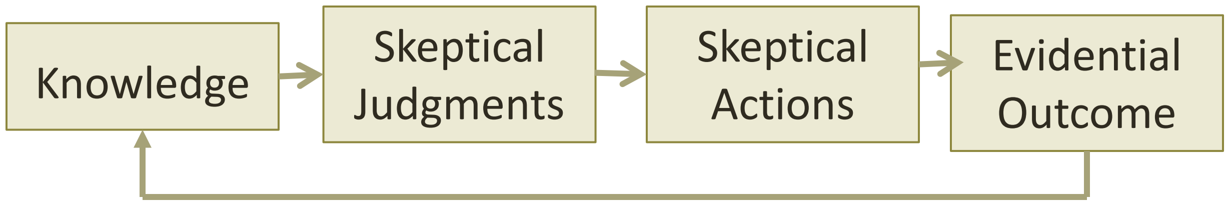
Griffith et al. (2014) report that the testing of fair values is often conducted by staff inexperienced in valuations, and is supervised by those who often lack the necessary knowledge to thoroughly understand management's models and estimates.

This lack of knowledge and experience

1. contributes to the difficulty in validating and testing management's critical assumptions and estimates

2. reduces the auditor's ability to identify, evaluate, or even communicate effectively concerns with those involved with the development of the estimate, be it management or an outside specialist.

Auditor Knowledge Effects



- Nelson (2009) describes a recursive relationship between Knowledge and Skepticism that requires the auditor to understand (in this case) ***misstatement risk*** associated with the estimate.
- Lack of valuation expertise implies a lack of feedback / experience and may inhibit auditors' ability to properly assess misstatement risk in future assessments
  - May lead auditors to use management's model as a starting point versus develop an independent expectation

What have academics learned about:

How estimates are audited and common problems?

- Cannon and Bedard (2014)
- Glover, Taylor, and Wu (2014)
- Griffith (2014)
- Griffith, Hammersley, and Kadous (2014)

Ways to improve audits of estimates?

- Griffith, Hammersley, Kadous, and Young (2014)
- Maksymov, Nelson, and Kinney (2014)
- Montague, Gaynor, and Cohen (2014)
- Rasso (2014)

Audit process for estimates

Generally, audit management's process/model by:

- Verifying each of management's assumptions
- Using valuation specialists to evaluate:
  - Appropriateness of model
  - Economic and industry-based assumptions
- Having auditors retain overall responsibility for evaluating estimate

For difficult-to-audit estimates, use multiple methods:

- Audit process/model
- Prepare independent estimate
- Use subsequent events data

Audit problems re estimates – Risk assessments

- **Inherent risk** assessments don't always reflect underlying account risk
  - More than one-third rate IR as low/moderate when estimation uncertainty exceeds materiality

- **Control testing** often doesn't lead to reduced substantive testing, even for accelerated filers
  - Controls are not precise enough to address specific risks related to subjective assumptions

Audit problems re estimates – Assumptions

- Reliance on specialists causes:
  - Difficulty identifying, evaluating, and pushing back on critical assumptions that drive risk

- Reliance on management’s process causes:
  - Failure to notice inconsistencies among estimate, assumptions, and other available data
  - Overlooking assumptions not included in model and external information that contradicts assumptions used

Audit problems re estimates – Using specialists

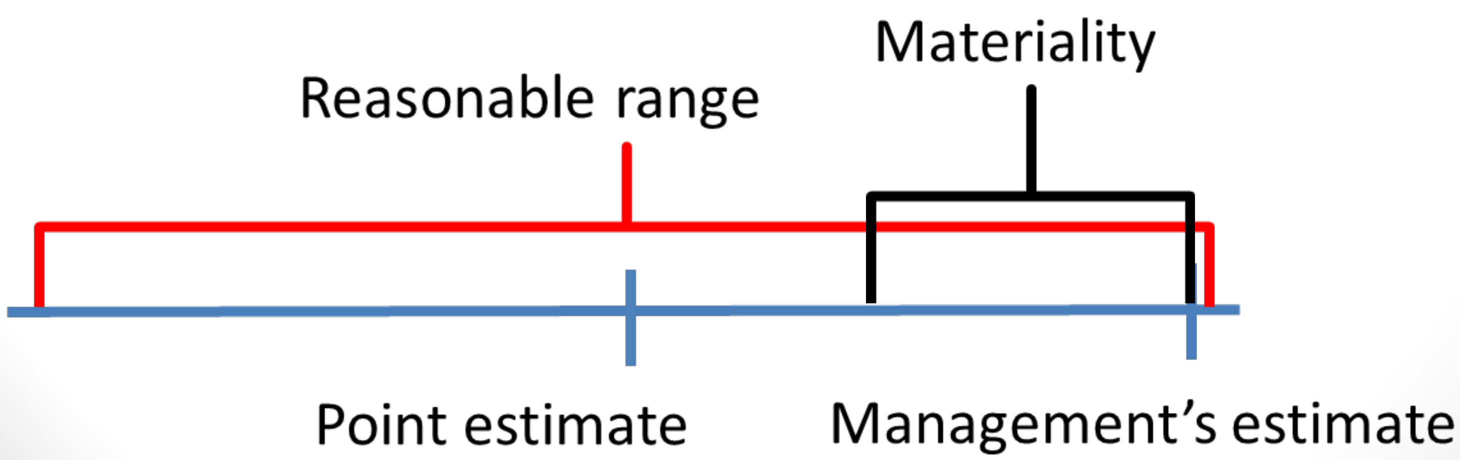
Use of *internal* valuation specialists not specifically contemplated by current standards

- Current practices adapted from standard on using *external* specialists which lacks guidance on:
  - What valuation specialists do
  - How they interact with auditors
  - How their findings should be incorporated into audit

- Lack of understanding of specialists' work leads auditors to
  - Misunderstand importance of specialists' findings
  - Dismiss specialists' findings as unimportant
  - Fail to follow up on issues identified
  - Be uncertain about sufficiency of evidence related to specialist-examined assumptions

Audit problems re estimates – Misstatement evaluation

- When management's estimate is materially *outside* reasonable range, current standards require adjustment to nearest range end point
- When management's estimate is *inside* reasonable range, current standards do not require adjustment even if
  - Width of reasonable range exceeds materiality or
  - Difference from point estimate exceeds materiality



How to improve audits of estimates?

Improve *critical thinking and resulting actions*, rather than merely increase *skepticism* about the estimate

One method: Change auditors' focus to big picture goals from completion of individual audit program steps:

- Auditors were more likely to notice available information that contradicted assumptions, without increasing effort
- Improved identification of and response to biased estimate

Standard setting implications

- Estimates contain bias, especially those requiring significant judgment to prepare
  - Auditor presumption of bias needed for these accounts
  - Guidance needed about where estimates are vulnerable to bias and how to identify presence of bias
- Auditors lack valuation knowledge
  - Encouragement to obtain basic valuation training needed
- Current standards implicitly encourage step-by-step verification of management's process
  - Impedes identification of missing or inconsistent assumptions and big picture view

Standard setting implications

- Current standards on using specialists don't contemplate today's environment
  - Guidance needed on when and how to use, how to incorporate findings
- Auditor responsibilities for accounts with extreme estimation uncertainty are untenable
  - Guidance needed on how to evaluate accounts with estimation uncertainty greater than materiality
  - Reconsideration of whether it is reasonable to provide positive assurance about point estimates for these accounts