



# The problem of management bias in accounting estimates: An investor perspective on root causes and solutions

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**Abstract** The standards of the PCAOB implicitly, yet unmistakably, presume that auditors are capable of eliminating the material effects of management bias by constraining point estimates to a ‘reasonable’ range. Yet, from inspection results of the PCAOB and its global counterparts we can confidently infer that auditors far too often fail to exercise sufficient skepticism of management’s estimates. The consequences could be profound. Therefore, we are proposing fundamental changes to the rules of engagement between the auditor and its client. We would, incrementally over time, transfer the responsibility for financial statement judgments to independent appraisers. Auditing would become solely a verification service, and financial statements would better serve investors and the public interest.

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## 1. Introduction

Estimates by management are ubiquitous in accounting. They are in the economic lives of buildings and machinery, the loan loss allowances of banks on the debts of the Greek government, and practically everything else in between. It would not be an

understatement to claim that the quality of modern financial reporting rises and falls with the collective integrity of management’s estimates.

Regarding the audits of estimates, the reality is that putatively ‘independent’ financial statement auditors effectively serve at the behest of management. Yet, the standards of the Public Company Accounting Oversight Board (PCAOB) implicitly, yet unmistakably, presume that auditors possess the technical capabilities and ethical resolve to eliminate the material effects of any management bias by constraining point estimates to a ‘reasonable’ range. Recently, however, that presumption has been called into question by the inspection results of the PCAOB and its global counterparts,

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from which we can confidently infer that auditors far too often fail to exercise sufficient skepticism of management's estimates.

Thus, it would seem unlikely for anyone to deny that management bias pervaded the financial statements of key financial institutions leading up to the Financial Crisis of 2008, yet views differ on the role of financial reporting in the crisis and how accounting regulators should react. For example, in the recently published memoir of his time as chair of the Financial Accounting Standards Board (FASB), [Robert Herz \(2014, p. 145\)](#) recounts how he repeatedly claimed that financial reporting did not cause the financial crisis, yet "it did reveal a number of areas requiring improvements in standards and overall transparency."

But given the many ways that financial reporting has been implicated in the financial crisis, there can be little doubt that it must have played a significant role, even if it did not actually cause the financial crisis. Issuers use financial statements as a basis for governance of all manner of corporations, creating incentives for managers to manipulate reported financial results by any number of means. They also use financial statements to make capital allocation decisions. And perhaps most importantly in the context of an economic crisis, financial regulators rely on financial statements to measure the capital adequacy of financial institutions subject to their oversight.

*The New York Times* economic policy columnist and Nobel laureate [Paul Krugman \(2009\)](#) rarely comments on financial reporting matters. But in one piece, he succinctly delivered a much harsher judgment:

So here's what Mr. Summers [Secretary of the Treasury]—and, to be fair, just about everyone in a policy-making position at the time—believed in 1999: America has honest corporate accounting; this lets investors make good decisions, and also forces management to behave responsibly; and the result is a stable, well-functioning financial system. What percentage of all this turned out to be true? **Zero** [emphasis added].

Perhaps due to such differing views, most would agree that fundamentally very little has changed about financial reporting since 2008 to make a noticeable difference. As evidence, there have been numerous recent developments to indicate that financial reporting remains inadequate to meet the needs of the public interest in a transparent, efficient, and stable economy. Consider the following:

- With respect to accounting standards, quality-critical agenda items are proceeding at a snail's

pace. These include valuations of debt, loans, and other financial instruments; classification of a financial instrument as liability or equity; leases; and the general incomprehensibility and incompleteness of financial statement disclosures. And, it is not even clear that successful completion of the current docket will result in actual quality enhancements. For example, the FASB and International Accounting Standards Board's (IASB's) joint revenue recognition project is already 12 years in the making, and may be further amended before it is finalized—which could take another 3 years. Although a 'final' converged standard has been issued, the costs of implementation in the U.S. will be high, there will be greater reliance on management's estimates, the informational benefits are purely speculative and highly debatable, and it does nothing to address the accounting deficiencies most closely associated with the financial crisis.

- In October 2010, the [European Commission \(2010\)](#) issued a report titled *Audit Policy: Lessons from the Crisis*, the first paragraph of which states: "The fact that *numerous* banks revealed huge losses from 2007 to 2009 on the positions they had held both on and off balance sheet raises. . .the question of how auditors could give clean audit reports to their clients for those periods" [italics added]. Yet again, it is far from clear that any of the proposals from the FASB (or IASB) are sufficiently broad in their scope, or whether the proposed new measurement guidance based on a new battery of management estimates would be an improvement.
- In April 2014, the [International Forum of Independent Audit Regulators \(2014\)](#) published the results of its survey of inspections taking place the prior year, in 2013, of the audits of the six largest firms worldwide. It expressed grave concern for the numerous deficiencies involving the examination of estimates in general, and fair value measurements in particular.
- In an inspection report dated October 21, 2014, the [PCAOB \(2014a\)](#) disclosed that of 23 audits inspected for a major international auditing firm, 65% were completed without obtaining sufficient information to support its opinion.

The IFIAR report referenced previously also states that it expects the firms to provide information about the results of root cause analysis of the factors that underlie the inspection findings and to take appropriate remedial actions. Yet, only one of the

firms studied would respond to a request for comment from Reuters. A spokesperson for the Center for Audit Quality, an organization promoting auditors that is affiliated with the American Institute of Certified Public Accountants (AICPA), stated that her group's members recognize there is still "work to do" (Lynch, 2014).

For its part, the PCAOB has recently undertaken a number of initiatives to determine how it should respond to the IFIAR report and its own inspection findings. After publishing a consultation paper seeking public comment on "auditing accounting estimates and fair value measurements" (PCAOB, 2014b), it convened a special meeting of its Standing Advisory Group (SAG) for a series of panel discussions on the issues. One of the authors of this article (Selling) was invited to be on the panel discussing investors' perspectives. This article is based in part on his opening presentation and the discussion that followed.

## 2. A perspective on investors' perspectives

In representing an investor perspective on financial reporting issues, one could choose to (1) attempt to report what investors *state* they expect from financial reporting, or (2) perform an analysis to determine what investors *should* expect from financial reports. Both approaches can present challenges. Even if investors as a group are assumed to be relatively homogeneous in respect to their preferences for financial reporting information, they usually show little interest in expressing their views to policy makers. As one notable example, when the Securities and Exchange Commission (SEC) solicited comments on its Roadmap proposal for International Financial Reporting Standards (IFRS) adoption—one of the most consequential financial reporting proposals since the enactment of the federal securities laws in 1933 and 1934—240 letters of comment were received, but only 6 came from the investor/analyst community (Hansen, 2009).

Thus, in representing an investor viewpoint, a reasonably complete consideration must involve some rigorous thought about what investors *should* want from financial reporting, while recognizing that conclusions must be qualified by the assumptions of investor preferences and context. In consideration of these limitations, we believe it is necessary to precisely state the question we are attempting to answer, so as to eliminate any controversy regarding the principles underlying our proposals: *When a judgment is required to arrive at a number in a financial statement, how should*

*investors want that judgment to be made?* The answer is clearly that an investor should want the judgment to be made in an unbiased manner.

Yet, it is commonly known that unbiased judgment is not sufficiently pervasive; rather, management bias in financial statements has risen to epidemic proportions, and despite the efforts to-date of policy makers, it shows little sign of abating. We will argue that recent events and the history of regulation since the advent of the federal securities laws indicate that only radical change to fundamental rules of an audit engagement—that is, what management's and auditors' responsibilities are with respect to financial statements—will have the desired effect.

## 3. The lessons of history on management bias

The U.S. Congress laid the foundation for the rules of engagement between auditors and issuers of financial statements in the federal securities laws. During the hearings leading up to passage of the U.S. Securities Act of 1933, representatives of the accounting profession successfully convinced Congress that government involvement in corporate audits would not be necessary. The public could safely rely on the 'conscience' of auditors to perform their function with an independent state of mind (Niemeier, 2007).

But, it soon became apparent that auditors would have difficulty separating their business interests from the public interest. The SEC concluded from its 1938 investigation of the long-running fraud perpetrated by the managers of McKesson & Robbins that auditors needed to be explicitly told something that today is second nature: It is *not* okay to allow management to exclude inventories and receivables from the scope of their work (Niemeier, 2007). Yet, despite these shaky beginnings, regulators remained passive. They allowed the auditing profession to establish its own standards for conducting an audit, peer reviews, and investigations of the root causes of audit failures as they arose. With the benefit of hindsight from the aforementioned recent PCAOB inspection results, it appears that the conscience of auditors was likely never an adequate safeguard against financial statement manipulations.

After a series of high-profile accounting frauds, most notably Enron and WorldCom, Congress recognized these inherent flaws in the regulation of audits. But even though the resulting Sarbanes-Oxley Act of 2002 (SOX) made important structural changes, primarily via the establishment of the PCAOB, improvement in auditing standards has been slow. Attempts at mandatory audit firm rotation in the U.S. failed

completely even though changes, albeit modest, were made by the European Commission. Efforts are being made to promulgate a standard that would require audit firm partners to personally sign their reports, and for the auditor to disclose more information about critical matters that arose during the audit; however, real progress has thus far been impeded by special interests.

Perhaps the greatest regulatory success story is how the PCAOB has effectively used its inspection and enforcement powers to bring to the public's attention the reality that audit deficiencies—resulting from failure to adequately examine management's estimates—occur at an alarmingly high rate. As the aforementioned IFIAR report reflects, regulators in other jurisdictions have followed the PCAOB's lead.

#### 4. Looking beyond the firms for the root cause of audit deficiencies

Notwithstanding the PCAOB's concerted efforts to promulgate standards and staff guidance that would attempt to better align auditor incentives with the public interest and achieve greater transparency, we believe that the incremental changes being sought do not address the root cause of audit deficiencies surrounding management's estimates. We agree with [Schuetze \(2003\)](#), who has reasoned that the fundamental rule of engagement, AU § 342.03 of the PCAOB's interim auditing standards, is a flawed basis for the relationship between auditors and management. The rule states in relevant part as follows:

Management is responsible for making the accounting estimates included in the financial statements. Estimates are based on subjective as well as objective factors and, as a result, judgment is required to estimate an amount at the date of the financial statements. Management's judgment is normally based on its knowledge and experience about past and current events and its assumptions about conditions it expects to exist and courses of action it expects to take.

The auditor is responsible for evaluating the reasonableness of accounting estimates made by management in the context of the financial statements taken as a whole. . . .

This longstanding rule of auditing, which has no direct basis in the securities laws, states that management is responsible for the judgmental components of financial statement numbers; and what management chooses to consider when forming its judgments is a matter of management

judgment itself. Despite its obvious limitations, such an arrangement might have worked well enough in a distant past when financial reporting was purportedly less dependent on management judgments, but history and recent events dictate that it be re-examined by policy makers: *Does AU § 342.03 promote the unbiased judgments that investors should want, or does it hinder them?*

Let's consider the question in a different light. Imagine that Accounting Professor X permitted students to grade their own exams. In determining one's grade, a student could take into account the intention to learn the material better during the coming months while studying for the CPA examination. Professor X understands that she must somehow rein in extreme abuses of the discretion she gives her students, but that is not as easy as it sounds. All of the students are giving themselves the benefit of the doubt, so to speak, for their good intentions as well as evaluations of their past performance. Bias is rampant; and Professor X certainly cannot and would not wish to confront every student about the questionable manner in which they graded themselves.

Despite its obvious flaws, Professor X must like her system well enough. We know this because she is the one who wrote the rules into the course syllabus. Whatever the costs of the bias in the system and whoever should bear those costs, we also know that Professor X has fewer confrontations with students over grades because of it. However, future employers of Professor X's students—who will rely on grades to identify best candidates—are not being well served by the rules of engagement for her class. What if the entire university system permitted students to grade their own exams?

The moral of our story is that AU § 342.03, however it came into existence, will be gamed by practically every manager who has a personal stake in the financial statements of their company. It is a standard that is both understandable and to be expected, given that it was created by auditors to benefit auditors; but, it is undeniable that such a system is an open invitation to the types of earnings management that is anathema to investor interests ([Levitt, 1998](#)).

To extend beyond theory to real-world implications of the problem, two anecdotes from distinctive sources are instructive. First, Jack Welch, the iconic CEO of General Electric Co. (GE) and whom Warren Buffet has referred to as “the Tiger Woods of management,” included the following vignette from his memoirs ([Welch, 2003](#), p. 225):

The response of our business leaders to the crisis [failure of the recently-acquired Kidder

Peabody business unit to generate an adequate contribution to consolidated earnings] was typical of the GE culture. Even though the books had closed on the quarter, many immediately offered to pitch in to cover the Kidder gap. Some said they could find an extra \$10 million, \$20 million, and even \$30 million from their businesses to offset the surprise. Though it was too late, their willingness to help was a dramatic contrast to the excuses I had been hearing from the Kidder people.

Mr. Welch revealed that during his tenure as CEO of GE, financial statement manipulation was to him, and continues to be, an honorable management activity. The business leaders at GE had been filling their accounting ‘cookie jars’ with reserves, and as team players, they were expected to share them. It is also worth noting that GE has retained the same audit firm for the last 105 years (*General Electric Company, 2014*). One could speculate as to how forcefully the current partner-in-charge of the GE account would push back against the current CEO’s accounting estimates in a similar scenario—and risk losing GE as a client for the firm.

Another instructive anecdote is from an auditor, Walter Schuetze (*Colson, 2006*), who also happened to serve as the SEC’s chief accountant and as a charter member of the FASB:

I’ve got scars on my back from when I . . . told my clients that they could not manage their earnings. My clients went to the Board of Directors of the firm and said, **“Get Walter off my account—just get him off.”**

Earnings management was rampant. . . . It was like dirt; it was everywhere and I think it’s still everywhere **because the accounting standards that we have today still allow management to have control of the numbers.**

The allowance for doubtful accounts—management controls that number. . . . The liability for claims—management controls that number. There are all sorts of numbers in the financial statements that are controlled by management **and the auditors don’t have any foothold to go to management and say no, that number is wrong** [emphases added].

The evidence is too strong for policy makers to disregard, and the stakes have become too high. When it matters the most, the current rules of engagement—which vest in management production of all the estimates that go into the financial statements and which have no basis in the securities

laws—do a disservice to investors and continue to threaten economic stability. Even if auditors were technically capable of meeting the standard set forth in AU § 342.03, history demonstrates that their economic incentives are not aligned with the public interest.

## 5. A path forward

*Rawls (1971)* proposed that the rules for a just society could only be established by policy makers with no prior knowledge of what their position will be in that society. For similar reasons, SOX established an independent PCAOB that could promulgate auditing standards without the involvement of the auditing profession or issuers. *Schuetze (2003)* has argued that auditors are incapable of judging the reasonableness of management’s estimates, and we argue that such rules of engagement were promulgated by the auditing profession mainly for the benefit of its members. In contrast, auditing should be exclusively focused on verification. However, our proposal is not to completely overhaul the annual audit, because many audit tasks are already verification tasks. Prominent examples include the verification of cash balances, the existence of assets and their historic costs, and supporting documentation to confirm contractual amounts due and owed.

A promising point of departure for incremental change toward verification-focused audits would be the financial statements of Systemically Important Financial Institutions (SIFIs)<sup>1</sup>—specifically for the financial instruments that are already reported at fair value, but for which those fair values are *not* derived from quoted prices in active markets for identical financial instruments (so-called ‘Level I’ fair values per U.S. GAAP). Even though independent appraisers would be engaged to estimate the fair value of those financial instruments, the auditor would still have the role of verifying certain key facts:

- That the factual information provided by management to the appraiser is accurate and complete.
- With respect to the work of the appraiser, that the appraiser meets specific independence standards (similar to the standards that auditors currently work under and likewise codified by the SEC); that the appraiser performed the work in accordance

<sup>1</sup> Systemically Important Financial Institutions (SIFIs) are those subject to supervision by the Federal Reserve Board and to prudential standards under the Dodd-Frank Act.

with U.S. Generally Accepted Accounting Principles (GAAP) and in accordance with their engagement letter with the issuer; and that the appraiser's calculations were accurately made.

We do recognize that this path away from biased management's estimates toward estimates by other independent experts raises at least three important concerns:

1. How would the viability of the auditing profession be affected if the scope of audits were restricted to verification of facts?
2. Would, or should, such a fundamental change to the rules of engagement affect accounting standards?
3. Would the use of qualified, independent appraisers produce the intended effect of reduced bias?

We address the first two of these questions in the following section, and the third question in the section preceding our concluding remarks.

### **5.1. Implications of a verification-focused audit**

The task of assessing reasonableness of management's estimates poses formidable, if not impossible, challenges to audit quality. From our own experience as educators, we are aware that future auditors are trained to verify facts and to recognize when estimates are required when preparing financial statements in accordance with GAAP; little else is ingrained pertaining to expertise for assessing the reasonableness of management's estimates. For example, the CPA examination only tests what new CPAs are expected to know about tasks they would be performing in their first 2 years of practice. Consequently, they are not even expected to have much knowledge of valuation.

Moreover, no auditor is in a position to contest management's stated intent to take future actions. After the latest gadget is introduced to consumers, are management's plans for the superseded inventory a reasonable basis for measuring its market value, or are they merely a charade in the hopes of delaying a write-down? We challenge the presumption that when facts and circumstances indicate to any extent that the past is not indicative of the future, no auditor—no matter how technically qualified—could competently assess the reasonableness of management's estimates.

Even if only the incremental step of focusing on fair value estimates by SIFIs were implemented,

that would represent substantial progress, indeed. But the ultimate objective of purging financial statements of all of management's biases could lead to other important outcomes. For example, consistent with current efforts by regulators, both auditing standards and U.S. GAAP could be simplified.

A verification-focused audit could also create new business opportunities for auditors. It would take the profession back to the scope of services that Congress and the public would have expected to be performed when the federal securities laws were enacted. But, since auditors would no longer be put in the position of second-guessing management's judgments, regulators should reconsider the degree to which they constrain the performance of non-audit services for audit clients. Moreover, the costly restrictions and regulations that are currently on the docket would become moot. Thus, any loss of revenue from the second-guessing functions now performed could be replaced with new sources; a less restrictive relationship with the client could create new efficiencies for the clients, as well.

With respect to accounting standards, independent estimates would remove issuer preferences for judgment-based accounting since the issuers would be unable to control how those judgments are made. Similarly, if estimates were made by independent parties, increased reliance on information from market-based transactions would become the norm. From there it is not difficult to envision that most, if not all, assets would be measured using a current valuation concept.

### **5.2. On the feasibility of reliance on independent appraisals**

Much of the ensuing discussion of the presentation at the SAG meeting was devoted to concerns regarding the reliability of independent appraisals. For this reason, we examine the question of whether it would be beneficial, or even feasible, to shift responsibility for estimates to an independent third party.

Although we have initially suggested that financial instruments of SIFIs be the subject of independent appraisals, the following discussion will be based on our knowledge of real estate appraisals. We do this because real estate appraisal bias has been the focus of significant academic research that we can summarize and learn from; unfortunately, we do not find a similar level of research regarding biases in financial instrument appraisals. In addition, as compared to financial instrument valuation, real estate appraisals entail the challenge of greater heterogeneity among assets that are less frequently traded; consequently, we believe that real estate

appraisals provide a stronger test of the feasibility of our proposal to incrementally transfer the responsibility for estimates from management to independent appraisers. Below, we summarize four observations from the research on real estate appraisals to support our proposal.

*First, transferring responsibility to independent appraisals is not a radical change from current practice.* In their study of auditing issues connected to fair value measurements, [Martin, Rich, and Wilks \(2006\)](#) observe that the purpose of auditing in that context is to enhance reliability by reducing measurer and measurement bias. For this reason, it is very important for the auditor to have access to valuation and client-specific expertise. An understanding of how fair values are prepared requires knowledge that is similar to that of an appraiser.

Although not always implemented in practice, higher audit reliability is achieved when the auditor makes its own estimates of fair value, which in addition to different parametric assumptions should comprehend an independent search for information beyond what simply supports management's explanations. At present, the larger audit firms maintain specialized teams that are capable of performing these functions. Consequently, it was suggested by a SAG member during the discussion that an appropriately isolated group within the audit firm could perform the appraisal work that would ultimately become the numbers in the financial statements.

*Second, evidence exists that external appraisals reduce the cost of capital.* [Dietrich, Harris, and Muller \(2000\)](#) found evidence that external real estate appraisals result in more reliable fair value estimates than appraisals conducted internally. [Muller and Riedl \(2002\)](#) support a view that external appraisers can reduce the cost of capital by affecting perceived information asymmetry. Also, [Yamamoto \(2014\)](#) discusses the importance of external appraisers providing fair value estimates for financial reporting purposes and argues that information regarding the difference between internal and external valuations is perceived to be useful by investors.

*Third, while challenges to appraiser independence can exist, the practical problems of appraiser independence are similar to auditor independence.* As documented by [Achu \(2013\)](#), clients will exert pressure in an attempt to influence independent appraisers, even to the point where client feedback has had an effect on future assignments.

Like auditors, the ethical standards of the appraisal profession require the appraiser to inoculate itself from improper client involvement in its work. The Appraisal Standards Board and the Uniform Standards of Professional Appraisal Practice (USPAP)

set forth the rules regarding independence that must be followed by state-licensed or state-certified appraisers. Individual state appraiser regulatory agencies where the appraiser holds a license or certification are responsible for investigating complaints and taking appropriate disciplinary action against the appraiser. We would also observe that, in the context of financial reporting, the SEC and the Department of Justice would also have jurisdiction over the work of experts whose work is relied upon for making public disclosures in accordance with SEC rules and regulations.

*Fourth, estimation uncertainty in measuring current values does not differ dramatically from other types of estimates.* Even in the absence of bias, there can be substantial uncertainty in property value estimates. But since the focus on financial reporting is to obtain a single number, rather than a range of possible values, there is some risk that third-party users of valuations may be misled by the apparent certainty of a single valuation figure.

Notwithstanding this limitation, researchers have attempted to measure uncertainty in property valuations on the basis of the normal spread that can be obtained if one uses different valuers (valuation variation) as well as on the basis of the precision in valuations in a comparison of actual selling prices (valuation accuracy). Results of such studies can be found in the Royal Institute of Chartered Surveyors ([RICS, 2002](#)), [Bretten and Wyatt \(2001\)](#), [Lundstrom and Gustafsson \(2006\)](#), and [Mokrane \(2002\)](#). Overall, these studies indicate a variance/uncertainty of the order of +/- 10% in the assessment of market values. In normal cases this is regarded as the expected variance/uncertainty in value assessments of a single property. In our opinion, this is not out of range of the perceived overall uncertainty in financial reporting. For example, the SEC recommends a range of +/- 10% when discussing the sensitivity of critical accounting estimates in MD&A ([SEC, 2003](#)).

## 6. Conclusion

AU § 342.03 of the PCAOB's interim auditing standards implies that auditors should be capable of containing, to a reasonable range, management bias in accounting estimates. Notwithstanding the dubiousness of that goal from an investor perspective, normative, empirical, and anecdotal evidence all indicate that excess management estimation bias has become prevalent.

The PCAOB alone has conducted over 2,000 inspections of audit firms in the first 12 years of its existence. From these inspections, combined with inspections by audit regulators worldwide, we have

learned that efforts to at least have auditors scrutinize management's estimates to a degree consistent with extant professional standards have had little effect. Regulators are demanding that the audit firms look within themselves to take appropriate remedial steps, and they continually fret over new ways to supplement the dubious premise of AU § 342.03.

If history is any guide, none of this is working. GAAP is becoming more susceptible to management estimation bias, and the problems are getting worse. Accordingly, we have proposed to fundamentally change the rules of engagement between the auditor and its client by transferring the responsibility for financial statement judgments to independent appraisers. Auditing would become solely a verification service, and financial statements would better serve investors and the public interest.

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