Fairness of Reporting, Acceptable Accounting Risk and the IASB’s Conceptual Framework Review: Insights from the Enron Trial

Our argument-based analysis of the accounting expert witness testimony given in the 2006 criminal trial of Enron’s CEO, Jeffrey Skilling, and Chairman, Ken Lay, highlights important issues in the reasoning process underlying financial reporting. Two expert accounting witnesses testified that Enron’s financial reporting fully conformed with US generally accepted accounting principles [GAAP]. We analyse the experts’ evidence using the notions of warrant, qualifier, data and conclusion.

Although Enron’s accounting ostensibly conformed to GAAP, the company’s financial reporting did not ‘present fairly’. We discuss the implications of this for accounting standard setting, and for proposals in the International Accounting Standards Board’s Discussion Paper of 2013 regarding the conceptual framework [CF] for financial reporting. We recommend that a CF be installed at the top of any GAAP hierarchy as the dominant item guiding standard-setting and professional practice. We also recommend that the concept of faithful representation in any revised CF should incorporate the notion of acceptable levels of accounting risk.

Keywords: Accounting Risk, Argument, Conceptual Framework, Enron, Expert Witness, Fair Presentation, GAAP, Principles, Rules
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1. Introduction

1.1 Purpose and Scope

We use an argumentation perspective to explore the role and features of a conceptual framework [CF] for financial reporting. In doing so, we highlight implications for the International Accounting Standards Board’s [IASB] (2013) proposals for a CF. Our case analysis approach draws upon court proceedings that ensued as a consequence of the collapse of Enron in 2001 to marshal empirical support for our arguments. We consider Enron to be an apt referent because it is a high-profile, well-known and influential example of the misapplication of GAAP. Our aim in exploring the testimony presented at the criminal trial of Enron’s CEO, Jeffrey Skilling, and Chairman, Ken Lay, in 2006, is to develop thinking about how to provide a CF for financial reporting that is based on fair presentation. Importantly, we use the trial’s setting to show how key arguments of the two defence accounting expert witnesses in support of Enron’s accounting could have been undermined by a logic-informed, accounting risk-influenced, principles-based CF. We highlight the importance of the need to control accounting risk to acceptable levels.

If accounting standards cannot be used in a court of law to justify the appropriateness of the financial reporting, the usefulness of accounting standards and the institution of accounting will be weakened. This prospect has motivated us to analyze the role the CF played in the Enron trial: how did the objectives of financial reporting influence the accounting argument of the expert witnesses? Our use of such a critical, high-profile case setting helps us to offer critique of the

The CF of the Financial Accounting Standards Board’s [FASB] was the operative framework relevant at the Enron trial. However, due to regulatory requirements in the US, the FASB’s CF was at the bottom of the hierarchy of accounting authority (see Palmrose 2009, 290). The rules-based mentality evidenced at the trial did not rely on the CF for justification (Ball, 2009, 310-312). Nonetheless, it helps explain the accounting reasoning used. The trial setting raises questions regarding the stated objectives of financial reporting, the relevance of the FASB’s CF, and claims that the FASB’s GAAP is principles-based (Schipper 2003, 62-63).

The collapse of Enron was a prominent milestone, indicating failure of governance, accounting, auditing, and regulation. The aftermath of the collapse continues to influence twenty-first century organisations, including accounting standards setters (Bishop 2013, 635). Important new regulators (such as the Public Company Accounting Oversight Board) and regulations (arising from the influence of the Sarbanes-Oxley Act, 2002) have been created to deal with many ‘shades of grey’ that characterise corporate activities. Consistent with this concern, accounting standard setters have been urged to take stronger account of how accounting standards can provide relevant information, yet not be conducive to fraudulent and unethical reporting (Amernic and Craig 2010). Rules-based, compliance-based accounting standards seemingly have strong potential to foster misleading reporting in many contexts, including where corporate leadership is dysfunctional and/or criminal.

We argue that there are two perplexingly inapt omissions from the IASB’s DP: first, with regard to the intended role of the conceptual framework [CF] in developing accounting
standards; and second, with respect to the lack of guidance on how to deal with uncertainties associated with faithful representation.

We make two recommendations to address these omissions. The first is that a CF of financial reporting should be the foundation of principles-based reasoning on all accounting issues. Thus, an appropriate CF should be installed at the top of any GAAP hierarchy as the dominant item. A desirable outcome of this will be that GAAP intended to lead to faithful representation will have a stronger basis in logic. Our second recommendation is that in any revised CF, the concept of faithful representation should involve the notion of acceptable levels of accounting risk. These two recommendations will be conducive to significantly improving financial reporting as a social institution. They should raise the level of trust in financial reporting in society-at-large.

1.2 The FASB’s Conceptual Framework Project

We assume the purpose of the IASB’s mooted CF is similar to the intent of the FASB’s CF project in the 1980’s. The goals then included constructing a framework to help develop sound financial standards: common premises, precise terminology, consistent reasoning about accounting issues, and a process of disciplined accounting reasoning (Storey and Storey 1998, 86). The FASB’s intentions were operationalised through four coherent, interrelated Statements of Accounting Concepts. These dealt with objectives of financial reporting, a hierarchy of accounting qualities, the elements of financial statements, and recognition and measurement criteria. The FASB’s framework constituted the basic elements of a principles-based accounting system — one in which more detailed standards are derived that ‘define specific classes of arrangements to be accounted for … along with prescriptive explanations such as examples’
The FASB’s approach and these concepts have influenced the preliminary views of the IASB (2013) on a CF.

The FASB framework portrayed by Schipper (2003) illustrates key features of an ideal CF. In our view, such an ideal framework has been best articulated by the Institute of Chartered Accountants of Scotland [ICAS] (2006). ICAS proposed a system that allows a rational way to implement principles-based fair presentation reporting by distinguishing compliance reporting from fair presentation reporting. Such a system can be linked logically with principles-based audit standards and principles of professional codes of conduct to create a coherent system of reasoning covering financial reports and their audits. For example, a clarity format similar to International Standards on Auditing [ISA] would be beneficial. Thus, each new accounting standard would have a clearly indicated introduction, objectives, definitions, requirements, application examples and other explanatory material. Each would integrate the principles and concepts identified in the CF of accounting with the CF of auditing, ISA 200. Such a system could marry with accounting standards to create a principles-based system of reasoning for all professional accounting.

1.3 Reasoning, Principles and Argumentation

The FASB’s ideals are based on the logic of a much older tradition in Western philosophy — one that goes back 24 centuries to Aristotle. This is the philosophy of reasoning through natural language. This tradition of reasoning essentially means being able to demonstrate that a statement is true, using other statements. There are various ways this can be done using language. In the present paper, we use Toulmin’s (1958) argument analysis (explained later) as our analytical approach to assess the reasoning inherent in the accounting expert witness
testimony at the trial of Skilling and Lay. Such an approach is an influential and widely-accepted way of summarizing the reasoning process used to justify a conclusion.

If a CF of financial reporting is the dominant general principle in the accounting system of reasoning, its primary role is to justify accounting judgments. In such a system, the CF can override a detailed standard when:

(a) an accounting rule in that detailed standard does not capture the plausible economic substance of a transaction in a given economic context; or

(b) there is a gap in the detailed standard on specific issues or contexts.

Reasoning logic is especially important for the concepts reflected in the objectives of the CF. Presumably these objectives mirror broader public interest. If not, then the IASB risks losing social legitimacy because its recommendations and pronouncements will not reflect broader social norms about the role of accounting. Standard setters should ensure that professional norms align with society’s expectations of accounting and accountants. When the objectives of the CF align with social norms, then application of the Toulmin argumentation framework (described below) would ensure additional guidance (e.g., in the form of detailed standards) do not justifiably depart from the legitimate objectives of financial reporting included in the CF. The CF would drive the logic of accounting reasoning.

1.4 Legal Strategies in a Criminal Trial: Accounting Standards as Legal Defence

The purpose of financial statements is conceived widely as being to provide useful information for existing and potential capital providers (FASB/IASB 2010, OB2). Although Enron’s financial reporting has been perceived widely as misleading, it can be viewed as conforming with GAAP (e.g., Haldeman 2006). This was evident to the prosecution at the Enron trial. Hence,
a major strategic decision of the prosecution was whether to focus on ‘proofs of reserve manipulations, asset overvaluation schemes, complicated and misleadingly disclosed end-of quarter transactions…and other accounting frauds’ (Hueston 2007, 206). The prosecutor’s concern was that inclusion of such matters would lead to a complex ‘battle between experts regarding the propriety of a transaction under governing accounting rules … [with the attendant risk of] … presenting a diluted message and losing the jury for much of the trial’ (Hueston 2007, 206). The prosecution decided that ‘the winning way was to directly confront the weaknesses of the case—defining the “crime” and conduct directly involving the defendants themselves—and to convert it into a clear trial narrative’ (p. 207). The subsequently proven crime did not include fraudulent violation of GAAP in financial reporting. The prosecution’s opening statement to the jury is instructive:

This is a simple case. It is not about accounting. It is about lies and choices….In the year before Enron declared bankruptcy, two men at the helm of the company told lie after lie about the true financial condition of Enron, lies that propped up the value of their own stockholdings and lies that deprived common investors of information that that they needed to make fully informed decisions about their own Enron stock (Hueston 2007, 207).

By focusing directly on the (alleged) lies of the two defendants in private and public information external to the financial statements, the accounting issues became tangential to the prosecution’s case. But why were the objectives of accounting to meet investors’ needs (compromised as they were by lies) ignored or marginalised? This is a major issue we analyze in the accounting issues at the trial. Although the prosecution decided against mentioning accounting issues, the defendants decided to use accounting issues to parry accusations against them of lying. Ironically, accounting standards were used to show that there was no lying with
respect to the (alleged) true economic situation at Enron. This raises the important question of how the defendants publicly reasoned their actions in accounting terms, and to what extent such reasoning was justified.

US court practice encourages accounting expert witnesses to seek the sanctuary of rules while engaging in ‘information-seeking dialogue’ (Walton 2006, 746). Although reliance on accounting rules in US courts might assist in winning a legal battle by hiding behind GAAP, it risks losing the war in terms of meeting user needs more broadly³ (see Craig et al., 2014). We reveal that although neither of the two expert accounting witnesses criticised Enron’s accounting, more consideration should have been given to whether Enron’s accounting estimates were deceptive. The ignorance we report of the critical importance of providing reliable accounting estimates is tantamount to a type of ‘ethical blindness’ in accounting (Palazzo et al., 2012).

We highlight major effects of the absence of an authoritative principle that limited accounting risk in estimates to an acceptable level. In view of ISA 540.11, it is especially important that there is no ‘significant risk’ in estimation uncertainties associated with accounting estimates. The position of the IASB’s 2013 DP is that such significant risks will be rare (IASB 2013, para. 2.35 [b]). However, such a stance conflicts with recent empirical evidence on the high level estimation uncertainties in common fair value accounting estimates (Christensen et al. 2012; Bell and Griffin 2012). A key component of estimation uncertainty is accounting risk. If the level of accounting risk is not significant, we refer to this as acceptable accounting risk. Without limits on acceptable accounting risk, the concept of faithful representation of future events in financial reporting becomes meaningless.

1.5 Implications for the IASB’s Discussion Paper on the Conceptual Framework
Current re-evaluation of the CF by the IASB (2013) makes it especially important to understand how any major ‘disconnect’ can arise between accounting standards and the CF (as occurred in the Enron trial). Case analysis for a particular firm (such as Enron), in a particular economic context, using the logic of accounting, can provide insights to problems with the existing framework, and inform proposals for reformed frameworks. This is especially true if legally-proven lies involve representations of financial position and earnings (see quotes from Hueston [2007] above; and Ball [2009, 306]).

Standard setters can benefit by understanding how court argument concluded that Enron’s accounting could be considered to be ‘true and fair’ or to ‘present fairly’. While there may be some inconsistencies between a CF and particular detailed standards, is it acceptable to have a complete disconnection between the two, as occurred at the Enron trial? If not, how can the problem be better addressed in a revised framework? Given that Enron’s fair valued assets (31% of reported assets, valued at $21 billion) did not exist (Haldeman 2006, 19), how did Enron’s ‘fair valued’ assets satisfy the definition of an asset in the FASB’s CF? Is this a problem of fair value standards (such as FASB 157 or International Financial Reporting Standard [IFRS] 13) or a problem of the CF?

1.6 Faithful Representation and Accounting Risk

Benston’s (2002, 2006, 2008) analyses of problematic reporting by Enron indicate recurring, fundamental problems of riskiness and uncertainty. These problems were facilitated by the practice in accounting of ignoring the risks of many estimates related to the measurement of assets and liabilities. We address these matters by evaluating the accounting reasoning at the Enron trial using Toulmin’s (1958) argumentation ideas and the concept of accounting risk.
By ‘accounting risk’ we mean ‘the risk of material misstatement in recording an asset or liability due to forecast inaccuracies in accounting estimates.’ The concept of accounting risk helps to operationalise the IASB DP’s emphasis on faithful representation as a fundamental qualitative characteristic. Faithful representation depicts a form of reporting that should be complete, neutral, and free from error (IASB 2013, 200-01). The DP makes it clear that future events, such as future cash flows, are pervasively important in financial reporting (IASB 2013, section 6).

We assume that a faithful representation of a future event or future outcome is what actually occurs or is realised in the future. Thus, we conceptualise accounting risk as the probability of a material difference arising between what is recorded, and what is realised in the future. If an asset is recorded at its probable value (IASB 2013, paras. 2.17-2.19), there is a risk this probable amount will not be realised. With such a conceptualisation, we quantify the failure to faithfully represent future outcomes pertaining to an accounting estimate as the accounting risk associated with that particular estimate. We focus on the need to control accounting risk at acceptable levels. We contend that this ought to be a key accounting measurement concept in accounting.

Accounting risk is incorporated in international audit standards as the part of estimation uncertainties that arise from judgmental misstatements (IFAC 2012b, ISA 540.A118). These standards specify fair presentation criteria (IFAC 2012a, ISA 200.13) and the need to assure that accounting estimates do not have significant risks associated with them (IFAC 2012b, ISA 540.11). This suggests that accounting standard setting and auditing standard setting should be coordinated.

The IASB DP proposes that verifiability no longer be a required qualitative characteristic of accounting information (IASB 2013, paras. 4.24-4.27). The IASB proposal seems likely to have
been prompted partly by views within the accounting and auditing professions that conformity with GAAP is associated axiomatically with faithful representation, even though many estimates are high risk. Such a claim has weak validity. To create a coherent system of reasoning about accounting issues, all numbers in financial reports should be logically justifiable from the CF. This means that risk principles and measurement principles must be incorporated in any CF. When such accountability is lacking, management is likely to be able to exercise too much discretion. A likely consequence is that the untrustworthy Enron-type accounting that we analyze here becomes legitimised — with no conceptual incentives to avoid such problems in future financial reporting (also see Benston et al. 2007, 235).

1.7 A Conceptual Framework Should Dominate

The CF should be installed as the dominant authority, at the top of the GAAP hierarchy, within a fair presentation accounting based on GAAP/IFRS. Such installation would accord the CF a prime influence and render accounting demonstrably principles-based, consistent with ICAS (2006) and ISA 200.11. For practical considerations, not all IFRS standards can be made consistent with the CF immediately. Nonetheless, the IASB should set a reasonable, explicit time frame in which to revise standards to conform with the framework. It is not sufficient to aim vaguely for consistency between the framework and standards in some distant future, as seems envisaged in the DP (IASB 2013, 6, 20). Such an approach was taken by the FASB in the 1980’s, but the FASB’s standards still fail to conform with its framework (see later).

If an appropriate CF was installed as the overarching set of principles in financial reporting, then the concept of fair presentation would have clearer meaning and it would play the role envisioned by Alexander and Archer (2003) and Zeff (2007) with the fair presentation override
concept. Such a CF would also better meet the IASB’s (2013, para. 1.26) primary objective ‘to assist the IASB by identifying concepts that it will use consistently when developing and revising IFRS.’

The CF should take precedence when conflicts arise with detailed accounting standards. This will help ensure that the CF becomes the overarching authority; and that a principles-based reasoning system is implemented eventually. Financial accounting and reporting would be improved considerably if the overriding principles in the CF led to accounting risk being controlled at acceptable levels, thereby rendering accounting estimates verifiable and more reliable.

1.8 Structure of the Paper

Section 2 outlines the analytical framework we apply. It describes four critical argumentation factors based on Toulmin (1958) (warrant, qualifier, data, and conclusion). These factors are used to analyze five accounting issues raised during the Enron trial. Section 3 outlines important aspects of the trial context, the data transcripts analyzed, and how the four critical argumentation factors explain our argument in this paper. Section 4 analyses the five main accounting issues raised in the testimony of the two expert accounting witnesses. It highlights the argumentation factors that were (or ought to have been) critical to the court in ascertaining whether Enron’s accounting conformed to GAAP and resulted in fair presentation. In respect of the accounting issues, we identify an accounting principle or concept from the CF that could have been used to undermine the arguments presented by the two expert witnesses. Thereby, we highlight the benefits of giving priority to principles over accounting practices and rules in any CF that is
based on fair presentation. Section 5 discusses implications for the evolving CF of financial reporting, and enters two recommendations.

2. Analytical Framework

2.1 Logical Analysis Using Toulmin (1958)

Our approach to logical analysis of argument is inspired by Toulmin (1958). Thus, we highlight the critical importance of warrants, qualifiers, data and conclusions (explained later) in the logical development of assessments of accounting risk and fair presentation in Enron’s financial reporting prior to it filing for bankruptcy protection in December, 2001. Toulmin’s approach to argument analysis has been used widely in many fields, including in exploring logical support for the reasons provided for management’s forward looking information (e.g., Hursti, 2011). (For a summary, see Hitchcock and Verheij 2005).

Toulmin’s (1958) concepts of data, warrants, qualifiers, and conclusions are described in the general model of logical argumentation in auditing and accounting outlined by Barnes (1991). The four concepts have been employed widely in argument analysis in legal jurisprudence to assess evidential reasoning (e.g., Goldring 2001; Twining 1990; Anderson and Twining 1998). Our analysis elicits a fuller understanding of how logos (logic), pathos (emotional quality) and ethos (arguer’s perceived character) were invoked in arguments about whether Enron’s accounting conformed to GAAP. Ideally, argumentation in the Enron trial should have relied on logos to organise thoughts in support of a conclusion. We assess whether pathos and ethos dominated over logos.

2.2 Warrants, Qualifiers, Data and Conclusions
Warrants are the statements in an argument that explain the connection between data and conclusion. They are the major premises of an argument. They include objectives, concepts, principles, theories, models, and definitions. Common warrants in accounting are the matching principle, the going concern assumption, and the monetary unit assumption. We propose that the set of warrants in accounting should include the principle of controlling accounting risk to an acceptable level. Such a principle is needed to help make accounting measurements sufficiently reliable and consonant with the objective of the international audit standard ISA 540, Audit of Accounting Estimates. That is, the principle would help render estimates verifiable. It would assure overall estimation uncertainty includes accounting risk and audit risk but does not result in significant risks outlined in ISA 540.11, Auditing Accounting Estimates, Including Fair Value Accounting Estimates, and Related Disclosures.

In legal reasoning, warrants are the driving force of logic. This is because courts must decide cases based on a general principle (Goldring 2001, 63; Walton 2006). The reasoning in judgments must have a generality of application that goes beyond a particular case at hand. Application of the same general reason (warrant) across like cases leads to principled reasoning. This has the desirable property of judicial fairness: ‘like cases should be treated alike’ (Goldring 2001, 64).

A principles-based reasoning approach is followed in professional accounting ethics. For example, in Rules of Professional Conduct for CPA Ontario at http://www.cpaontario.ca/Resources/Membershandbook/1011page5011.aspx

There are five principles defined in half a page, followed by 14 pages of application guidance, 36 pages of detailed rules consistent with the guidance, and 80 pages of interpretations in different contexts. In this example, Toulmin’s (1958) warrants are represented by five
principles, related objectives, definitions, concepts, rules and interpretations. The purpose of the rules and interpretations is to explain how a principle applies in different contexts.

Originally, the FASB’s rationale for its CF was based on a hierarchy of warrants in GAAP. At the apex of the hierarchy was the most general reason (or warrant), followed by more specific reasons and detailed rules, consistent with the overall framework. As initially conceived, the intent of the CF was to guide reasoning in standard setting and rule making, and to provide general practical guidance when no specific standard existed. The CF was supposed to embrace a principles-based reasoning that incorporated principles from experience, as well as new ideas addressing future needs (Storey and Storey 1998, 41-3). The FASB’s CF created additional hierarchies of warrants to help determine which warrant took precedence when there was conflict among warrants. For example, the FASB made it clear that everything should follow from the objectives of financial reporting. From this prime objective, basic concepts in accounting were defined. Then, further concepts of recognition and measurement were developed.6

**Qualifiers** are the constraints on warrants. They clarify situations in which a general warrant does not apply. For example, a qualifier in financial reporting is that ‘although GAAP are the most common benchmark for evaluating financial reporting, GAAP do not always result in fair presentation.’ Explicit qualification in an argument helps to strengthen the argument. The broader the generalisation in the warrant, the more likely there will be qualifiers to represent exceptions to the generalisation. For example, the going concern assumption is an important warrant of financial reporting that has helped to justify the use of historical cost. If this warrant is questionable in a particular circumstance, then a different basis of accounting other than historical cost may be needed. Justification for a liquidation basis of accounting arises from the qualifier regarding violation of the going concern assumption.
Data are the evidence of accounting practices and the circumstances of their application. They are the minor premises of an argument. Data depend on warrants (major premises) to determine their relevance in reaching any conclusion about the reasonableness of accounting.

Conclusions state the claim of a logical argument. Conclusions are strengthened by supporting evidence and by acceptable major premises (warrants) and acceptable minor premises (data). One type of accounting conclusion that is based on available evidence (data) is a forecast (a distinguishing feature of accrual accounting). Warrants logically dominate argumentation because they determine which data are relevant to the conclusion. It is usually easier to follow the logic of an argument when it is put in the following standard sequence: Warrants → Qualifiers → Data → Conclusion.

2.3 Legal Argument

An appropriate CF should be useful in defending accounting judgments in court, especially with respect to the degree of faithful representation of future events in accounting estimates. Court evidence presented by an expert witness contains a strong appeal to the authority (ethos) of the expert’s professional reputation. Ideally, an expert witness’s evidence should appeal extensively to logos, and much less to ethos or pathos. Otherwise it risks becoming ‘emotional, imprecise and open to interpretation’ (Norreklit 2003, 595). Because arguments usually draw strength from the credibility (or ethos) of the provider, much trial questioning focuses on enhancing (or attacking) the ethos of an expert witness. Nonetheless, an expert witness risks losing credibility by invoking bad arguments involving poor logos.

The following analysis of Enron trial transcripts highlights the important warrants that supported the accounting experts’ opinions. We do not leave the warrants implicit, as
enthymemes, contrary to what occurs in court-based argumentation. Enthymemes are premises, statements or conclusions that are not explicit because of the widespread adoption of social norms reflecting shared knowledge, conventions, and assumptions (Hechter 2008). They arise because it is impossible to specify every aspect of the universe that is assumed in making an argument (Walton 2001). In formal and everyday informal interchanges, shared conventions and values are used often, without making them explicit or without participants even being overtly aware of them. Any CF in accounting should acknowledge its reliance on such shared conventions and values, and justify the goals and concepts arising from them (Bromwich et al. 2010).

2.4 Accounting Estimates

It is critical to determine how much management discretion to allow in developing accounting estimates (Lev et al. 2010, 780-81). Auditors are conflicted when deciding on the acceptability of accounting estimates. They are encouraged to allow managers some discretion when those managers report accounting estimates so that users are provided with useful information. Yet, they also view discretion as undesirable because it allows managers an opportunity for manipulation, leading to reliability problems (Lev et al. 2010, 779-81). The lower the reliability of accounting estimates and the higher the accounting risk, the more difficult it is to identify fraudulent forecast estimates. The higher accounting risk becomes, the less likely an estimate will be realised (i.e., it is therefore not a faithful representation of what will be realised).

Accounting risk captures the important role of uncertainties in accounting (IASB 2013, paras. 2.32-2.36). These uncertainties are reflected in current definitions of assets and liabilities through such concepts as ‘expected’ or ‘probable’ (para. 2.12). In particular, the current
The definition of assets (liabilities) uses the notion of expected future economic benefits (outflows) in IASB (2013, para. 2.11). These can take the form of expected values or other measures of central tendency of future economic events (IASB 2013, para. 2.18; Johnson et al. 1993, 88; Barth 2014, 345). However, measurements based on expected value ignore associated risks and variability. This can prevent measurements from being useful for investor decision making. Savage and Van Allen, (2002) and Savage (2009) provide many examples of the problems created in the context of accounting. They refer to excessive reliance on expected value measures as the ‘flaw of averages’. Unrestricted use of expected values as a measurement basis is regarded to be conceptually unsound from the perspective of risk management in actuarial studies, management science, and finance theory.7

There are several reasons why the accounting risk concept seems a superior way of implementing measurement concepts involving future outcomes. Measures of central tendency (such as expected values) imply the consequences of deviating from the central tendency are linear. This ignores the important qualitative characteristic of materiality (IASB 2013, Appendix A Chapter 3, QC 11) that is intended to remain in the CF (IASB 2013, paras. 7.43-7.46). Information is material if omitting it or misstating it would influence user decisions. Exclusive use of expected values or related measures of central tendency creates the problem of flawed decision making leading to the ‘flaw of averages’ criticism mentioned above. The flaw arises from assuming that any misstatements arising from using the expected value measure have proportional effects, whereas the materiality concept implies disproportional effects. Since accounting risk, by its definition, always takes into account any material misstatement that can arise from a measure, it is superior to expected values as a measurement basis for financial statement purposes. Frequently, an accounting risk measurement basis is minimised at the
expected value, but not always, depending on the distribution of possible outcomes. However, even when the accounting risk is minimized at the expected value this does not mean the accounting risk acceptable. This is why an acceptable risk criterion should be used. Accounting risk also has the desirable property that it tends to increase with biased reporting.

Second, accounting risk is more consistent with the representational faithfulness concept of future and past events – in line with the logic of audit standards. Third, and perhaps most important for a CF, accounting risk can distinguish between the major categories of financial reporting identified in Beaver (1991, 127-128):

- measurement (‘presentation’ in IASB 2013, para. 7.10),
- note disclosures only (‘disclosures’ in IASB 2013, para. 7.35), and
- no required disclosures of the asset or liability (e.g., the asset exists, but for all practical purposes has a value of zero according to IASB 2013, para. 2.36 — this is equivalent to a ‘remote’ chance of being realised according to Beaver).

An accounting risk-based approach to measurement is consistent with risk-based auditing standards, and ethical standards. Adoption of this approach would facilitate convergence of all professional standards to a consistently risk-based coherent reasoning (for example, that accounting risk is a component of the estimation uncertainty concept of auditing standards). We discuss the importance of acceptable levels of accounting risk later.

3. Research Method and Central Argument

3.1 Context and Transcripts

Skilling and Lay were convicted in the US District Court (Southern District of Texas – Houston Division) on May 25, 2006 of conspiracy to commit securities fraud. These convictions arose
from matters related to the quarterly financial statements of Enron that were issued before the company filed for bankruptcy protection in December 2001. At the trial, two prominent members of the American accounting profession, Jerry Arnold and Walter Rush, testified as defence experts that Enron’s accounting complied fully with GAAP. Transcripts of their testimony were downloaded from http://www.kenlayinfo.com/public/pag149.aspx (last accessed 9 June, 2006). [The website www.kenlayinfo became inactive shortly after Ken Lay’s death in July 2006. The transcripts are currently available from the US Court for the Southern District of Texas (www.txuscourts.gov).] Arnold and Rush testified on three days (May 2 to May 4, 2006). The transcript of their testimony occupies 741 pages and contains 214,427 words. To illustrate the nature of the transcript, we reproduce page 284 in Appendix 1. This example captures a small part of the cross-examination on May 4 between Arnold and a prosecution lawyer, Stolper.

Why was accounting an issue at this trial if the prosecution argued that the trial was not about accounting, as noted earlier? The reason is that the defendants decided to make accounting an issue at the trial. This should be of interest to standard setters because compliance with accounting standards was used to demonstrate that there was no lying by management. We conjecture that the accounting expert witnesses were invited to defend Enron’s management by demonstrating that lying was not taking place because the alleged lies led to GAAP-compliant financial reporting. In effect, compliance with accounting rules was being used to show that the information was not misleading. This issue (the meaning of compliance reporting versus the meaning of fair presentation in financial reporting) has been discussed in the accounting literature by Palmrose (2009), Zeff (2007), and Benston and Hartgraves (2002).

Arnold was a well-known accounting academic at the University of Southern California’s Leventhal School of Accounting. He informed the court that he founded the ‘SEC and Financial
Reporting Institute’ and was involved extensively in consulting for the Securities and Exchange Commission [SEC] and major accounting firms (May 2, 197-198). [For a faculty profile for Arnold see http://www.marshall.usc.edu/faculty/directory/jarnold, last accessed 20 September 2013]. Rush stressed his experience as a former audit partner at PricewaterhouseCoopers, his extensive experience as a technical consultant on reporting issues, and his extensive consulting for the SEC and the federal government (May 3: 70-75).

3.2 Analytical Method: Application of the Toulmin Framework to Accounting Expert Witness Testimony

We analyzed the three days of trial transcripts using the Toulmin framework to seek a consensus on the key elements. The accounting issues were identified by the two accounting expert witnesses. They formed part of the defence case that Lay and Skilling were not lying or misrepresenting the true state of Enron’s financial affairs.

In evaluating the expert witness testimony, we assessed two matters: whether Enron’s accounting was technically in conformity with GAAP; and whether the accounting and financial reporting ‘presented fairly.’ We were especially conscious of the many problems posed by enthymemes in financial reporting: concepts like ‘materiality’ and ‘fair presentation’. For example, in the context of ‘fair’ presentation, does ‘fair’ implicitly assume ‘even-handed and impartial in reporting to stakeholders’? Does ‘fairness’ arise from privileging the interests of capital over labor? Is financial reporting ‘fair’ simply because the symbolic representations of wealth and operating performance in financial statements have been calculated in accordance with GAAP (Smeliauskas et al. 2008)?
3.3 Five Accounting Issues

Through repeated close readings of the trial transcripts of the testimonies of Arnold and Rush, we identified five major accounting issues, summarised below. These were sufficiently significant to prompt the defence team to explore them in detail at the trial. They are accompanied by a brief commentary in respect of each issue. Importantly, in the context of this paper, we suggest a warrant that could have been used had the CF had authoritative status. Thus, we show how principles-based reasoning could have been implemented.

**Issue 1**: Were the international assets of Enron's Global Asset and Services Unit impaired, according to GAAP? [Expert witness: Arnold]

An impairment test requires predictions of future cash flows from the asset at issue. The high accounting risks associated with valuing assets based on predicted future cash flows should have been made more evident, so as to not mislead investors.

**Issue 2**: Was the reduction in equities of $1.2 billion in the third quarter of 2001 ‘immaterial’ and therefore not requiring re-statement, according to GAAP? [Expert witness: Arnold]

Whether the amount of the re-statement for fair presentation was justified should have been assessed in terms of whether accounting risk was reduced to acceptable levels. Any reduction in accounting risk is prone to estimation uncertainty.

**Issue 3**: Was the accounting treatment of the third quarter ‘non-recurring’ charges of approximately $1 billion appropriate, according to GAAP? [Expert witness: Arnold]

The issue here was one of transparency and failing to disclose the inconsistent treatment of gains on future operations versus losses on future operations. Had clear priority been given to conforming with the CF, this issue would have been avoided.
Issue 4: Was the shifting of losses from Enron’s Retail to Wholesale segments (which arose from re-segmentation) appropriate according to GAAP? [Expert witness: Rush]

Support for shifting losses follows logically from the existing GAAP hierarchy. But such logic should be regarded as deficient if user needs (which are at the bottom of the GAAP hierarchy) were to have been satisfied.

Issue 5: Was the estimation of reserves in conformity with GAAP and not materially misstated?

[Expert witness: Rush]

Rush exploited the fact that the CF is not authoritative by ignoring the unreliability of estimates to users. This illustrates the potential for any revised CF to include flawed accounting argument in the absence of principles (warrants) regarding the reasonableness of accounting estimates. For example, IASB (2013, 31) proposes that a minimum probability threshold does not need to be specified when recognizing assets and liabilities. This would appear to allow future reporting to continue to use unreliable estimates in accounting. Reliability is no longer a consideration in the proposed IFAC CF (IASB 2013, paras. 4.15-4.21).

We submit that the summaries of evidence in the following sections are faithful representations of the expert witnesses’ testimonies and the prosecutor’s points of view; and that they provide a reliable source for drawing conclusions regarding the trial testimony. The summaries are consistent with the trial transcript summaries of the opinions of the expert witnesses (May 2, 191 for Arnold; May 3, 70 for Rush), and with the basic reasoning framework used extensively in legal literature (analyzing the main features of an argument in terms of warrants, qualifiers, data, and conclusion). To minimise misinterpretation we use extensive direct quotes from the transcript and give detailed references to the testimony. Our conclusions are consistent with the prosecutor’s view, as explained independently by him (Hueston 2007).
3.4 Our Argument: Warrant, Qualifier, Data and Conclusion

The structure of our argument in this paper, expressed in terms of the four critical argument factors advanced by Toulmin (1958), is as follows:

Warrant: Accounting and financial reporting can be improved by analysing four critical argumentation factors (warrant, qualifier, data and conclusion) in debate regarding accounting issues.

Qualifier: Accounting measurement and financial reporting are not exact sciences. They are subject to estimation uncertainty.

Data: The transcripts of testimony presented by two accounting expert witnesses at the criminal trial of two senior Enron executives (Skilling and Lay) for fraud-related matters that were connected with Enron’s financial reporting, are insightful.

Conclusion: A CF of financial reporting should be installed at the top of the GAAP hierarchy to render GAAP and reporting standards more reliant on logic and principles-based reasoning. Such a CF should emphasise fair presentation and should require verification and assurance in terms of acceptable levels of accounting risk.

4. Analysis

We clarify the need for important deficiencies in GAAP/IFRS to be addressed in a revised CF.

4.1 General Accounting-related Argument in the Enron Trial

The basic reasoning of the expert witnesses drew from the following argument:

- Warrant: GAAP do not condone lying.
• Qualifier: a crucial qualifier is omitted. When accounting estimates involve forecasts of future events, GAAP does not provide guidance on the level of estimation uncertainty that constitutes lying in financial reporting. Such guidance should be included in any revised CF. If acceptable risk levels are stated, auditors can verify whether risks are below this level. They can use newly evolving principles of risk management – such as well-calibrated reasonable ranges for estimates to assess the acceptability of the accounting risk for the estimate (Smieiliauskas 2012). The key concepts (or warrants) for evaluating financial reporting (in cases such as this) are reliability and verifiability. Curiously, these two concepts are now both being proposed for demotion in the IASB (2013) DP.

• Data: The financial reporting by Enron’s management conforms with GAAP.

• Conclusion: Enron’s management is not lying.

It would have been preferable in the trial had the CF acted as an overriding warrant for more detailed rules. But this did not occur because the CF lacked authoritative status in the [then] GAAP hierarchy. This illustrates that if the overall objectives of financial reporting are to be met, then an appropriate CF should have authoritative status over detailed standards. Such a reasoning system would also be consistent with a fair presentation framework as envisioned in ISA 200.13, and also with fair presentation frameworks in prior research (e.g., see Zeff 2007,16; Alexander and Archer 2003, 14-15). The compliance framework concept of ISA 200.11 could be used to deal with the situations outlined by the IASB (2013, paras 1.31-1.32), although this is contrary to the role of a CF that seems to be envisioned in these paragraphs by the IASB. We discuss this issue in section 5.

We note here the need to have global accounting and auditing (assurance) standards better integrated at the framework level. Reconciliation with a CF would have allowed a defensibly
coherent system of reasoning to emerge about the financial reporting at Enron. Such an approach is followed by professional ethics in public accounting, where a handful of principles (e.g., maintain the public interest/reputation of the profession) guide and justify more detailed rules of appropriate professional behavior. In such a system of reasoning, the detailed rules cannot conflict with the basic principles.

Despite pejorative description of Enron’s accounting as ‘unreasonable’ or ‘high risk’ (Benston 2006; Knapp 2006), Arnold and Rush were never asked to address the riskiness of Enron’s accounting estimates. They argued strongly that Enron’s accounting conformed to GAAP. Even if their argument is true, and Enron’s accounting was technically in conformity with GAAP, is GAAP a necessary but insufficient condition in Enron’s case (Alexander and Archer 2003)? Should the court have considered whether Enron’s accounting was presented fairly (Zeff 2007)? If so, what would have been the features of the accounting required to result in fair presentation?

We agree with the expert witnesses that Enron’s accounting can be considered to conform to US GAAP (as then conceived). However, we do not agree that Enron’s accounting constituted fair presentation. This is because, at a minimum, Enron’s accounting was misleading to users. Specifically, the accounting risks for Enron were too high to be considered acceptable or presented fairly. To make them acceptable, adjustments would have been necessary to the reported estimates. Accounting risks should have been reduced to an acceptable level (as suggested by ISA 540) so that the reported numbers were more reliable. In essence, the accounting estimates at issue were not verified for accuracy.

4.2 Rules or Principles?
Rather than focus on the actual intentions of the defendants, Arnold and Rush focused on demonstrating technical conformity with accounting rules. In a principles-based reasoning framework, detailed accounting rules should provide reasoned guidance on specific applications of principles. In the specific context of Enron’s financial reporting, Arnold and Rush used flawed accounting argument that was based on detailed rules. The accounting estimates they invoked had too much accounting risk for Enron’s economic context. Nonetheless, this seemed the best defence strategy given the commonly alleged bias in the US regulatory system in favor of rules-based regulation over principles-based regulation. The defence’s strategy is consistent with observation that evidence of compliance with rules-based GAAP has been persuasive in many US court cases alleging improper reporting (Ball, 2009, 306). However, such persuasiveness is mildly surprising given argument that a rules-based system encourages misleading financial reporting (Chambers and Wolnizer 1991, 362-3). In a well-developed principles-based system, two major objectives should be to satisfy users’ reporting needs and to not mislead users by allowing financial statements to report extremely risky estimates that are unlikely to be realised.

A key accounting issue that should have arisen in the trial was whether high risk estimates should be permitted in GAAP. However, the prosecution was keener to attack the character (the credibility or *ethos*) of the defendants, using premises not connected with accounting reasoning (Hueston 2007, 207). The prosecution did not want to get bogged down in arcane technical details of accounting rules and risk confusing the jury. The defence also had similar concerns — as indicated in the transcripts of May 2 (p. 291) and May 3 (p. 69).

### 4.3 Accounting Expert Witness Argument Dissected
For each of the five accounting issues, we outline the critical argument factors (warrant, qualifier, data, and conclusion) of the expert witnesses and the prosecution. We also provide a commentary in respect of each issue. We draw on those commentaries in forming our recommendations.

**Issue 1: Were the international assets of Enron’s Global Asset and Services Unit impaired, according to GAAP?**

**Warrant**

*Arnold:* The value reported for the international assets is based on book value, in conformity with GAAP. Hence, international assets are presented fairly. ‘Under GAAP, the only appropriate number to show for assets included in a set of financial statements is the book value’ (Arnold, May 2, 201).

*Prosecution:* The value of the assets is misleading. Therefore the assets are not presented fairly.

**Qualifier**

*Arnold:* ‘Losses can only be taken if an asset is going to be sold, committed to be sold in a formal way or if specific accounting rules indicate that there’s been an impairment loss’ (May 2, 196).

*Prosecution:* There are no qualifications to the government’s prohibition on misleading financial information (May 2, 276).

**Data**

*Arnold and Prosecution:* The data are in a schedule that lists individual assets in the Enron Global Asset and Services Unit. These data show where these assets are located, the values that...
were determined by Enron’s risk assessment and control group, Skilling’s estimate of the values, and the carrying (or book) value of the assets is as at June 30, 2001 (May 2, 195).

Conclusion

Arnold: Although Enron’s book value for international assets exceeded their market value by billions of dollars, this does not mean that there was (or that there will be) a loss. (Arnold, May 2, 197).

Prosecution: Since the assets are recorded at billions of dollars in excess of fair market value, this is misleading. For fair presentation, the assets should be recorded at fair value.

Commentary

The expert witness testimony was intended to disprove any criminal intent by Lay (e.g., see Hueston 2007). However, a notable feature of Arnold’s testimony was his narrow interpretation that the rules affecting asset impairment applied only to some assets. What we observe is an apparent obsession with rules-oriented behavior (‘the rules must be followed’ [May 2, 201]) despite the capacity for such behavior to be misleading (as observed in subsequent SEC interpretations). Nevertheless, the expert witness view was that to comply with GAAP, rules must be obeyed mechanically, regardless of the circumstances (i.e., independent of the economic context). The presumption that accounting concepts are clear, and that rules must always be followed, dominated the testimony. The $6.5 billion international assets at issue were part of the $21 billion fair value assets that Haldeman (2006, 19) argued were worthless just a few months later. Arnold testified that there was no need to inform potential investors of the vastly overstated nature of the international assets relative to current market values because the book values conformed with GAAP rules (May 2, 199-201). There was scant concern for how users of financial statements might be affected. Fairness of presentation was not raised as an issue.
The writing-down of a group of assets (such as those of Enron’s Global Asset and Services Unit) had the capacity to signal that top corporate management had ‘given up’ on the businesses supported by those assets, thus prompting a loss. However, if the group of assets had not been written down, then there was potential to send a strong signal that top management intended to take strategic and tactical actions to realise the book value of the group of assets. Thus, management intent, and more importantly, the feasibility of the outcomes contingent upon management intent and ensuing actions, ought to have become central to the accounting. A key issue was whether or not there was an appropriate or acceptable level of accounting risk in the estimation uncertainty. Under ISA 540, an estimate’s uncertainty cannot be significant. If it is significant, then either the audit report should be modified, or the basis of accounting should be changed (e.g., from historical cost to a liquidation basis).

This highlights the problem of assessing the plausibility that a future event (or combination of events) should have to qualify for recognition in financial reporting. Assessment of such plausibility is a contest. On one hand, management ostensibly alleges some future state with respect to event(s); and on the other hand, external auditors seek good evidence to support or oppose such allegation(s) before making an audit judgment. This plausibility contest should be distinguished from mechanical compliance with rules. The problems entailed in assessing plausibility should be addressed through the accounting risk concept; for example, by relating fairness of presentation to an acceptable level of accounting risk for different line items in financial statements. A skeptical auditor ought to consider a reasonable range of plausible scenarios, and evaluate the accounting risk associated with the non-realisation of management’s estimate. If management fails to forecast correctly (as is probable), an overconfidence bias arises as a pervasive management problem (Kahneman 2011, ch. 24).
The IASB DP does not explicitly countenance any probability threshold in its recognition criteria. Thereby, it effectively supports Enron’s accounting at the principles level (IASB 2013, paras. 2.17-2.36).

**Issue 2. Is the reduction in equities of $1.2 billion in the third quarter of 2001 ‘immaterial’ and therefore not requiring re-statement, according to GAAP? (May 2, 257)**

This issue prompted court discussion of the confounding nature of ‘legal materiality’ and ‘accounting materiality.’

**Warrant**

*Arnold and Prosecution:* If there is a material misstatement, a re-statement should be made.

**Qualifier**

*Arnold:* If a misstated item does not affect an investor’s opinion, that misstatement is immaterial. (May 3, 29).

*Prosecution:* Under SEC Staff Accounting Bulletin [SAB] No. 99, *Materiality*, the ‘auditor must consider both quantitative and qualitative factors in assessing an item’s materiality’ (May 2, 261). Even if the item is quantitatively immaterial, it can be qualitatively material, as here (May 3, 18-9). Any intentional misstatement is material.

**Data**

*Arnold:* The materiality thresholds were appropriate (May 2, 258, 263, 271). Enron’s accounting is justified because the change in the debt-to-equity ratio was immaterial: that is, too small to care about.
Prosecution: The cover-up of a reduction in equity resulted from a huge accounting error by Enron. The misstatement was qualitatively material by virtue of it being intentionally misleading (May 3, 20-1, 24, 29).

Conclusion

Arnold: The error was immaterial when first discovered. There was no need for a re-statement. No independent analysis of the appropriateness of materiality (such as making enquiries of Enron’s accountants) was necessary (May 3, 285).

Prosecution: Management knew about the error. It was qualitatively material since the intention of management was to hide the loss. Therefore, the financial statements should have been re-stated.

Commentary

Arnold exaggerated the clarity of the accounting materiality concept. He did not express concern that users might be misled, contrary to the spirit of the SEC’s SAB 99 that he (and Rush) relied upon extensively in claiming an issue could be ‘immaterial’ based on a mechanistic rule of thumb. Both expert witnesses discounted the importance of the ‘intent of management’ in deciding whether a deliberate immaterial misstatement could be considered material in accord with SAB 99. Use of a mechanistic rule instead of recognizing the inherent estimation uncertainty can result in significant risks mentioned in ISA 530.11 being ignored. In general, just focusing on material misstatements, without considering the associated risks, regards accounting as having no uncertainty. This kind of logic allows 100% accounting risk. It does so because, for future events, no number can be absolutely certain. Thus, the only meaningful representation is one that considers the riskiness of an accounting number. This is well established in financial economics and risk management — but not in accounting principles (Smeliauskas 2012).
Issue 3: Was the accounting treatment of the third quarter ‘non-recurring’ charges of approximately $1 billion appropriate, according to GAAP?

Warrant

Arnold: GAAP requires a company to report separately on matters that affect operations and those that are not expected to affect future operations (May 2, 235, 241-2).

Prosecution: For the financial statements to be presented fairly, the treatment of the third quarter charges should be consistent for positive items and for negative items (May 3, 45-6).

Qualifier

Arnold: According to the consistency principle, the treatment of an item as ‘recurring’ or ‘non-recurring’ should be consistent from year to year. It is not necessary to explain in the notes to financial statements why a non-recurring item was previously recurring (May 3, 43).

Prosecution: For full transparency, any inconsistent treatment of non-recurring and recurring items between two periods should be explained (May 2, 235).

Data

Arnold: Consistent with the SEC’s definition, non-recurring items should be discussed as unusual or infrequent events that materially affect the amount of reported income from continuing operations (May 2, 243-9).

Prosecution: Management intended to hide losses. Enron treated losses as non-recurring at a time when it was treating gains as recurring (May 2, 240; May 3, 45-6).

Conclusion

Arnold: Enron’s non-recurring charges fit the SEC’s definition well. That is why it was appropriate to record them as non-recurring (May 2, 235).
Prosecution: Enron should not have classified the charges as non-recurring, based on management’s intention to hide losses. By classifying the charges as non-recurring, Enron misled users (May 3, 45-6).

Commentary
The accounting experts exaggerated the importance of strict adherence to form rather than economic substance. They seemed to lack concern for the purpose of the rules. Their stance is unsurprising given that the CF (and its primary warrant relating to objectives of financial reporting) were at the bottom of the GAAP hierarchy at the time of the trial. IASB (2013, 151-155) makes it clearer now that the issue is one of meeting user needs. Note that the distinguishing characteristic for the non-recurring category is based on a prediction of future events.

Issue 4: Was shifting losses from Enron’s Retail to Wholesale segments (which arose from re-segmentation) appropriate according to GAAP?

Warrant
Rush: There is no rule on how a company should segment its business. Segments should reflect the way the company is organised. FASB 131 (Disclosures about Segments of an Enterprise and Related Information) permits companies to change their segments (May 3, 131-6).

Prosecution: There should be a valid business reason for re-segmentation to occur. There was none (May 3, 294).

Qualifier
*Rush:* Prior financial statements have to be re-stated to conform to new presentation requirements (May 3, 295-6).

*Prosecution:* To avoid misleading reporting, a Management Discussion & Analysis report is needed to explain the reasons for re-segmentation (May 3, 296).

**Data**

*Rush:* The risk management function in the Retail operation was moved to the Wholesale operation. Enron was re-segmented to share the risk management function (May 3, 141, 152, 292).

*Prosecution:* The questionable timing of the re-segmentation indicates that management’s intent was to hide losses (May 3, 294).

**Conclusion**

*Rush:* The re-segmentation was disclosed properly under FASB 131 and SEC rules (May 3, 132).

*Prosecution:* The re-segmentation was structured to hide losses and mislead the public to believe that the Wholesale operation was profitable. There was no valid business reason for the re-segmentation (May 3, 294).

**Commentary**

Rush’s testimony follows logically from the [then] existing GAAP hierarchy. However, the logic is deficient if user needs are to be satisfied. Those needs were at the bottom of the GAAP hierarchy. They are superseded by detailed accounting standards (Palmrose 2009, 290). Rush made it clear that he was rules-oriented (May 3, 293). But segmentation requires estimation of future events by segment. The uncertainty this creates should be addressed by fundamental accounting principles.
**Issue 5: Was the estimation of reserves in conformity with GAAP and not materially misstated?**

**Warrant**

*Rush:* The reserve estimates conform with GAAP. They are not materially misstated. Hence, they are presented fairly (May 3, 108-14, 118).

*Prosecution:* Reserve estimates should comply with GAAP. Reserves should not be used to manage earnings. SAB 99 *Materiality* should be used when conducting audits of reserve estimates. SAB 99 requires consideration of qualitative and quantitative factors in determining materiality, and for adjustments to be made for intentional misstatement (May 3, 207-8).

**Qualifier**

*Rush:* Auditors are unlikely to be able to check the reasonableness of the estimated reserve accurately at any time. ‘A review is much less detailed, much less rigorous’ (Rush, May 3, 100).

*Prosecution:* There are grey areas in GAAP. These might lead to risks for users in interpreting GAAP-compliant financial statements.

**Data**

*Rush:* External auditors verified the estimate of the reserve was reasonable, as part of their normal audit work. They verified quarterly financial statements that tracked the reasonableness of estimates for the reserve (May 3, p. 100). No new information was available to justify the change in estimate. Therefore, there was no earnings management in the change in estimate (May 3, 105).

*Prosecution:* Management was very aggressive. It understood how Enron’s reserves could be manipulated to manage earnings to meet analysts’ expectations (May 3, 205-17, 233-4, 247).

**Conclusion**
Rush: Enron’s accounting for reserves complied with GAAP and received unqualified audit opinions for 1999 and 2000 (May 3, 101). Management’s estimates of reserves were legitimate — even if they were ultimately proven to be wrong. The greater the volatility in gas prices, the more reserves the company needed to set aside, since the chances of being paid on the contract would decrease. This showed that the reserve was set up to take account of the impact of volatility on prices, and that Enron reacted in accord with market information.10

Prosecution: Enron used reserves as a tool to manage earnings. The reserves were misstated in the financial statements. ‘Misstatements are not immaterial simply because they fall beneath a numerical threshold’ (quote read to the court by the prosecutor from SAB 99) (May 3, 205).

Commentary

When questioned about estimates of reserves, Rush stated:

… the accounting principles also know that you’re not always going to get these estimates right … If it turns out that the reserve was too high or low, that is not an indication that the financial statements were wrong (May 3, 201).

Rush argued that GAAP require management to make assumptions and estimates about future events; and that management made the best assessments possible. In his view, GAAP assumed users understand that estimates are not final, but change over time.

The expert witness testimony again relied on the logic of form over substance. This was an enthymeme in the [then] current GAAP hierarchy. According to Rush:

GAAP doesn’t talk about misleading. GAAP doesn’t talk about integrity. GAAP talks about accounting rules, how you measure assets and liabilities, and what kind of disclosures you make (May 3, 201-2).
Rush relied on detailed GAAP rules relating to specific accounting issues, even though he agreed to the likelihood of great uncertainty. We suggest that had the CF included an explicit principle about controlling estimation uncertainty to a non-significant level, then he would not have used such mechanistic reasoning. Also implicit in his view is that users understand the logic of the current GAAP hierarchy (an enthymeme in Rush’s reasoning). Rush used the materiality concept mechanistically (May 3, 107-112). He relied mainly on quantitative materiality. He understated the importance of qualitative materiality. His emphasis on quantitative materiality was easier to defend because of the low status of the CF (including the objectives of financial reporting and user needs) in GAAP. Although Rush acknowledged estimation uncertainty, he failed to consider whether the level of estimation uncertainty would have affected faithful representation.

5. Discussion and Conclusions

5.1 Conformity with GAAP: Rules versus Principles

The defence expert accounting witnesses argued within the restricted limits of GAAP reasoning that Enron’s accounting conformed to GAAP. Nevertheless, their argument was insufficiently persuasive to sway the jury. The defendants did not ask their accounting expert witnesses to testify about any specific special purpose entity [SPE] transactions that had been the focus of much critical commentary in the accounting literature. Nor were they pressed on such matters by the prosecution. Some of Enron’s SPE transactions were clear violations of GAAP rules (e.g. see Benston and Hartgraves 2002, 109, 113; Knapp 2006, 15). Thus, we can appreciate why Skilling and Lay and their lawyers (and their expert witnesses) did not focus on these issues. What is puzzling is why the prosecution did not focus on the detailed accounting rules. A plausible explanation is that the prosecution believed jurors would get confused by those rules if they were
required to consider the characteristics of misleading, fair or unreasonable financial reporting. The prosecution focused instead (implicitly at least) on the objectives of financial reporting.

The prosecution strategy to achieve guilty verdicts would have been facilitated by a more appropriate GAAP hierarchy – one in which failure to adhere to principles helped to evaluate the ethos of the defendants. The following important warrant was left as an enthymeme: GAAP do not condone lying either outright about facts or by reporting highly improbable future outcomes that do not faithfully represent what is achievable. Since the prosecution did not want to get involved in ‘disputes over the defendants’ respective understandings of the application of often arcane accounting rules’ (Hueston 2007, 197-8), the data premise (Enron management’s financial reporting conforms with GAAP) was de-emphasised. The prosecution took a different route to disprove the conclusion (Enron’s management was lying).

A likely influence on the prosecution strategy was the judge’s admonition to not confuse accounting materiality with legal materiality. Given that materiality was a major point of discussion, it is unsurprising that the jurors relied more on the pathos of the ‘misleading’ reporting that can result from GAAP and the perceived ethos of the accounting expert witnesses. The prosecution tried to undermine the credibility of the expert witnesses by questioning their motives (e.g., how much they were paid for their testimony) and the reliability of their evidence (e.g., whether they attempted to corroborate the defence claims with their own independent analysis, as in issue 5).

Much of the prosecution’s attack on the expert witness testimony was based on the [then] GAAP hierarchy. This attack was compromised because the [then] GAAP hierarchy ranked the objectives of financial reporting and user needs last. Despite this, the prosecution characterised the positions of the expert witnesses as likely to result in misleading financial reporting — even
though the financial reports conformed technically with requirements outlined at higher levels of the GAAP hierarchy.

The GAAP hierarchy should be changed to facilitate a more defensible logic. The objectives of financial reporting in meeting user needs should be paramount. This includes the need to represent future events faithfully. When combined with the concepts of risk and materiality, this means that accounting risk in estimates contained in a financial report is at an acceptable level. Thus, the objectives and related concepts and principles inherent in the CF should be located at the top, rather than at the bottom, of the GAAP hierarchy. More detailed rules should then logically follow (and be derived from) more general principles and assumptions. This would result in a coherent system that is easier to defend logically in court disputes about financial reporting issues. The CF should be included in the current codification of US GAAP as its dominant component.

A key principle in the CF ought to be that reliable measurement of value in financial statements should emerge from accounting estimates that conform to rigorous measurement principles. One such principle would be the requirement for acceptably low accounting risk in estimates. If accounting estimates (measurements) do not result in faithful representation of future outcomes, then they should not be used in financial reporting.

Valuations that do not conform to rigorous measurement principles should not be recorded in financial statements, irrespective of the level of other disclosures about the measurements. Disclosures in notes to financial statements should not be used to compensate for unreliable measurement estimates that are recorded in financial statements. Such a stance is consistent with the view of the AICPA (1998, 82) that: ‘Disclosures are important, but good disclosures do not make up for bad accounting.’ Indeed, even additional disclosures of the type proposed by
Christensen et al. (2012) and Bell and Griffin (2012) with respect to potentially unreliable measurements recorded in the financial statements (such as arising from Level 2 and 3 fair value measurement estimates) are unlikely to be a satisfactory defence against litigation. This is evident from the focus of the expert witness trial testimony on the numbers used in the financial reporting – and not on the words and numbers used in the note disclosures.

If an auditor verifies only the arithmetic accuracy of the calculations that follow from some assumptions, this does not constitute a verification of the reasonableness of assumptions. Nor does it constitute verification of the acceptability of the risks arising from working with the assumptions. At best, such verification only provides the kind of assurance that is given currently in ‘forward-looking information’ (IASB 2013, paras. 7.38-7.39). However, the problem with the IASB’s recognition concept is that it ignores estimation uncertainty and it cannot distinguish ‘assets and liabilities in financial reporting’ from ‘assets and liabilities in forward-looking or prospective information.’ This failure to distinguish applies even when using a rational business model concept, such as is mentioned in IASB (2013, paras. 9.32-9.34). The IASB should not be complicit in allowing financial statement users to conclude that ‘forward-looking information’ satisfies measurement criteria unless additional criteria such as ‘acceptable accounting risk’ are introduced.

This raises a fundamental issue for financial reporting theory. Should any constraints be put on these estimation uncertainties by accounting standards? The IASB DP effectively argues ‘no’. But, is it ‘fair’ in financial reporting to allow estimates with 100% accounting risk to be presented – such as estimates based on a forecasting model that are certain to be materially in error? If not, then the reasons should be made clear. We can understand why the IASB seems reluctant to define what is ‘acceptable’ because any proposed cut-off would represent a possibly
arbitrary line. Nonetheless, a barrier or line, preferably justified on some principled grounds, should be drawn to ensure clear policy. This reasoning should be made clear in the CF by including a principle on acceptability, similar to the one proposed here. More detailed guidance can specify the acceptable risk level in specific contexts.

**5.2 Faithful Representation and the Persuasiveness of Trial Argument**

The prosecution exploited the failure of the expert accounting witnesses to address the issue of fair presentation in financial reporting. Although the defence’s accounting expert witness testimony was logically consistent with [then existing] GAAP, the arguments presented failed to persuade the jury. The authority of the experts was undermined by their inability to argue that their position resulted in fair presentation; and by the prosecution’s interrogation of their credibility and impartiality. In terms of persuading the jury, the logic of conformity with GAAP was overwhelmed, and ineffective.

A revised GAAP hierarchy (with improved concepts and better focused objectives for financial reporting) should be developed to facilitate wider acceptance (including by the courts) of the ‘fair presentation’ concept in financial reporting (e.g., see Ball 2009, 303-304). There needs to be a clear hierarchy of overarching concepts and principles consistent with a principles-based fair presentation framework (IASB 2010). GAAP should instal user needs as a dominant warrant. From this warrant should emerge broad principles and subsidiary concepts needed to meet those objectives, followed by detailed rules, and any constraints (qualifiers) in using them. This would require that the CF be included in the current US GAAP codification, and be ranked highest in that codification.
Acceptance of fairness of presentation as a key objective of financial reporting requires risks and uncertainties relating to future events to be disclosed appropriately.\textsuperscript{11} Thus, we should report only estimates with acceptable accounting risk and disclose other estimates in the notes.

5.3 Recommendations

Recommendation 1: A Conceptual Framework of financial reporting that emphasises fair presentation should be installed at the top of the GAAP hierarchy so that GAAP and financial reporting standards generally are more reliant on consistent logic.

The accounting standards and rules in the existing GAAP hierarchy rely more on their authority than their logic.\textsuperscript{12} In the Enron trial, such over-reliance led to less critical questioning of the expert witnesses.

Users of financial statements operate in sophisticated and (allegedly) rational capital markets where logic is supposed to be supreme. In the interests of strengthening the logic of accounting argument, detailed accounting standards and rules should be consistent with the CF. In specific circumstances when they are not, then the rules should be overridden by the objectives of the CF. This is consistent with the principles-based accounting standards approach (advocated by ICAS [2006]). Failure of standard-setters to develop such a system (for example, in FASB 162: ‘The Hierarchy of Generally Accepted Accounting Principles,’ issued in May 2008) will prevent GAAP from becoming more logical.

The IASB DP (2013, para. 132) also points to the possibility of flaws in the CF that will need to be remedied by a revised standard. We disagree with this stance – it contradicts a principles-based approach. If there are problems with the CF, it should be revised or amended. The response should not be to promulgate a subsidiary, presumably derived, standard. To avoid
generating confusion about the reasoning process, we suggest that necessary changes be made in the form of amendments to the CF itself. If a standard were used to revise the framework, effectively overriding it, this seems tantamount to the ad hoc rules-based reasoning evident at the Enron trial. Standard setters should consider the effect of their activities on perceptions of the relative importance of principles versus rules. This is the reason for promoting a hierarchical approach in argumentation—it makes the accounting reasoning clearer and easier to follow.

Less logic means less defensibility in argument in court, and to users of financial statements. If GAAP rely insufficiently on logic, then they can be undermined more easily in court, using the legal tactics described by Hueston (2007). If GAAP are not a reliable defence in court, then they lose relevance. GAAP need to be more dependent on logic, via a more appropriate set of warrants that justify the measurements and disclosures in financial reports. A more appropriate set of warrants would include explicit guidance on how to control, to acceptable levels, the accounting risks of estimation uncertainties in financial reports.

Recommendation 2: The concept of verification in a revised conceptual framework should involve assuring acceptable levels of accounting risk.

The CF needs to incorporate future events (and their related uncertainties), as suggested by Cohen (1978), Beaver (1991), Glover et al. (2005), Hicks (see Bromwich et al., 2010) and Smeliauskas et al. (2008; 2010). Given the crucial role of forecasting in GAAP (see Beaver, 1991), the CF is an appropriate place to incorporate forecast risk uncertainty in accounting estimates (that is, to allow for accounting risk).

The DP makes it clear that future events (such as future cash flows) are a pervasive phenomenon of importance in financial reporting (IASB 2013, section 6). Thus, a faithful
representation of a future event or future outcome is what actually occurs or is realised in the future. Accounting risk can then be defined as the probability of a material difference between what is recorded and what is actually realised in the future. This would capture the concepts of recognition (existence) uncertainty and outcome (measurement) uncertainty that are outlined in the DP (IASB 2013, paras. 2.17-2.36). It would also make it possible to quantify the failure to faithfully represent future events of an accounting estimate — that is, to quantify the accounting risk associated with a particular estimate. This is consistent with the risk modeling of future events that is used in risk management (Smieiauskas 2012).

To maintain the usefulness of financial statement reporting, measurement (or outcome) uncertainty should have limits. Since the accounting risk concept captures the dual problems of existence uncertainty and outcome uncertainty, requiring the conditions relating to acceptability of accounting risk to be stated, is a way of identifying limits on these uncertainties. Thus, to ‘not specify a minimum probability threshold’ (IASB 2013, para. 2.35) for a future outcome explicitly accepts that there is 100% estimation uncertainty for an accounting estimate. This is in conflict with the faithful representation concept.

Resolution of the uncertainties question will also have a carry-over effect on the preliminary views on recognition (IASB 2013, paras. 4.24-4.27). If a constraint were put on the acceptability of accounting risk, then this would effectively determine relevant presentation for financial reporting and what is relevant for disclosure in financial reporting. For example, Smieliauskas (2012) suggests a way to resolve the issues that is consistent with Beaver’s (1991) three-category reporting and disclosure criteria. His suggestions also attends to the range of possible outcomes discussed in IASB (2013, para. 4.26 (a), and deals with verifiability based on the ranges of outcomes outlined in IFAC (2011, section V). Thus, we recommend that the
relevance criteria in IASB (2013, para. 4.10) also be linked with a consideration of the acceptability of accounting risk. In this way there would be more coherence between relevance and faithful representation.

The need to represent future events faithfully means that accounting risk should be at an acceptable level. Therefore, a key principle in the CF ought to be one that fosters reliable measurement in financial statements. Such reliability can emerge from accounting estimates that conform to rigorous measurement principles – such as a requirement for acceptably low accounting risk in estimates. Valuations that do not conform to rigorous measurement principles should not be recorded in financial statements, irrespective of the level of other disclosures about the measurements. Recent evidence indicates that fraud tends to arise from fallacious thinking about what is acceptable in accounting estimates. Schrand and Zechman 2012, 312) claim further that ‘an optimistically biased initial misstatement, even if unintentional, starts the executive on a “slippery slope” that leads to greater probability of misstatement and an SEC enforcement action.’ The failure of the IASB (2013, paras. 2.35 [a] [i] and 1.8) to draw a line of acceptable uncertainty seems likely to contribute to slippery slope accounting reasoning in the development of accounting standards and in their interpretations and implementation.

Accounting risk incorporates freedom from material error and helps to make faithful representation of future events operational in practice. When accounting risk is high and there is no way of reducing it, the associated value or estimate should be written down to zero so it does not exist according to the DP (para. 2.36). These characteristics are discussed in more detail in Smieliauskas (2008). Beaver’s (1991, 127-125) categorisation of all financial statement items as ‘presentation’, ‘disclosure’, or ‘ignore’ depends on acceptable levels of accounting risks to some degree. However, this contradicts the notion that no constraints are placed on financial
statements as a consequence of estimation uncertainty or outcome uncertainty, as suggested by the IASB (2013, para. 2.35).

The current review of the CF of financial reporting by the IASB (2013, 6) proposes dropping the role of uncertainty from the definition of the fundamental concept of assets (para. 2.17). This is a curious proposal ethically. Such a concept will increase ethical blindness. It will worsen financial reporting problems by not restricting the level of uncertainty allowed in recognizing an asset. That is, it will condone a situation in which accounting risk can potentially grow to 100%. At such a level, there is a guaranteed material misstatement because the asset is guaranteed not to realise the estimated amount reported in the financial statements. In taking this position, the IASB (2013, para. 2.35) believes estimation uncertainties should not be dealt with at a conceptual level, but rather by the capacity of standards to deal with specific issues.

There are at least two problems with the IASB approach. First, it is likely to be a long time before all specific issues addressed conform with the CF (e.g., the FASB experience indicates it is not possible to catch up even after 40 years). There are frequent exceptions in the application of rules-based accounting (Schipper 2003, 67). This suggests a problem with either the principles or their implementation guidance in the detailed standards. This is illustrated by the continuing problems with accounting for future events in estimates that may be required in fair value accounting. For example, Enron’s $21 billion of fair valued assets were worthless less than two months after its third quarter statements in 2001 (Haldeman 2006).

The second problem with the IASB approach is the absence of a guarantee that specific standards will address all practical situations. Any gap in the coverage of individual standards that limit the accounting risk incorporated in the basic concept of assets is undesirable: it could be exploited to foster cases of clearly unacceptable reporting (such as at Enron) being considered
in ethical conformity with GAAP. For these reasons efforts to strengthen the CF should be emphasised and less emphasis should be placed on detailed guidance.

We recommend that fundamental concepts (such as that of ‘asset’) be defined to incorporate an acceptable level of accounting risk that is tolerable to users of financial statements. The benefit of this would be that it excludes estimates that are unethical. We argue, contrary to the IASB (2013) DP, that we should not eliminate use of uncertainty terms (such as expected economic benefits) from the assets concept. Rather, we argue that the degree of uncertainty in an accounting representation of an asset, and its acceptability, should be specified explicitly rather than keeping it implicit (as indicated by the wording in IASB [2013, paras. 4.22-4.27]).

Accounting risk is important because it captures the uncertainties associated with predicting future events in the accounting estimates in financial reports. This is recognised to some degree in IASB (2013, paras. 4.22-4.27). Indeed, concern about accounting risks arose in 1978 in the influential Cohen Commission Report on Auditors’ Responsibilities. The Cohen Report recommended that auditor responsibilities be expanded. Almost all of these recommendations have been adopted in the decades since. Importantly, the Cohen Report (1978, xix, 23, 29) also made some major recommendations for accounting standard setting in the context of accounting risks. However, none of these recommendations have been adopted fully by accounting standard setters. Now seems an appropriate time to do so.

Our two related recommendations have potential to elevate financial reporting beyond a mere compliance ‘instrument.’ Their implementation would help render financial reporting a more socially-constructive institution – and one that supported the accounting ideal of providing information to serve important public purposes, such as the ongoing construction of trust. An appropriate CF is required to justify more detailed guidance. More accountability is needed on
the part of preparers by means of justified judgments in the implementation of accounting concepts. This may require new skill sets for financial report preparers, auditors and standard setters. Such new skills would involve functional knowledge of argumentation, rhetoric, and related disciplines, as they apply to financial reporting.
Appendix 1

Illustrative Extract from Enron Trial Transcripts

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Arnold - Cross/Stolper

1 talk about that for one quick second. I'm going to take it
2 down.
3 That's a list of a whole bunch of Enron global
04:19:03 4 assets; is that right?
5 A Some of them, yes.
6 Q And you testified that -- I think your testimony --
7 THE WITNESS: Excuse me, Your Honor.
8 BY MR. STOLPER:

04:19:14 9 Q I think your testimony was that you can't conclude from
10 this list these assets are impaired, right?
11 A That is correct.
12 Q Okay. And I just want to be crystal clear, you also aren't
13 saying that these assets are not impaired; is that right?
04:19:27 14 A I'm saying that I have seen no evidence through
15 accounting -- appropriate accounting applications that there was
16 any impairment other than the 200 million of goodwill.
17 Q Okay. So you're saying that, for all these assets, you
18 have done a thorough review of their cash flow analyses, et
04:19:41 19 cetera, et cetera, and concluded that none of these assets were
impaired. Is that your testimony?

A  No, that's not what I just said.

Q  Okay. Your testimony is that these -- that you found no evidence that these assets are impaired?

A  I found no evidence of an analysis indicating any of these assets were impaired. Plus, I would add, part of Arthur Gayle Dye, CSR, RDR, CRR cgjenron@oplink.net
References


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Hechter, M. 2008. The rise and fall of normative control. Accounting, Organizations and Society 33 (6), 663-76.


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**Notes**

1 We use the terms ‘fair presentation’ of future events interchangeably with ‘faithful representation’ of future events. ISA 200 (*Overall Objectives of the Independent Auditor and the Conduct of an Audit in Accordance with International Standards on Auditing*) offers an audit perspective on fairness of presentation reporting frameworks.

2 Case analysis of this type is regarded to be a critical step in the social sciences in developing more comprehensive theories (Scheff 1997). Our approach is consistent with calls for detailed study of individual texts as a means of generating ‘[i]nferences concerning the social institutions within which a text is embedded [since] the texts intimate, in great detail, the subjects’ connections to larger institutions’ (Scheff 1997, 47).

3 We refer to ‘user’ in the conventional context of users of financial statements. Young (2006) queries whether standard setters consider real human actors or a self-constructed model of a ‘user’ that bears a stronger resemblance to robots than humans.
An asset is defined commonly as the probable future economic benefits obtained or controlled by a particular entity as a result of past transactions or events. (FASB, Statement of Financial Accounting Concepts No. 6, *Elements of Financial Statements*, 2008).

Benston and Hartgraves (2002) and Benston (2006) have highlighted several ‘high risk’ accounting practices that contributed to Enron’s demise.

Other examples of hierarchies of warrants within the FASB’s original CF are: a hierarchy of accounting qualities (Storey and Storey 1998, 101); a hierarchy to avoid ‘ad hoc’ accounting (p. 87); and the ‘conceptual primacy’ of the concepts of assets and liabilities (p. 123).

For example, the Black-Scholes formula for evaluating stock options is not based on just the average value of the stock, but also to a degree on the volatility of the stock and the duration of the option.

Drawing on the scientific principle of parsimony or Okam’s Razor, Smieliauskas (2008) also identified other principles that would improve a CF.

Increasingly, the effect on the quality of financial reporting is recognized as reflecting audit quality (Knechel *et al.* 2013; Smieliauskas 2012).

Rush did not complete an independent analysis of the reserve. This raises doubts as to whether he had sufficient knowledge of the facts when reaching his conclusion (May 3, 200).

The importance of risks and uncertainties and their treatment in Enron’s reporting have been documented extensively by Benston and Hartgraves (2002, 109, 111, 114-117) and Benston (2006, 2008). Smieliauskas *et al.* (2008) provide an example of the implications for the auditor’s report.

Some observers argue that rhetorical devices, such as appealing to the authority of the speaker (*ethos*) or using emotional appeals (*pathos*), should become more important (Posner 1995, 501-3).

To represent accounting risk concisely using concepts in IASB (2013, para. 2.19), we assume (consistent with the DP [IASB 2013a, paras. 2.17-2.36]), that existence uncertainty (which we represent as ‘probable’) and outcome uncertainty (which we represent as the probability of material misstatement [MM] with using a particular estimate for the relevant future events such as future cash flows) are applicable to the accounting estimate. If so, then the accounting risk for the estimate is as given by:

\[
\text{Accounting risk} = 1 - (P \times (1 - MM))
\]
where:

Accounting risk = Probability of material misstatement from failing to accurately predict future events in an accounting estimate

\[ P = \text{‘probable’ (existence uncertainty for the estimate due to future events [as given in IASB 2013, paras. 2.20-2.31])}. \]

\[ MM = \text{outcome uncertainty due to future events (as given in IASB 2013, paras. 2.32-2.39). MM can be viewed as the lack of measurement reliability under the existing conceptual framework (IASB 1989 CF chapter 4, paras. 4.44-4.45)}. \]

If no bounds are put on how small ‘probable’ is allowed to become, then the accounting risk can get high, even 100%: that is, it is a guaranteed material misstatement. This violates the concept of faithful representation of future events. Such formulation also shows that similar problems arise if MM is allowed to get too high, as indicated by recognition concerns noted in IASB (2013, para. 4.26).