

ACCOUNTING FOR UNCERTAINTY¹: *A guide for Audit Committees*

Uncertainty (ŭn-sŭr'tn-tē)

- The condition of being uncertain; doubt.
- Something uncertain: *the uncertainties of modern life*.
- *Statistics*. The estimated amount or percentage by which an observed or calculated value may differ from the true value.

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¹ "Accounting for Uncertainty" is conceptual and intended to support traditional accounting.

1. Introduction

From its earliest days, the core purpose of accountancy has been to provide a basis for explaining how assets which belong to one party or parties have been managed, or stewarded, by other parties. It has served an additional important purpose as a basis for determination of the taxes that may be due to the local ruling authority.

The traditional stewardship rationale for company accounting continues to form the basis for the legal framework for accounting, in the UK and other countries. Companies are required to prepare annual accounts that enable shareholders to form an informed view on how the company's directors have managed the company's assets and performed their legal duties. In doing this, preparers are required by law to present a true and fair view. Those who prepare accounts for listed companies in the UK are additionally expected by the Financial Reporting Council to ensure that those accounts present "*a fair, balanced and understandable assessment of the company's position and prospects*"²: this suggests that company accounts should be prepared and presented in a way which is not only technically correct but which is genuinely informative to users³.

The traditional approach which is reflected in the legal framework has been impacted by the somewhat different approach which is taken by IFRS. The conceptual framework for IFRS makes it clear that financial statements are expressly intended to "*provide financial information ...that is useful to users of financial statements*"³. This alternative approach means that annual accounts must be put together in a way which is not so much a basis for governance decisions by the body of shareholders as economic decisions to be taken by each individual investor.

Whichever approach is followed – and the two approaches outlined above are not mutually exclusive – accountants will always attempt to present as faithful an approximation of an entity's performance and prospects as can be achieved. In doing this, the issue of how to approach the valuation of assets and liabilities, and the measurement of income and expenditure, becomes of central importance.

Traditionally, accountancy has relied on historic values to measure and report costs and liabilities incurred. As it has developed, however, accountancy has increasingly taken account of the 'fair value' of assets and liabilities, rather than their historic value. But even where fair values are adopted, this does not mean that they will always amount to undisputable presentations of the value of that asset to the reporting business. Accountancy has after all always been referred to as an art, not a science, and financial statements can never be expected to encapsulate absolute certainty.

In an environment in which companies are being expected to report in ways which are 'fair' and 'balanced', and which at the same time make sense to users of different motivations, it is time to consider whether we need to factor this element of uncertainty more centrally into the process of preparing and reporting financial information. Specifically, we need to consider how we approach the use of judgement and assumptions in arriving at figures for each asset and liability in the financial statements,

This paper presents the case for how a new approach to the measurement of uncertainty can assist audit committees in carrying out their own functions in relation to the preparation of accounting information.

² Financial Reporting Council revision to the UK Corporate Governance Code, September 2012: The <https://www.frc.org.uk/Our-Work/Publications/Corporate-Governance/UK-Corporate-Governance-Code-September-2012.pdf>

³ November 2013 IASB discussion paper on the Conceptual Framework of Reporting: <http://www.ifrs.org/Current-Projects/IASB-Projects/Conceptual-Framework/Discussion-Paper-July-2013/Pages/Discussion-Paper-and-Comment-letters.aspx>

1. Why uncertainty in accounting matters

The financial crisis of 2007-8 highlighted the dangers practical difficulties, and even the dangers, of purporting to present precise figures in annual accounts. During that period many large financial services organisations were bailed out by governments to prevent their insolvency, within weeks of reporting healthy profits. An example of the speed and extent of changes in asset and liability valuations concerns the Swiss Bank, UBS. After declaring a profit of \$10bn in 2006, the bank disclosed a loss of \$3.5bn for 2007. Within two months, it had announced a further write-down of \$37bn.

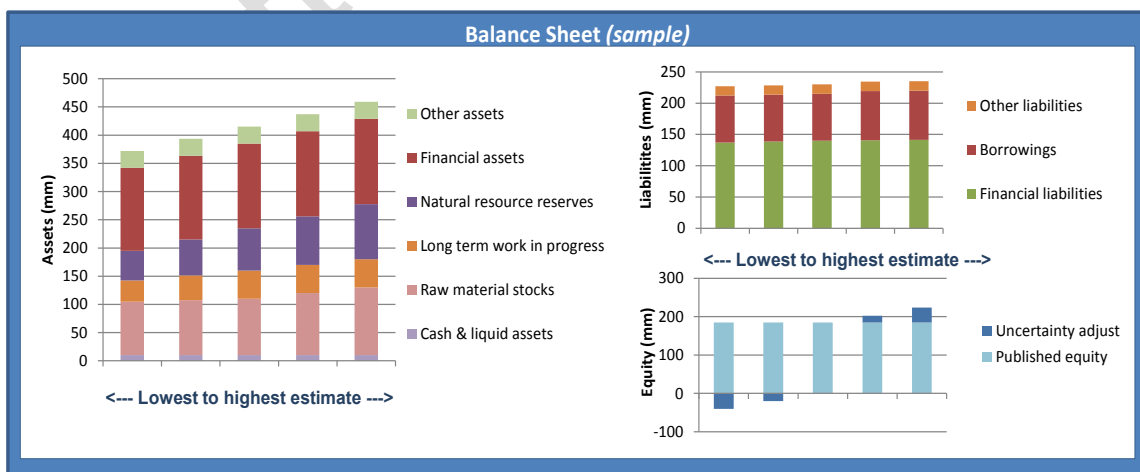
One response to what some observers consider to be a non-relationship between reported historic figures and commercial reality has been a suggestion that accountancy needs to take more account of uncertainty. Specifically, the process of preparing financial information needs to acknowledge that presenting precise figures may have the effect of misleading readers, and that an explicit recognition and estimation of the effect of uncertainty on financial results may help rather than hinder readers in understanding the reporting entity’s performance and prospects.

A paper published by ACCA in 2012, entitled “Confidence Accounting: A Proposal”⁶ contained a proposal for using probability distributions to represent a range of outcomes for financial statements, arguing that a single, precise numbers implied more accuracy than is possible or justified.

The identification and assessment of what is less known or certain is already an integral function of the process of risk management. As accounting practices have become more sophisticated, they have increasingly incorporated the risk management view of possible future outcomes. For example, IFRS already requires companies to...

“...disclose the significance of financial instruments for an entity's financial position and performance [and to] include a sensitivity analysis of each type of market risk...”⁷

In many global financial institutions, more than 50% of total assets are stated using “fair value”, derived from internal models or based on market prices. Being able to account for the underlying uncertainty by presenting a range of outcomes might show how changing assumptions impact a company’s position, exemplified by the following diagram:



⁶ Published in July 2012 by Long Finance, ACCA and the Chartered Institute for Securities & Investment.
⁷ IFRS 7

2. Implementation issues and Audit Committees

As indicated above, many parties have already expressed interest in the concept of Confidence Accounting as a mechanism for integrating uncertainty into the financial reporting process. While some expressed concerns about how, in practice, the concept could be accommodated within the existing reporting framework, others have shown a particular interest in the possible adoption of the thinking behind the concept by audit committees: many have suggested that audit committees would find the concept particularly relevant in view of the need for them to take a view on whether financial statements are “fair, balanced and understandable”.

The FRC Corporate Governance Code for UK companies⁸ places the following responsibilities on Boards and Audit Committees:

“The board should present a fair, balanced and understandable assessment of the company’s position and prospects.”

“...the Audit Committee should ...monitor the integrity of the financial statements of the company...reviewing significant financial reporting judgements contained in them;

Whilst it is management’s responsibility to prepare complete and accurate financial statements ... the audit committee should consider significant accounting policies, any changes to them and any significant estimates and judgements...and whether the company has adopted appropriate accounting policies and, where necessary, made appropriate estimates and judgements.

A recent Deloitte survey⁹ showed that the length of annual reports has doubled in 17 years, averaging over 100 pages for the top 350 companies in the UK. Those of major oil companies weigh in at about 250 pages, with banks stretching to over 400 pages. It seems doubtful whether individual directors and members of audit committees can be expected to absorb every word of the annual reports of this size. It would appear to be in their interests to be able to call on a mechanism which helped them to understand the critical assumptions and judgements being made and reported on..

Audit committees’ duty to satisfy themselves that the figures in the financial statements are fair, balanced and understandable could be aided by having access to management’s assessment of its confidence in the reliability of individual figures being reported. As well as benefitting audit committee members, discussion of such matters with the Chief Executive or the CFO and the external auditors could also enhance the quality of external audit.

⁸ <https://www.frc.org.uk/Our-Work/Publications/Corporate-Governance/UK-Corporate-Governance-Code-September-2012.pdf>

⁹ <http://www.deloitte.com/assets/Dcom-UnitedKingdom/Local%20Assets/Documents/Services/Audit/uk-audit-a-new-beginning-printer-friendly-13.pdf>

3. How Audit Committees might review uncertainty

One way of explaining uncertainty in the figures would be a simple narrative or report on the balance sheet from management, which would be discussed by the audit committee, prior to being sent for approval to the Board.

Each company could decide on the degree of confidence that was appropriate for their circumstances. Those with highly predictable cash-flows could expect to be highly confident of a tight range of outcomes, whilst fast-growing companies might have a much wider range.

Ranges for different types of asset or liability might be arrived at different ways – some would rely in experience and judgement; others from precisely modelled outcomes.

The following report, and the levels of certainty therein, are purely illustrative. In the report, "SimpleCo" has stated its expected range of outcomes under two scenarios, reflecting:

- 1) business as usual: an outcome that could be expected, although not necessarily in the immediate future; and
- 2) a stress situation: an outcome that is considered to be extremely unlikely, but conceivable. Management and external auditors of another company might not give specific confidence levels, merely stating that it was reasonably sure or highly confident of particular outcomes.

Report from the Chief Executive to the Board of SimpleCo.

"In preparing the financial statements for the Board, the management of the company has made a number of assumptions. Some of these are required by IFRS; others are estimated using historic data, internal models or are based on the management's own experience.

We tested the impact of changing our assumptions to reflect our view of the possible outcome under different scenarios. In our report, we present a range of outcomes that we could expect to occur in one out of every ten years (1 in 10, or 90% confidence), which we have called "Possible". We also considered outcomes that we consider extremely unlikely, but conceivable – referred to as "Remote" – in other words we don't expect them to occur more than once in every hundred years (1 in 100 or 99% confidence). The impact on SimpleCo's balance sheet of changing our assumptions is described below:"

Item	Explanation	Outcome:	
		Possible	Remote
Cash and liquid assets	Whilst we cannot be completely certain that cash is correctly stated, we believe that our internal systems and controls would have identified significant error – say less than 2.5% either way. At the balance sheet date there was no evidence that cash deposited with financial institutions was at risk. The value of other liquid assets – investments in government securities – is based on market prices on the day. Therefore, we see no reason to provide a range of results for cash and liquid assets.	None	None
Stocks	Stocks are valued at historic cost, in line with accounting standards. Raw material prices have risen this year and if we were to sell the stocks today, we could expect to realise a profit of 10%, possibly as high as 20%. Stocks are held in secure, well maintained warehouses, we have audited over 50% of the	Range of -2.5% to +10%	Range of -5% to +20%

Item	Explanation	Outcome:	
		Possible	Remote
	quantities in the past three months and we believe the estimates to be correct. However, there is always the risk of loss, which past experience has shown to be never more than 5%.		
Long term work in progress	We have fixed contracts to supply our customers over a number of years. Balance sheet values are based on the historic cost of materials and labour and take into account the degree of completeness of the work. At the balance sheet date, we see no need to make provisions for a reduced value of these contracts. However, since some of the projects are at an early stage, it is too early to be fully confident that we will realise the full expected value. Experience from companies with similar contracts leads us to believe that a reduction in value of more than 25% is remote but could possibly be up to 12.5%.	Reduce by 12.5%	Reduce by 25%
Natural Resource Reserves	We hold licences to extract raw material from certain places and we have included the value of that raw material on today's price per unit – i.e. spot price, less the estimated cost of extracting it and transporting it to market. It is always difficult to estimate the amount of raw material – there can be more than we expect, or we may not be able to extract the amount we are expecting. In the past, our geological modelling has been accurate nine times out of ten within a range of 15% either side of the central estimate and has never been more than 30% wrong.	Range of +/- 15%	Range of +/- 30%
Financial Assets and Liabilities	Our Treasury operations largely exist to protect future costs and sales from our operations, but include an element of trading. Financial assets and liabilities are stated in the balance sheet at fair value in accordance with accounting standards. Whilst values are derived from current market prices, there is a risk that our counterparty is unable to fulfil the contract. Although this risk is low, we modelled the impact of replacing existing hedges, of a large counterparty defaulting. Trading is mostly in instruments for which there are observable market prices, but we have used internal models to estimate around 20% of our assets and liabilities. Whilst these models have been verified by external experts, model error is possible or estimated values may not being realisable in practice. Our rigorous stress-testing leads us to be confident that the impact of a counterparty defaulting and/or an error in our models would not increase the value of our financial assets and liabilities by more than 1% or reduce them by more than 2%.	Range +0.5% to -1%	Range +1% to -2%
Borrowings	Under IFRS, we stated our borrowings at their fair value. As our credit rating has reduced, prices for the debt have fallen by 5%, which shows up as a profit in the profit and loss account. However, we do not intend to redeem the debt and we would be more confident in showing the debt at the increased value (+5%)	Increase by 5%	Increase by 5%
Overall impact	Taking into account all the above uncertainty, we expect net assets to be within 12% of the stated figure and are very unlikely	Range of +/-12%	Range of +/-25%

Item	Explanation	Outcome:	
		Possible	Remote
	to vary by more than 25%. Discussions with senior executives in other companies with our product range show that they have similar ranges of variability.		

The following table summarises these results. The central estimate is the figure that we included in the annual report. The estimates on either side are those outcomes that could occur under different scenarios. The “lowest” and “highest” estimates are outcomes that we expect to occur under almost all circumstances – an outcome outside that range is “unlikely”. The lower and higher estimates are outcomes that we could envisage one year in ten and are considered possible:

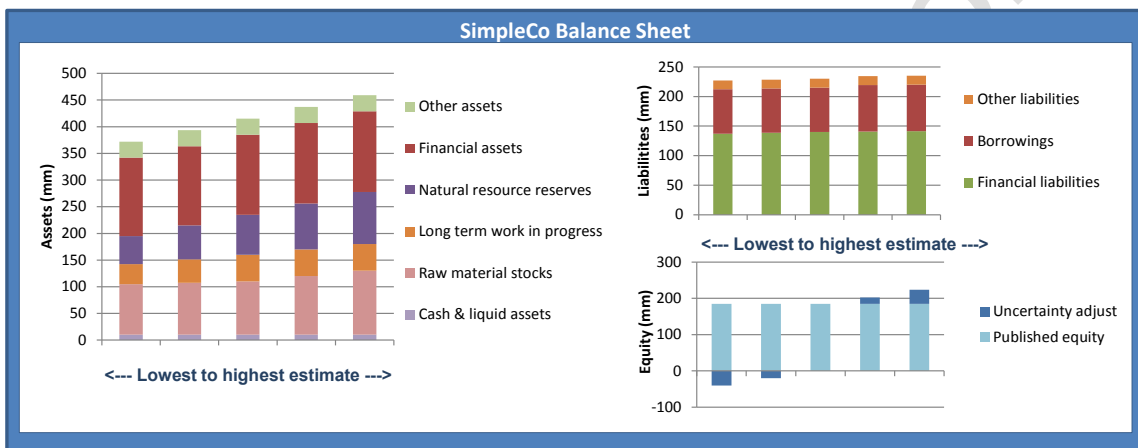
SimpleCo									
Consolidated balance sheet									
As at 31 December 2013 (mm)									
	Variability				Lowest estimate	Lower estimate	Annual report	Higher estimate	Highest estimate
	Lowest	Lower	Higher	Highest					
Assets									
Cash & liquid assets					10	10	10	10	10
Raw material stocks	-5.0%	-2.5%	10.0%	20.0%	95	98	100	110	120
Long term work in progress	-25.0%	-12.5%			38	44	50	50	50
Natural resource reserves	-30.0%	-15.0%	15.0%	30.0%	53	64	75	86	98
Financial assets	-2.0%	-1.0%	0.5%	1.0%	147	149	150	151	152
Other assets					30	30	30	30	30
Total assets					372	394	415	437	459
Liabilities									
Financial liabilities	-2.0%	-1.0%	0.5%	1.0%	137	139	140	141	141
Borrowings			5.0%	5.0%	75	75	75	79	79
Other liabilities					15	15	15	15	15
Total liabilities					227	229	230	234	235
Equity									
Share capital					125	125	125	125	125
Retained earnings					60	60	60	60	60
Published equity					185	185	185	185	185
Uncertainty adjust					-40	-20		18	39
Adjusted equity					145	165	185	203	224
Total liabilities and equity					372	394	415	437	459

4. Alternative presentations

The paper on Confidence Accounting depicted the outcomes as distribution charts. Feedback to the paper was that such diagrams were not intuitive for many and alternative presentations might be helpful. The following diagrams show some alternatives. Each company could choose diagrams that best represented their particular assets or liabilities.

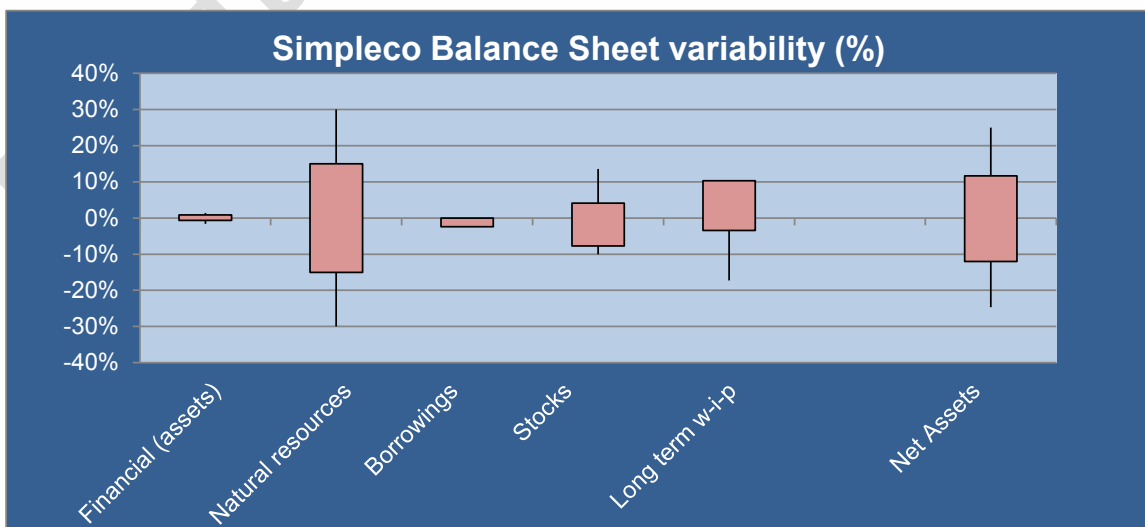
a. Block columns

The box below depicts the balance sheet from the above table. The column in the middle of each chart in the box represents the figure in the annual report, with the highest and lowest estimates at either end of each chart. As well as showing the total variability for Assets, Liabilities and, hence, net equity, it also shows the components of that variability (in mm).



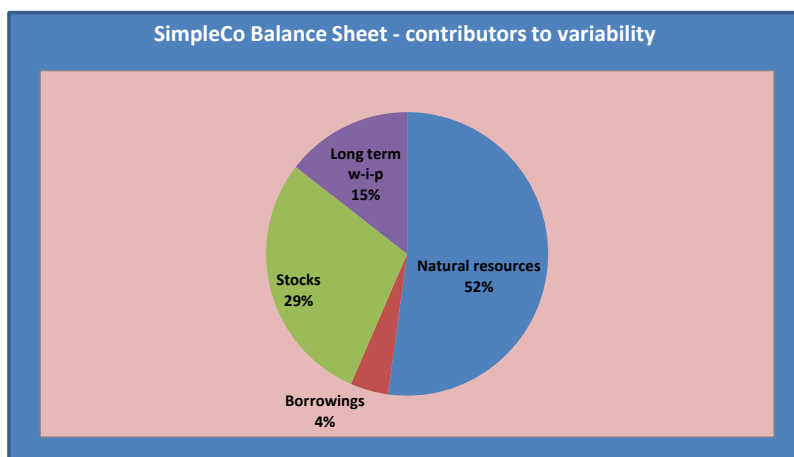
b. Candlesticks

An alternative presentation is similar to that used for variability of stock prices. The following diagram depicts the variability in the balance sheet items listed above. The expected possible range is shown as a block, with unlikely outcomes shown as lines.



c. Pie chart

Expressing the relative contribution of each item to balance sheet uncertainty could be done in a pie chart. Three items contribute 95% of variability – natural resources over 50%, stocks of raw materials nearly 30% and long term work in progress 15%.



5. What might be the outcome of such a report

One suggestion has been that it could result in a dialogue between the Audit Committee and the Chief Executive (or CFO) and the external auditors along the following lines:

Audit Committee	Chief Executive
<i>What net assets have you reported in the annual report?</i>	We reported net assets of 185mm in the most recent balance sheet.
<i>What is the likelihood of that number being correct?</i>	Very high, perhaps 90% that it will be within 12% of the figure
<i>What would be the implications of such a reduction?</i>	We have sufficient equity for us not to cut dividends and we would not be in danger of breaching our banking covenants.
<i>What is the likelihood that it will be different by more than 12%?</i>	Unlikely. We did some analysis on scenarios that we think will not occur more than once in a hundred years.
<i>What was the result?</i>	Net equity was no lower than 145mm, but could be as high as 224mm
<i>What would be the implications for the lower figure?</i>	We'd have to cut our dividend and the market might expect us to raise additional equity – at least 20mm – which might be expensive, given that such an outcome is likely to be when the capital markets are stressed and demanding a relatively high return on investment.
<i>Is that acceptable for our stakeholders?</i>	Not really. They have invested in us because they expect stability of earnings and a steady divided growth.
<i>What has to happen for us to avoid that scenario?</i>	Well, as we said, we think it highly unlikely, as we'd have to fail to close almost all the deals we are

Audit Committee	Chief Executive
	negotiating.
<i>What are you doing to reduce the odds of that happening?</i>	Both the CFO and CEO are personally engaged in all deals over 1 million.
<i>What has to happen / not happen for you to fall short by the lower 12%?, what are you doing to reduce the risk...etc</i>	...
<i>Let's return to your estimate that you might exceed your forecast. What can you do to increase the odds that you will be on the high end?</i>	...

6. Derivatives in Financial Institutions: a special case?

As well the types of assets used by a relatively simple company, Financial Institutions face particular challenges in accounting and reporting for trading assets and liabilities, particularly derivatives:

- a. The term “derivative” covers a wide range of instruments, from the relatively simple – a forward foreign exchange contract, whose price is the current spot price plus or minus the difference in interest rates between the two currencies – to the arcane – CDS squared, a derivative of a derivative of the price of security issued by a company.
- b. Liquidity in a specific derivative can quickly disappear in stress conditions
- c. Certain derivatives have little market history.

As a result, a derivative might be relatively easy to mark to market, or there may be no reliable market, in which case a company will model the likely price. Nevertheless, companies include derivatives and other trading positions in the balance sheet at fair value, as determined by Accounting Standards. A typical large global bank reported the fair value of its trading assets in 2013 as nearly £600bn – around 50% of its balance sheet:

- a. 18% used observable market prices (Level 1)
- b. 76% used prices for similar instruments (Level 2); and
- c. 6% was derived from internal models (Level 3)

Whilst there is some uncertainty within Level 1 – prices move from day to day – at the balance sheet date, the value is based on a reliable price. An Audit Committee might be entitled to assume a 100% confidence in the published figure.

For Level 2 and Level 3 – over 80% of the trading position – there is more uncertainty about the value used. Banks already publish sensitivity to price movements in their financial statements. The Audit Committee would be helped by a report showing the confidence of the management in its assessment of the value of Level 2 and 3 assets. In particular: How likely is it that a lack of liquidity or other factors might force the company to sell assets when a market was in particularly stressed conditions – at fire-sale prices?

7. Conclusions

To be written following the 28th March conference.

Draft for Discussion

Appendix: Questions to be discussed at conference (on scale of 1 to 5 agree / disagree, except possibly question 5)

1. Is there a need to better represent uncertainty in financial statements?
2. Given the practicalities of introducing accounting for uncertainty into existing financial reporting, would Audit Committee discussion be a good place to trial the concept?
3. Do Audit Committees have the tools available to satisfy themselves that financial statements are "*fair, balanced and understandable*", as required by the FRC's Corporate Governance Code for UK companies?
4. Would the concept of Accounting for Uncertainty help Audit Committees meet those responsibilities?
5. Are the proposed diagrams useful, either individually or in combination, in showing how Accounting for Uncertainty can be represented?

Alternative for question 5: Which of the proposed diagrams are most useful in representing Accounting for Uncertainty?

- a. Table
 - b. Blocks
 - c. Candlesticks
 - d. Pie
 - e. All, in combination, depending on circumstance
 - f. None
6. To what extent would the sample dialogue add to an Audit Committee's understanding of the "company's position and prospects"