



Accounting and Business Research

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/rabr20>

Standard-setting measurement issues and the relevance of research

Mary E. Barth^{a b}

^a Graduate School of Business, Stanford University

^b International Accounting Standards Board, E-mail:

Published online: 28 Feb 2012.

To cite this article: Mary E. Barth (2007) Standard-setting measurement issues and the relevance of research, *Accounting and Business Research*, 37:sup1, 7-15, DOI: [10.1080/00014788.2007.9730079](https://doi.org/10.1080/00014788.2007.9730079)

To link to this article: <http://dx.doi.org/10.1080/00014788.2007.9730079>

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at <http://www.tandfonline.com/page/terms-and-conditions>

Standard-setting measurement issues and the relevance of research

Mary E. Barth*

1. Introduction

Measurement is a key aspect of financial reporting. This paper explains my views, as a standard setter and a researcher, on how the International Accounting Standards Board (IASB) approaches standard-setting measurement issues, the measurement bases it and other standard setters commonly consider, and how research can contribute to resolving standard-setting issues related to measurement.

The IASB approaches measurement issues in the same way as it approaches other standard-setting questions. That is, the IASB attempts to apply its conceptual framework, which is specified in its *Framework for the Preparation and Presentation of Financial Statements (Framework, IASC, 1989)*. Other standard setters also base standard-setting decisions on their conceptual frameworks. For example, the conceptual framework of the US standard setter, the Financial Accounting Standards Board (FASB), is specified in its *Statements of Financial Accounting Concepts (SFAC) Nos. 1, 2, and 5-7 (FASB, 1978, 1980, 1984, 1985, and 2000)*.¹ Despite its importance, measurement has received relatively little attention in the conceptual frameworks of financial reporting standard setters. Thus, in making measurement decisions, standard setters usually focus on applying the definitions of financial statement elements and the qualitative characteristics of accounting information in the context of the objective of financial reporting. The definitions identify what is to be included in the measurement, the qualitative characteristics identify the desired characteristics of the measurement, and the objective of financial reporting identifies the context in

which the measurement should be evaluated.

Application of those concepts has resulted in a variety of measurement bases being used to measure financial statement amounts. These include historical cost, amortised historical cost, fair value, and value in use, among others.² Each basis has advantages and disadvantages relative to the others in meeting the conceptual framework criteria. However, a review of the recent activities of the IASB reveals that the use of fair value in financial reporting is likely to increase. This is because as the board has debated particular measurement questions, it has concluded that in some cases fair value meets the conceptual framework criteria better than other measurement bases considered. It is not because the board has a stated objective of changing accounting measurement to fair value for all assets and liabilities. Fair value is not a panacea and other measurement bases also have desirable characteristics. Thus, which basis the IASB will require in any particular situation is not a foregone conclusion.

Research can be helpful to standard-setting debates about measurement. This is because research is generally rigorously crafted and grounded in economic theory. Also, because academics do not have a stake in the outcome of the research, research typically is unbiased. Relating specifically to measurement, research can provide insights into how alternative measurement bases, in a variety of

¹ The conceptual framework of the UK Accounting Standards Board (ASB) is specified in its *Statement of Principles for Financial Reporting (ASB, 1999)*. The conceptual frameworks of the IASB, FASB, and ASB are similar, but not identical. The IASB and FASB currently have a joint project to complete, converge, and improve their conceptual frameworks. Because the IASB and FASB anticipate the framework project will take several years to complete, they are conducting it in phases. Measurement is one of the phases.

² The UK framework (ASB, 1999) lists deprival value as a measurement basis. Deprival value is the loss that the entity would suffer if it were deprived of the asset. It is measured as the lower of replacement cost and recoverable amount, where recoverable amount is the higher of value in use and net realisable value. In its recent measurement discussion paper, the staff of the Canadian Accounting Standards Board (CASB) explains its view that deprival value is a decision rule for determining which of these measurement bases to use (IASB, 2005).

*The author is a professor at the Graduate School of Business, Stanford University and is a member of the International Accounting Standards Board. E-mail: mbarth@stanford.edu

She appreciates helpful comments from Kevin McBeth, Wayne Landsman, Jim Leisenring, Richard Macve, Trish O'Malley, Brian Singleton-Green, David Tweedie, and an anonymous reviewer. The views expressed in this paper are the author's; official positions of the IASB on accounting matters are determined only after extensive due process and deliberation.

contexts, meet the criteria in the conceptual framework, such as relevance and faithful representation. Researchers also can question the current framework by rethinking the objective and characteristics of financial reporting and, if necessary, offering an alternative framework that comprehensively meets the objective and evidences the desired characteristics. Research also can identify measurement alternatives to fair value that can be used on a comprehensive basis. Relating to fair value measurement itself, research can help link valuation theories to the real world in which we live. Such research would aid standard setters, for example, in determining which assumptions underlying the valuation theory are most important and those that can be ignored. For example, most valuation theory relies on perfect and complete markets – or at least markets with no arbitrage opportunities. Without these market features, a single value for every asset and liability does not exist. But, by how much does the observed inconsistency with each of these assumptions affect the resulting value estimates? Is it enough to be concerned about from a practical perspective? There is much to learn about accounting measurement and research can aid standard setters in identifying the issues they need to address, helping them structure their thinking about the issues, and providing evidence that informs the debate about the issues.

The paper proceeds as follows. Section 2 explains how the IASB approaches measurement issues, and attempts to dispel some common misunderstandings. Section 3 discusses why the IASB has increasingly focused on fair value and identifies some of the possible alternatives. Section 4 suggests some ways in which research can inform standard-setting measurement issues. Section 5 offers concluding remarks.

³ Some use the term ‘present value’ to refer to an estimate of current value. Others, including the IASB, use the term to refer to the technique of calculating a discounted stream of expected cash flows and, thus, consider it a measurement technique, not a measurement basis. Several measurement bases use present value calculations to determine the measure – the bases differ depending on which expected cash flows are included and which discount rate is used. For example, fair value uses cash flows a market participant would expect and value in use uses cash flows the entity would expect, even if they differ from those a market participant would expect. Yet, both can be estimated using present value techniques. Thus, for present value to be a measurement basis, the characteristics of the current value it is intended to measure must be specified, by specifying the characteristics of the expected cash flows and the discount rate to be used in the calculation.

⁴ At the request of the IASB, the staff of the CASB analysed the characteristics of alternative measurement bases and issued a discussion paper to invite comments on its analysis. The CASB staff concluded that fair value should be the measurement basis for initial recognition for all assets and liabilities (IASB, 2005). Comments received on the discussion paper will inform the measurement phase of the joint IASB/FASB conceptual framework project.

2. How do standard setters approach measurement?

2.1. Conceptual framework

As with any standard-setting decision, when making decisions relating to accounting measurement, the IASB strives to follow its *Framework*. Unfortunately, the current *Framework* does not include much guidance on measurement. It simply lists examples of measurement bases, such as historical cost and settlement value, and measurement techniques, such as present value, that are currently used in financial statements.³ It does not identify their key attributes or provide criteria for selecting among them, and it does not list all possible measurement bases that the board should consider. Thus, when applying the *Framework* to measurement questions, the IASB focuses on determining which measurement basis best meets the objective of financial reporting, the elements definitions, and the qualitative characteristics of accounting information. The objective of financial reporting sets the context for evaluating the measurement, the definitions identify what should be measured, and the qualitative characteristics identify the desired characteristics of the measurement. The treatment of measurement in the FASB’s conceptual framework, specifically SFAC 5, is similar to that in the IASB’s *Framework*. Thus, the present joint IASB/FASB conceptual framework project includes a separate phase on measurement aimed at developing concepts relating to measurement in financial reporting.⁴

At the present time, the first two chapters of the converged IASB/FASB framework, comprising the first phase, have been exposed as a preliminary views document for public comment. These chapters cover the objective of financial reporting and the qualitative characteristics of accounting information. Because the boards believe that these two exposed chapters represent clarification of the current frameworks, not conceptual changes, this paper uses the proposed revised and clarified wording when discussing objective of financial reporting and the qualitative characteristics of accounting information. Much of the discussion in this section is taken directly from the preliminary views document (IASB, 2006a).

The objective of financial reporting is ‘to provide information that is useful to present and potential investors and creditors and others in making investment, credit, and similar resource allocation decisions.’ (IASB, 2006a, para. OB2). The term ‘investors’ refers to present and potential equity holders and their advisers, and the term ‘creditors’ refers to present and potential lenders and their advisers. The resource allocation decisions of these users include determining whether to buy, sell, or hold equity securities and whether to lend funds to or call existing debt issued by the entity. Despite

the fact that equity investors, particularly, and creditors are interested in estimating the values of the entity and its equity, it is not the objective of financial reporting to provide such estimates. Rather, the objective of financial reporting is to meet the information needs of a wide range of users in making a wide range of economic decisions, which are not limited to those dependent on estimates of entity or equity value.

The objective of financial reporting focuses on these users based on the belief that meeting their needs will meet the needs of other financial statement users. For example, as the preliminary views document points out, consistent with the current IASB *Framework*, 'users of financial reports wishing to assess how well management has discharged its stewardship responsibilities are generally interested in making resource allocation decisions... Decisions about whether to replace or reappoint management, how to remunerate management, and how to vote on shareholder proposals about management's policies and other matters are also potential considerations in making resource allocation decisions...' (IASB, 2006a, para. OB28).⁵ The objective of financial reporting affects measurement decisions because it establishes the context for assessing the qualitative characteristics of accounting information, including accounting measurements.

The qualitative characteristics of accounting information in the preliminary views document (IASB, 2006a, ch. 2) are relevance, faithful representation, comparability, and understandability. Relevant information is capable of making a difference to a financial statement user's decisions. Relevant information has predictive value, i.e., it helps users to evaluate the potential effects of past, present, or future transactions or other events on future cash flows, and confirmatory value, i.e., it helps to confirm or correct their previous evaluations. Making the information available to users before it loses its capacity to influence their decisions, i.e., timeliness, is another aspect of relevance. Faithful representation means that the information reflects the real-world economic phenomena that it purports to represent. Real-world economic phenomenon are economic resources and obligations and the transactions or other events that change them. Accounting constructs that are the creation of accountants, such as deferred charges, are not real-world economic phenomena (IASB, 2006a, para. QC18). Neither are

results of calculations, in themselves. Components of faithful representation include verifiability, i.e., different knowledgeable and independent observers would reach general consensus, neutrality, i.e., freedom from bias intended to attain a predetermined result or to induce a particular behavior, and completeness, i.e., all of the information that is necessary for a faithful representation is included.

As the preliminary views document explains, the qualitative characteristics are subject to two pervasive constraints, materiality and benefits that justify the costs. Information is material if its omission or misstatement could influence the resource allocation decisions users make. It is a pervasive constraint on the information to be included in an entity's financial report rather than a qualitative characteristic of accounting information. The benefits and costs contemplated in the *Framework* are broad. The benefits of financial reporting information include better investment, credit, and similar resource allocation decisions, which in turn result in more efficient functioning of the capital markets and lower costs of capital for the economy as a whole. Costs include direct and indirect costs incurred by both preparers and users of financial statement information, as well as by auditors and regulators. Assessing whether the benefits exceed the costs is inherently subjective because it is not possible to obtain quantitative data on all costs and benefits. However, the requirement to assess benefits and costs means that in setting standards, the IASB needs to consider practicality as well as concepts.

Comparability, which includes consistency, is the quality of information that enables users to identify similarities in and differences between two sets of economic phenomena. That is, it is undesirable if similar transactions, events, or conditions look different or if different transactions, events, or conditions look alike. Consistency helps achieve comparability because it refers to the use of the same accounting policies, either from period to period within an entity or in a single period across entities. Understandability is the quality of information that enables users who have a reasonable knowledge of business and economic activities and financial reporting, and who study the information with reasonable diligence, to comprehend its meaning.

When making measurement decisions, the IASB also takes into consideration the *Framework* definitions of assets and liabilities:

- An *asset* is a resource controlled by the entity as a result of past transactions and events and from which future economic benefits are expected to flow to the entity.
- A *liability* is a present obligation of the entity arising from past events, the settlement of which

⁵ Some view stewardship as necessitating an historical cost measurement basis. Others disagree and view stewardship as unrelated to the selection of measurement basis. Rather, they view stewardship as relating to ensuring the entity's management has not inappropriately enriched itself at the expense of investors and creditors (see, e.g., IASB, 2006a, Alternative View to ch.1).

is expected to result in an outflow from the entity of resources embodying economic benefits.

These definitions specify the real-world economic phenomena that accounting should measure, even though they do not specify how to measure them. In particular, the definitions make clear that not all expected inflows and outflows of economic benefits are assets and liabilities for financial reporting purposes.

2.2. Common misunderstandings

There are several common misunderstandings about how the IASB approaches measurement decisions.⁶ First, the *Framework* does not identify conservatism as a qualitative characteristic of decision-useful financial information. Conservative amounts are not neutral, which is a qualitative characteristic. As noted in Section 2.1, neutrality means freedom from bias. Conservatism implies a negative bias for assets and income and a positive bias for liabilities and expenses.⁷ Some argue that because, historically, accounting amounts have been conservative, accounting amounts are useful for purposes beyond those anticipated by the objective of financial reporting, e.g., debt contracting (Watts, 2003). However, the fact that accounting amounts have been used for this purpose does not imply that such use should affect standard-setting decisions in the context of the stated objective of financial reporting.⁸

Second, matching is not a separate concept in the *Framework*. This is because matching is not an objective of accounting recognition or measurement, per se. Rather, it is an outcome of applying the other concepts. That is, the *Framework* is based on the notion that if assets and liabilities are appropriately recognised and measured, profit or loss will be too, which obviates the need for a separate concept of matching. Although the existing *Framework* (IASB, 1989 para. 95) discusses the concept of matching income and expenses, the discussion ends by stating ‘However, the application of the

matching concept under this *Framework* does not allow the recognition of items in the balance sheet which do not meet the definition of assets or liabilities.’ Thus, matching per se cannot be used to justify income or expense recognition that is inconsistent with the definitions of assets and liabilities.

Third, the term reliability as used in the current *Framework* is neither limited to verifiability, as some interpret it, nor does it mean precision. It means faithful representation of the real-world economic phenomenon it purports to represent. This common misunderstanding is why the preliminary views document (IASB, 2006a) uses the term ‘faithful representation’ rather than ‘reliability’ and explains that just because an amount can be calculated precisely, it is not necessarily a faithful representation of the real-world economic phenomenon it purports to represent. Faithful representation implies neither absolute precision in the estimate nor certainty about the outcome.

Fourth, the objective of financial reporting does not include providing accounting information for management to use in managing the business or for contracting parties to include in contracts. This is because these users can directly specify the information they want and need. IASB standards are designed for general purpose financial reports, whose objective stems from the information needs of external users who lack the ability to prescribe all the financial information they need from the entity. This is not to say that measures used for financial reporting are not useful for managing the business or contracting purposes. But, if they are, this is a by-product, not an objective, of external general purpose financial reports.

Fifth, the *Framework* focuses on defining financial position elements, i.e., assets and liabilities, not because financial position is more important than profit or loss. Rather, it is because profit or loss is important. Defining financial position elements is the only way standard setters have been able to determine how to measure revenues and expenses, which comprise profit or loss. To date, attempts to define revenues and expenses without reference to assets and liabilities have been unsuccessful. This approach also is consistent with the concept of economic income being the change in wealth during the period (Hicks, 1946).

Sixth, the IASB does not have an objective to measure all assets and liabilities at fair value. As explained in Section 3, there are reasons why fair value is a candidate measurement basis in many situations, and the IASB and FASB have a stated long-term objective to measure all financial assets and liabilities at fair value. However, there is no similar objective to measure other assets and liabilities at fair value.

⁶ See Storey and Storey (1998) for a history of some of these misunderstandings in the context of the development of the FASB’s conceptual framework.

⁷ The current IASB *Framework* includes prudence as a dimension of reliability. However, the *Framework* states that prudence ‘is the inclusion of a degree of caution in the exercise of judgment needed in making estimates required under conditions of uncertainty ... However, the exercise of prudence does not allow, for example, the creation of hidden reserves or excessive provisions, the deliberate understatement of assets or income, or the deliberate overstatement of liabilities or expenses, because the financial statements would not be neutral and, therefore, not have the quality of reliability.’ (IASB, 1989, para. 37).

⁸ See IASB (2006a, para. BC 2.19 to BC2.22). Also, if conservatism were a desirable qualitative characteristic, the *Framework* would need to specify how much conservatism is desirable and how to measure it.

3. Which measurement basis?

3.1. Fair value

Observation of IASB deliberations reveals that it considers fair value as a possible measurement basis in many situations. A primary reason for this is that the *Framework* criteria make fair value a natural measurement basis to consider. First, fair values are relevant because they reflect present economic conditions relating to economic resources and obligations, i.e., the conditions under which financial statement users will make their decisions.⁹ Also, research shows that fair values have predictive value (see, e.g., Barth et al., 1995; Aboody et al., 1999).¹⁰ Second, fair values can be faithful representations of assets and liabilities, as defined in the *Framework*, because they reflect risk and probability-weighted assessments of expected future cash inflows and outflows. Fair values are unbiased and, thus, neutral. Fair values are timely because they reflect changes in economic conditions when those conditions change (see, e.g., Barth et al., 1996; Barth et al., 1998; Aboody et al., 1999). Third, fair values are comparable because the fair value of any particular asset or liability depends only on the characteristics of the asset or liability, not on the characteristics of the entity that holds the asset or liability or when it was acquired. Fair values enhance consistency because they reflect the same type of information in every period.¹¹

Despite these advantages, fair value measurement is not a panacea. Some commonly expressed concerns include lack of a clear definition of fair value, lack of verifiability, the ability for management to affect fair value estimates, and the potential circularity of reflecting fair values in financial statements when the objective is to provide financial statement users with information to make economic decisions that include assessing the value of the entity.

Regarding the definition of fair value, the IASB defines fair value as 'the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's

length transaction' (IAS 39 para. 9; IASB, 2004). Although this definition states the measurement objective, it lacks sufficient specificity to ensure consistent application. Because of similar problems in US accounting standards, the FASB issued Statement of Financial Accounting Standards (SFAS) No. 157 (FASB, 2006), which provides a more precise definition of, and specifies how to estimate, fair value. The IASB has on its agenda a fair value measurement project, and issued SFAS 157 as a discussion document as the first step in the project's due process. Until the IASB completes its fair value measurement project, the concerns about lack of specificity are valid for entities applying international accounting standards; SFAS 157 has mitigated these concerns for entities applying US standards.

Regarding verifiability of fair value, verifiability is a component of faithful representation. The concern over verifiability of fair value often is expressed in relation to assets and liabilities that do not have observable market prices. For such assets and liabilities, fair value must be estimated, which raises the possibility that the estimates will not be verifiable. As explained in section 2.1, information is verifiable if different knowledgeable and independent observers would reach general consensus, although not necessarily complete agreement. IASB (2006a) explains that verification can be direct or indirect. Indirect verification involves determining whether the measurement method has been applied without material error or bias, and relies on verifying the inputs to the measurement method. Direct verification relies on verifying the measurement itself. Thus, fair values may not be verifiable in some situations if many inputs to the measurement method are not verifiable.

Regarding management affecting fair value estimates, the effect of management incentives on fair value estimates is also of concern primarily when observable market prices are unavailable. The fact that fair value estimates incorporate and, thus, reflect managers' detailed information that is not necessarily available to others is a desirable aspect of fair value. Reflecting such information in financial statements mitigates the need for market participants to develop noisy estimates based only on public information. Nonetheless, the concern about the effects of management incentives is valid. But, it is not unique to fair value. A large body of research shows that managers find ways to manage earnings regardless of the accounting regime.¹² Whether this is a greater potential problem for fair values than for other accounting estimates is an open empirical question (see, e.g., Landsman, 2006).

Finally, regarding potential circularity, it is unlikely that even if all recognised assets and liabilities were measured at fair value, recognised equity

⁹ See Barth et al., (2001), Landsman (2005), Landsman (2006) and Barth (2007), for summaries of empirical research relating to the value relevance of fair values. Finding that fair values are value relevant indicates they are relevant and sufficiently representationally faithful to be included in investors' equity valuation assessments.

¹⁰ The preliminary views document explains that predictive value refers to inputs into a predictive process. Relevant information need not predict itself (IASB, 2006a para. QC10-QC11). For example, the research cited above shows that fair values help predict future cash flows, which are of interest to investors in valuing the entity's equity. Current fair values or changes in them do not necessarily predict future fair values or changes in them, and need not do so to have predictive value to financial statement users.

¹¹ For more discussion, see IASB (2005) and Barth (2006).

¹² See, e.g., Healy and Wahlen (1999) for a review of this literature.

would equal the market value of equity. This is because only assets and liabilities that meet the *Framework* definitions are candidates for recognition. Market value of equity reflects investors' assessments of, among other things, growth options and managerial skill that do not meet the asset definitions. Also, in most cases, the market used to estimate fair value for individual assets and liabilities is not the market for the entity's equity. However, in some cases, such as major business combinations or for single reporting unit entities, it could be.

Another reason that the IASB considers fair value in most measurement situations is that its use holds promise for minimizing the undesirable effects of the mixed measurement approach to financial reporting that we have today.¹³ Presently, financial statement amounts are determined using a variety of measurement bases. These include, for example, historical cost (used for cash), amortised historical cost (used for loans receivable and long-term debt), impaired amortised historical cost (used for purchased property, plant, and equipment), accumulated amortised and impaired historical cost (used for self-constructed property, plant, and equipment), fair value (used for derivatives and asset revaluations), and entity-specific value (used for impaired inventories and impaired property, plant, and equipment).¹⁴ These differences in measurement bases do not result from differences specified in the *Framework*. Rather, they result from conventions and differences in practice that have evolved over time. Thus, when viewed in terms of the *Framework*, these differences generate financial statements that are internally inconsistent. Not only is use of multiple measurement bases conceptually unappealing, but also it creates difficulties for financial statement users. Measuring financial statement amounts in differ-

ent ways complicates the interpretation of accounting summary amounts such as profit or loss. Using multiple measurement bases makes it difficult for financial statement users to separate accounting-induced income or expense from economic income or expense (see, e.g., Barth, 2004). Thus, fair value applied comprehensively has appeal.

3.2. Alternatives to fair value

Although opponents of more comprehensive use of fair value have some legitimate concerns, standard setters are unaware of a plausible alternative. Some opponents advocate historical cost. However, we do not comprehensively use historical cost in financial statements today. Items initially recognised at cost typically are subsequently measured at amortised and impaired amounts; these are not historical cost. Thus, one would need to specify how these items should be measured subsequent to initial recognition. Also, it is unclear whether historical cost has the qualitative characteristics of accounting information specified in the *Framework*. For example, although historical cost is a real-world economic phenomenon and, thus, an historical cost measure can be a faithful representation, historical cost may not be a relevant economic phenomenon for users making economic decisions. However, cost is not always clearly identifiable, for example for self-constructed assets or assets acquired in a basket purchase, which raises verifiability concerns. Also, the present convention of recognising decreases in asset values, i.e., impairments, but not increases in asset values, is inconsistent with neutrality. Moreover, some assets and liabilities have no cost – notably derivatives. This raises the question of how such assets and liabilities would be reflected in historical cost financial statements without either leaving them unrecognised or creating a mixed measurement approach.

Value in use, or entity-specific value, is another possible measurement alternative.¹⁵ Value in use requires including future cash flows that the entity expects to receive, discounted at a rate that perhaps reflects the entity's cost of capital, even if these differ from those of other entities. Thus, entity-specific value differs from fair value in that entity-specific value includes cash inflows or outflows expected by the entity that would not be expected by other market participants, such as expected inflows related to superior management talent.¹⁶ Thus, entity-specific value can result in embedding the measure of an intangible asset, e.g., superior management talent, in the measure of another asset, e.g., property, plant, and equipment. As with all measurement bases, measuring assets and liabilities at entity-specific value also has implications for profit or loss measurement. Because

¹³ Until and unless fair value is used for all assets and liabilities, the mixed measurement approach will persist. Even then, issues related to cash flow hedges remain. However, the more consistently we measure assets and liabilities, the less the mixed measurement approach is a problem.

¹⁴ The staff on the measurement phase of the joint IASB/FASB conceptual framework project is attempting to identify the different measurement methods currently used in IASB and FASB standards. Thus far, the staff has identified at least 12. For many of the methods, there is no obvious reason for the differences from other methods. This observation makes clear the need to rationalise the methods we use.

¹⁵ The IASB defines entity-specific value as 'the present value of the cash flows an entity expects to arise from the continuing use of an asset and from its disposal at the end of its useful life or expects to incur when settling a liability' and defines value in use as 'the present value of estimated future cash flows expected to arise from the continuing use of an asset and from its disposal at the end of its life' (IASB *Glossary of Terms*, IASB 2006b). The distinction between these definitions is not obvious and, thus, the terms typically are used interchangeably.

¹⁶ See SFAS 157 (FASB, 2006) for further discussion.

entity-specific value measures, assets and liabilities are based on what the entity expects to accomplish with the assets, the value of the entity's special rights or skills are recognised when the assets are recognised, not when the entity realises the benefits associated with those special rights or skills. Thus, profit or loss resulting from using entity-specific value for asset and liability measurement would reflect how the entity performed during the period given the assets at its disposal relative to its own expected performance based on its plans and special rights or skills. In contrast, using fair value would result in profit or loss reflecting how the entity performed during the period given the assets at its disposal relative to other market participants' expected performance. If the entity makes better use of the assets, profit will be greater than the return expected based on the risk of its net assets; if it makes worse use of the assets, profit will be less than the expected return.¹⁷

It could be possible to decouple financial position measurement from profit or loss measurement. This would eliminate the need to consider the profit or loss effects associated with a particular asset and liability measurement basis. To date, standard setters have been unsuccessful in developing concepts about how this would be done. Thus, those advocating this approach need to provide a conceptual basis for doing so.

There could be other alternatives that standard setters should consider. They are open to ideas. However, before adopting one of those ideas, standard setters need to understand the conceptual basis for the idea, and how it could be applied comprehensively in financial reporting.

4. How can research contribute?

Measurement is key to financial reporting. Thus, it is important that standard setters base their decisions relating to measurement on the best possible information. Some believe that research cannot be relevant to standard-setting issues. It is well-known that empirical research cannot directly an-

swer standard-setting questions (see, e.g., Gonedes and Dopuch, 1974; Beaver, 1998). This primarily is because accounting standards and the results of their implementation are public goods. That is, one entity's use of the standards does not diminish the benefits that can be derived by another entity's use of the standards. Also, there are externalities. That is, there are benefits and costs associated with accounting standards and financial reporting that are not enjoyed or borne by only those entities that enjoy or bear direct benefits or costs. However, there is no market or other mechanism that aggregates all of these benefits and costs. Thus, standard setters must determine how to make any social welfare trade-offs necessary when establishing the requirements in a standard. Because empirical research typically relies on markets and other aggregation mechanisms, such research cannot be used to determine what the requirements of any particular standard should be.

Others believe that research can provide insights into standard-setting issues. It can do so, for example, by operationalising criteria standard setters establish for deciding among alternatives when developing standards, such as relevance and faithful representation. Because these criteria are specified in the conceptual frameworks of the FASB and IASB, researchers need not specify the objective functions of standard setters. Standard setters are potentially interested in research of all types because they actively seek input on all of the issues they consider; research can be particularly helpful because it is unbiased, rigorously crafted, and grounded in economic theory.¹⁸ Thus, research can aid standard setters in identifying issues, structuring their thinking about a particular issue, and providing evidence that informs the debate about the issue (see Barth, 2006 for a more complete discussion and for examples of research that does this; see also Landsman, 2006).

Relating specifically to accounting measurement, research can provide insights into whether and the extent to which various measurement bases, in various contexts, meet the qualitative characteristics of accounting information specified in the *Framework*. It also can help determine which real-world economic phenomena are relevant to financial statement users. There is a large body of financial accounting research, particularly empirical capital markets research, described as adopting a measurement perspective (Beaver, 1998) that does this; more is needed.¹⁹ Because faithful representation is a key concern for any measurement, and no representation is perfect, research providing insights into how faithful is faithful 'enough' would be helpful. Such research aids standard setters in making measurement decisions in the context of their own criteria.

Research also can explore comprehensive finan-

¹⁷ Using historical cost for all assets would reflect how the entity performed given the cost of its assets. Using a mixed measurement model, as we do presently, reflects a mixed view of entity performance, with unclear interpretation. The interpretation of profit or loss is also affected by which assets and liabilities are recognised. The amounts recognised for individual assets and liabilities do not necessarily reflect all sources of expected inflows or outflows of the entity's economic benefits. A notable example is internally generated intangible assets. Thus, profit or loss in a given period also includes cash flows associated with unrecognised assets and liabilities, as well as unrecognised but expected future transactions. See Barth (2006).

¹⁸ See Barth et al., (2001) and Holthausen and Watts (2001) for alternative perspectives on these issues.

¹⁹ See e.g., Landsman (1986), Barth (1991), Choi et al., (1997). See also Barth (2006) for further discussion and more examples.

cial reporting measurement alternatives to fair value. As noted above, many have concerns with using fair value as the measurement basis in a variety of situations but there is no clear alternative under consideration. Standard setters would like to understand why the alternative is better in terms of meeting the objective of financial reporting and the qualitative characteristics of accounting information. They also would like to understand how the alternative would apply to various types of assets and liabilities and what it implies for profit or loss measurement.

Fair value is a measurement basis even for assets and liabilities that do not have observable market prices. Thus, standard setters would find helpful research that relates valuation theory to the imperfect and incomplete world in which we live. Accountants must become more comfortable with valuation theories, techniques, and practicalities. Simply saying that valuation theory does not fit all aspects of the real world is not helpful. Research identifying how the differences between the assumptions underlying the theory and the real world can be addressed, would be helpful. Such research would highlight where problems arise, identify which failed assumptions are most important and which can safely be ignored, and provide insights into how standard setters should think about dealing with the problems.

Research also can suggest alternatives to the current *Framework*. Researchers could use economic and finance theory to aid standard setters in rethinking financial reporting and, thus, the criteria in the *Framework*. This would include suggesting changes to the objective of financial reporting, the qualitative characteristics of accounting information, and the elements definitions that comprise an alternative financial reporting regime. This could lead to considering alternative measurement bases. Researchers are perhaps the best persons to do this because it is a conceptual exercise that requires new thinking not hampered by past practices.

5. Conclusion

Many standard-setting decisions relate to accounting measurement. The IASB bases its measurement decisions on its conceptual framework. Unfortunately, the present framework contains virtually no guidance on measurement. The IASB and FASB are presently conducting a joint project to complete, converge, and improve their conceptual frameworks. One phase of that project is devoted to measurement. However, until that phase is complete, the IASB must continue to base its decisions on the definitions of assets and liabilities and its assessment of the qualitative characteristics of accounting information, in the context of the objective of financial reporting. The lack of guidance specific to measurement in the conceptual

framework means that measurement issues are likely to continue to be difficult to resolve. Because measurement is vital to financial reporting, the issues are also likely to be controversial.

Observation of IASB standard-setting deliberations reveals that use of fair value as a measurement basis is likely to increase. This is because as the board has debated particular measurement questions, it has concluded that in some cases fair value meets the conceptual framework criteria better than other measurement bases considered. It is not because the board has a stated objective of changing accounting measurement to fair value for all assets and liabilities. Fair value is not a panacea, and other measurement bases also have desirable characteristics. Also, standard setters' cost-benefit assessments can differ depending on the issue at hand. Thus, which basis the IASB will require in any particular situation is not a foregone conclusion.

Researchers can help the IASB resolve these issues at the conceptual and practical levels. Research is particularly valuable to standard setters because it is unbiased, rigorously crafted, and grounded in economic theory, as is the conceptual framework. Research can aid standard setters by identifying issues they need to address related to measurement, structuring their thinking related to those issues, and providing evidence that informs their debate about the issues. Relating specifically to fair value as a measurement basis, research can provide more evidence on the extent to which fair value meets the criteria specified in the *Framework*. It also can help relate valuation theory to accounting measurement in the incomplete and imperfect world in which we prepare financial reports.

The time has come to resolve measurement issues in financial reporting.

References

- Aboody, D., Barth, M.E. and Kasznik, R. (1999). 'Revaluations of fixed assets and future firm performance: Evidence from the UK'. *Journal of Accounting and Economics*, 26: 149–178.
- ASB. (1999). *Statement of Principles for Financial Reporting*. Accounting Standards Board: London, UK.
- Barth, M.E. (1991). 'Relative measurement errors among alternative pension asset and liability measures'. *The Accounting Review*, 66: 433–463.
- Barth, M.E. (2004). 'Fair values and financial statement volatility' in *The Market Discipline Across Countries and Industries*. Claudio Borio, William Curt Hunter, George G. Kaufman, and Kostas Tsatsaronis (eds.). Cambridge, MA: MIT Press.
- Barth, M.E. (2006). 'Including estimates of the future in today's financial statements'. *Accounting Horizons*, 20: 271–285.
- Barth, M.E. (2007). 'Research, standard setting, and global financial reporting'. Forthcoming. *Foundations and Trends in Accounting*.
- Barth, M.E., Beaver, W.H. and Landsman, W.R. (1996).

- 'Value-relevance of banks' fair value disclosures under SFAS 107'. *The Accounting Review*, 71: 513–537.
- Barth, M.E., Beaver, W.H. and Landsman, W.R. (2001). 'The relevance of the value relevance literature for financial accounting standard setting: another view'. *Journal of Accounting and Economics*, 31: 77–104.
- Barth, M.E., Clement, M.B., Foster, G. and Kasznik, R. (1998). 'Brand values and capital market valuation'. *Review of Accounting Studies*, 3: 41–68.
- Barth, M.E., Landsman, W.R. and Wahlen, J.M. (1995). 'Fair value accounting: effects on banks' earnings volatility, regulatory capital, and value of contractual cash flows'. *Journal of Banking and Finance*, 19: 577–605.
- Beaver, W.H. (1998). *Financial Reporting, An Accounting Revolution*. Prentice Hall, New Jersey, 3rd ed.
- Choi, B., Collins, D.W. and Johnson, W.B. (1997). 'Valuation implications of reliability differences: The case of non-pension post-retirement obligations'. *The Accounting Review*, 72: 351–383.
- FASB. (1978). *Statement of Financial Accounting Concepts No. 1: Objectives of Financial Reporting by Business Enterprises*. Financial Accounting Standards Board: Norwalk, CT.
- FASB. (1980). *Statement of Financial Accounting Concepts No. 2: Qualitative Characteristics of Accounting Information*. Financial Accounting Standards Board: Norwalk, CT.
- FASB. (1984). *Statement of Financial Accounting Concepts No. 5: Recognition and Measurement in Financial Statements of Business Enterprises*. Financial Accounting Standards Board: Norwalk, CT.
- FASB. (1985). *Elements of Financial Statements*. Financial Accounting Standards Board: Norwalk, CT.
- FASB. (2000). *Statement of Financial Accounting Concepts No. 7: Using Cash Flow Information and Present Value in Accounting Measurements*. Financial Accounting Standards Board: Norwalk, CT.
- FASB. (2006). *Statement of Financial Accounting Standards No. 157: Fair Value Measurements*. Financial Accounting Standards Board: Norwalk, CT.
- Gonedes, N., and Dopuch, N. (1974). 'Capital market equilibrium, information production, and selecting accounting techniques: Theoretical framework and review of empirical work'. *Journal of Accounting Research*, 12: 48–129.
- Healy, P.M. and Wahlen, J.M. (1999). 'A review of the earnings management literature and its implications for standard setting'. *Accounting Horizons*, 13: 365–383.
- Hicks, J.R. (1946). *Value and Capital*. 2nd ed. Clarendon Press: Oxford.
- Holthausen, R. and Watts, R. (2001). 'The relevance of the value relevance literature for financial accounting standard setting'. *Journal of Accounting and Economics*, 31: 3–75.
- IASB. (2004). *International Accounting Standard 39 Financial Instruments: Recognition and Measurement*. International Accounting Standards Board: London, UK.
- IASB. (2005). *Measurement Bases for Financial Accounting – Measurement on Initial Recognition*. International Accounting Standards Board: London, UK.
- IASB. (2006a). *Preliminary Views on an Improved Conceptual Framework for Financial Reporting: The Objective of Financial Reporting and the Qualitative Characteristics of Decision-Useful Financial Reporting Information*. International Accounting Standards Board: London, UK.
- IASB. (2006b). *International Financial Reporting Standards (IFRSs) 2006*. International Accounting Standards Board: London, UK.
- IASC. (1989). *Framework for the Preparation and Presentation of Financial Statements*. International Accounting Standards Committee: London, UK.
- Landsman, W.R. (1986). 'An empirical investigation of pension fund property rights'. *The Accounting Review*, 61: 662–691.
- Landsman, W.R. (2005). 'Fair value accounting for financial instruments: Some implications for bank regulation'. Working paper. University of North Carolina, Chapel Hill.
- Landsman, W.R. (2006). 'Fair value and value relevance: What do we know?' Working paper, University of North Carolina, Chapel Hill.
- Storey, R.K. and Storey, S. (1998). 'The framework of financial accounting concepts and standards'. FASB: Norwalk, CT.
- Watts, R.L. (2003). 'Conservatism in accounting Part I: Explanations and implications'. *Accounting Horizons*, 17: 207–221.