

# Common Views from the Commentators about Accounting Measurement

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## ABSTRACT

*Financial reporting aims at reporting relevant financial information, useful to users in evaluating present and past performance of an entity and making informed economic decisions in allocating economic resources. Despite significant development in regulating financial reporting in order to ensure that users are provided with sufficient level of financial information, many still find it difficult to interpret the financial information. The main area of concern is accounting measurement. Most accounting standards setters agree that accounting measurement is problematic. As the process of measurement is central to general purpose financial reporting, the attributes we choose to measure and the way we go about establishing the measurements, create images of financial performance, financial position, liquidity, capacity to adapt, cash generating potential and so on.*

## **Introduction**

Accounting is always regarded as the heart of business. It is a communication tool for managers to inform the stakeholders, particularly the owners or shareholders about how they have managed the business entities. As business is about using money to make more money, financial reporting is basically being used to report about how much money was made during a particular period. Generally, financial reporting aims at reporting relevant financial information, useful to users in evaluating present and past performance of an entity and making informed economic decisions in allocating economic resources.

Despite significant development in regulating financial reporting in order to ensure that users are provided with sufficient level of financial information, many still find it difficult to interpret the financial information. This problem is not unique to users alone. Accountants who prepare financial statements are also experiencing hard times to communicate financial information accurately to various users. The main area of concern is accounting measurement. Most accounting standards setters agree that accounting measurement is problematic. As the process of measurement is central to general purpose financial reporting, the attributes we choose to measure and the way we go about establishing the measurements, create images of financial performance, financial position, liquidity, capacity to adapt, cash generating potential and so on.

Having said that measurement is very important to the things that we measure, let us look at the earliest definition of measurement. Campbell (1938), a physicist and one of the first to deal in depth with the issue of measurement defined it as,

*the assignment of numerals to represent properties of material systems other than numbers, in virtue of laws governing these properties....*

The above definition implies that there is a set of objective properties, or attributes, which exist independently of their measured amounts. To make it meaningful, we need to discover and to illustrate these attributes. Measurement in social science such as accounting is much more arguable as the numbers we report are not representations of objective reality. They are merely descriptions of abstractions such as 'revenue', 'profit', 'performance' and 'financial position'. These abstractions do exist dependent of the way we measure. They are interdependent with the accounting concepts we employ to recognize assets, liabilities, revenues and so on (Morgan 1989). Thus, the conceptual framework that we use in defining and

recognising such elements of financial statements is strongly influencing the meaning of our measures.

## **Conceptual Framework for Financial Measurement**

In most jurisdictions around the world, measurement basis for a particular element is based on specific accounting standards in those jurisdictions and other authoritative pronouncements. Up to this date, there is no general conceptual guidance available to deal specifically with measurement of the elements of financial statements. For instance, the framework for the preparation and presentation of financial statements or, better known as IASB framework (IASB 2001), note that there are various measurement bases commonly employed by entities in preparing their financial statements. However, the framework does not include concepts or principles that guide the selection of the measurement bases for financial items.

Disagreement about which measurement bases to adopt had forced FASB, the accounting standard setter body in United States to include in *SFAC 5 Recognition and Measurement in Financial Statements of Business Enterprise* that the use of different measurement attributes rather than a single attribute for measurement shall apply. In its attempts to provide conceptual guidance on measurement, SFAC 5 can only describe the common measurement practice and the reasons to support or explain the measurement practices. This illustrates that the nature of financial measurements is very problematic which prohibits a prescription of a particular measurement bases. Nevertheless, the contents of SFAC 5 are mostly based on the objective of general purpose financial reporting and the qualitative characteristics of financial information as per stated in the US conceptual framework for financial information and reporting.

We notice that SFAC 5 is consistent with the modern view that purports measurement ought to be

linked to the objective of general purpose financial reporting and the qualitative characteristics of financial information and other factors such as the nature of assets and liabilities and their recognition criteria. However, we are not going to delve into the SFAC. We would rather refer to several related international accounting standards and IASB Framework as Malaysia adopts international accounting standards (IASs) effectively from 1 January 2005.

According to the IASB Framework, the objective of financial statements is ‘..to provide information about the financial position, performance and changes in financial position of an entity that is useful to a wide range of users in making economic decisions’ (paragraph 12). This objective specifically points out that the financial reports are for general users, not for particular group of users. Thus, the measurement bases must be able to generate financial information useful to the users at large. To serve public interest, financial information must possess certain qualities or characteristics.

The framework also states that relevance and reliability are the two most important characteristics of financial information. Therefore, in choosing the measurement bases, we need to consider these qualities. Normally, there is a trade off between relevance and reliability. Relevance is defined as that quality of information that exists when it influences the economic decisions of users by helping them to evaluate past, present or future events or confirming or correcting their past evaluation (paragraph 26). It is relevant only if it can assist users in making economic decisions.

Not only relevant, information must also be reliable. Being reliable is defined as free from material error, neutral and can be depended upon to represent faithfully what it represents or could reasonably be expected to represents (paragraph 31). This characteristic is so important that accounting standard prescribes it as part of the recognition criteria. Reliable measurement is the second recognition criteria. Both criteria will

determine whether an item is recognised or not in the financial statement. The requirement that the item be capable of reliable measurement to qualify for recognition raises the prospect of a conflict with the qualitative characteristic of relevance and the potential failure to satisfy the objective of general purpose financial reporting. We will see more of these problems when we look at the selected measurement bases.

## **Common Measurement Bases**

Given the importance of selecting the right measurement bases, some guidance is available in the framework. The IASB framework (IASB 2001: paragraphs 99-101) identifies the following measurement bases or attributes that are commonly employed in general purpose financial reports:

- i. Historical cost
- ii. Current cost
- iii. Realisable or settlement value
- iv. Present value

Fair value measurement is another basis that is being considered by IASB in developing and revising the international financial reporting standards (IFRS) such as *IAS 39 Financial Instruments: Recognition and Measurement*. The first measurement basis, which is the historical cost, is the oldest basis and it still dominates general purpose of financial reporting. It involves recording assets at their cost of acquisition and liabilities at the amount proceeds received in exchange for an obligation. This reflects the historical importance of manufacturing and merchandising activities in which the majority of transactions are purchases and sales of goods and services that are recognized at their historical exchange prices or historical proceeds (Leisenring et al. 1995).

However, the way we do business has changed.

Therefore, it is inaccurate to characterize present practice as based solely on the historical cost. Other measurement bases are commonly used now. Thus, a modified historical cost measurement system is perhaps more fairly described than the present practice. It is sometimes called as being a multi-attribute accounting model. However, we prefer historical cost because it is well understood by users and preparers of financial statements. Furthermore, it is probably the least costly measurement basis for the preparers. Under historical cost approach, we record a transaction based on the supporting documents such as sales receipt, invoice or bills. The amounts are stated in those documents. They are regarded as objective and thus reliable. However, there are problems with the reliability of this measurement that may occur at both acquisition and subsequent measurement, particularly during fluctuations in market prices. When prices change over time, the reliability of historical cost measures is doubtful.

Since prices change over time and the assets are acquired at different dates, comparability across entities at a particular date, and among assets within entity will suffer. Besides, measures of performance are distorted as expenses measured at historical costs are matched against current revenues. Conceptually, profits are recognised when the assets are sold or realised, not when the prices or other values of assets and liabilities change under historical cost basis. Thus, it has been argued that the historical cost basis gives room for earning management. The managers can choose when to sell assets in order to manage the reported results. Consequently, this does not reflect the appropriate economic performance of that entity. In addition, making resource allocation decisions based on outdated prices could lead to misleading allocation of resources.

## The Five Common Views towards Measurements

### Present Value Measurement: The Ideal

This view is from a group of commentators who strongly believed that the ideal measurement approach is the present value method. Present value basis is defined as

*..the current measures of an estimated future cash inflows or outflows, discounted at an interest rate for the number of periods between today and the date of the estimated cash flow.*

(SFAC 7: glossary)

They argue that present values are the ideal bases for measuring assets and liabilities. Many think that present values are particularly most relevant for valuing financial assets and liabilities. Their claims are supported by the fact that present value principles are now commonly incorporated into contractual arrangements and security prices.

The main advantage of this basis is that it provides relevant information because it takes into account the timing and uncertainty of cash flows. For example, if we take accounting for identifiable intangible assets such as brand names, mastheads and patents, as these assets are expected to generate economic benefits in future periods, discounting the estimated cash flows from such assets provides better indication of their values. Present value is also an accepted alternative value for historical cost as concluded by Leo who believed that all identifiable assets acquired externally or generated internally, should initially be recorded at cost of acquisition or at discounted recoverable amount (Leo et al. 1995: 66).

The proponents of present value support their view that discounted recoverable amount is the preferred method to initially measure assets by reference to the objective of general purpose financial report and the qualitative characteristics of financial information, which

emphasize on users' interest in predicting the future cash flows of an entity. When reliable estimates of expected future cash flows are not possible, surrogate measures are suggested including current market value, particularly for assets held for disposal (Leo et al. 1995, pp 75 - 78).

### **Net Market Value: The Ideal and Only Attribute**

Net market value is the measurement attribute frequently associated with the measurement framework developed by Chambers (1980) known as '*Continuously Contemporary Accounting*' or CoCoA. Under this framework, net market value represents the money equivalent of assets. It reflects the amount that is expected to be received from the disposal of an asset in an orderly market after deducting estimated cost to make the sale. Measurement rule for inventory applies this basis where an inventory must be measured at the lower of cost and net realizable value. The use of a single valuation rule based on money equivalent of assets, according to Chambers (1980), avoids the multiplicity of measurement rules that are specified for assets. It is also objective as it is based on the use of externally observed asset prices. Chambers argued that net market value takes into account the impact on financial statements of changes in specific asset prices and changes in the general purchasing power.

Furthermore, Chambers claims that net market value provides information regarding the adaptive capacity of an entity. It shows the ability of an entity to adapt to changes in its environment. For example, due to changes in an entity operational environment, the entity needs to dispose of assets and acquire new assets more suited to its new environment. The capacity to do so is reflected by the net market value of assets held. However, using net market value as a single measurement basis is not practical to value assets that have a value in use, but no market value such as most public sector assets. This will distort the balance sheet because assets with no net market values would not be recognised.



## **Fair Value Preferred with Current Market Value or Present Value as an Acceptable Surrogate**

Fair value is defined as 'the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's-length transaction' (IFRS 3, Appendix A). Normally, this amount can be determined by reference to a current market price in an active and liquid market. For example, *IAS 41 Agriculture* requires biological assets to be measured at fair value less estimated selling costs. These values can be easily available from the current market. However, if reliable current market prices are not available, a few surrogate measures, such as present value of expected net cash flows discounted at current market-determined pre-tax rate, could be used.

Using present value as surrogate to fair value, rather than a primary valuation basis in its own right is consistent with the recommendation in *Discussion Paper 23 Accounting for Self-Generating and Regenerating Assets*, which notes that estimates that must be made to implement net present value measurement are not likely to satisfy the qualitative characteristic of reliability.

Under IAS 141, the best indicator of fair value is the quoted price in an active market (paragraph 17). This price represents the amount actually paid by market participants in transactions. However, fair values for some assets such as young trees are very rarely available. There is no active market exist since the market for young trees is very thin. IAS 41 prescribes that we should first use the most recent transaction price of the same asset. Then, if there has been significant change in economic circumstances between the date of that transaction and the reporting date, we will refer to the market price of similar asset with adjustment to take account of any differences. Finally, if there is no market price of similar asset, we may then use sector benchmarks such as the value of an orchard per hectare or the value of cattle expressed per kilogram of meat (paragraph 18).

Nevertheless, we should take note that IAS 41 is

only applicable to biological assets and agriculture produce such as logs from forestry operation, paddy from paddy field and palm fruits from oil palm trees at the point of harvest. Another accounting standard, *IAS 2 Inventories*, covers any subsequent processing of the agriculture produce with the fair value less estimated point-of-sale costs becoming the cost for the purpose of IAS 2. Inventories will subsequently be valued at lower cost or net realisable value. Any difference between cost and net realisable value is an impairment loss, which will be charged against the profit for the current year.

### **Financial Instruments should be measured at their fair values**

This view was the subject of a draft standard accounting for financial instruments and similar items developed by a Joint Working Group in 2000. The Joint Working Group of Standards Setters (JWGSS) comprises accounting standard setters and professional organisations from Australia, New Zealand, Canada, US, France, Germany, Japan, the five Nordic countries and the International Accounting Standards Committee. Members of JWGSS argue that traditional accounting concepts for recognising and measuring financial instruments is no longer suitable in view of the increasing sophistication of financial markets in the use of complex derivatives and other financial instruments.

Although many standard setters around the world had developed rules requiring disclosure about financial instruments and a few had issued standards specifying recognition and measurement rules, no standard had been developed in major jurisdiction which specified comprehensive rules based on a fair value approach. The JWGSS Draft Standard was an attempt to use fair value in measuring financial instruments where its members may use the draft as the basis for developing related accounting standards.

The JWGSS Draft Standard proposed that most financial instruments should be measured at fair value and

all changes in the fair values should be recognised as revenue or expenses in the income statement in the period in which the change occurs. Relevance and reliability are used by the JWGSS to justify this approach. The JWGSS argues that

*fair value is the most relevant measurement attribute for financial instruments and that sufficiently reliable estimates of their fair value are generally available use in financial reporting.*

(JWGSS 2000: 50)

Fair value reflects the market's assessment of the impact on financial instruments of current economic conditions as well as changes in those conditions when they occur. This presumes that fair value has been determined in an active and liquid market that reflects all available information at the time of measurement.

Furthermore, fair value provides a better basis than cost-based measures for prediction of future cash flows. This is so because fair value reflects the market assessment of the expected cash flows expected to result from a financial instrument discounted using a rate that reflects the market's required rate of return for an instrument of equivalent risk. As fair value is a market-based notion, it provides an unbiased measure that facilitates comparison of financial instruments with essentially the same economic characteristics within enterprise and between enterprises. On the other hand, cost-based measures can impede comparability because they can make financial instruments with the same economic characteristics look different and financial instruments with different characteristics look the same.

In addition, fair value also reflects the effect of management decisions regarding holding, acquisition or disposition of financial assets and financial liabilities. Cost-based measures ignore the consequences of holding decisions and only reflect the effect of impact of fair value when a transaction is later realised. The measurement of

financial instruments at fair value would overcome the deficiencies of a mixed cost-fair value model and make the need unnecessary for complex hedge accounting rules.

Fair value measurement may still provide reliable information as advances in valuation techniques can reasonably reflect market-pricing methods. These estimation techniques can incorporate capital market pricing principles and information about current market conditions. The use of reasonable estimates is also an accepted part of the accounting process as acknowledged by IASB in the IASB framework that

*in many cases, cost or value must be estimated; the use of reasonable estimates is an essential part of the preparation of financial statements and does not undermine their reliability'* (paragraph 86).

Support for fair value is also found in paragraph 87 of *IAS 32 Financial Instrument: Disclosure and Presentation* that summarizes the major rationales for recognising financial instruments at fair value. Although this approach has been fairly justified, it has not survived the due process in standard setting. There are strong opponents, particularly from the Joint Working Group of Banking Associations (JWGBA). This group has issued two papers to counter argue JWGSS's arguments namely *Accounting for Financial Instruments for Banks* and *Financial Instruments-Issues relating to Banks: comments on the JWGSS papers*.

The main concern put forward by JWGBA is that fair values are not relevant for all financial assets and financial liabilities of banks. For example, a portfolio of loans is held with the objective of earning an interest margin over the life of the portfolio. The banks are not able to take advantage of short-term fluctuations in fair value as the interest rates are fixed over the loan term. They assert that

*historical cost measurement provides the most*

*appropriate accounting information required to manage inherent portfolio risks and for that reason, the most the most relevant basis to report information on which to assess management's performance.*

(JWGBA 1999a paragraph 2.2.6)

The JWGBA also concerns about the reliability of fair value measurements of non-traded assets and liabilities as markets for loans are not well developed outside of the United States. For instance, only 0.66 per cent of outstanding loans are traded in the secondary markets (JWGBA 199b, p.6.). Thus, JWGBA concluded that valuing the banking books or the loans at values would be highly subjective. The group gave the following reasons,

*this arises from the lack of tradability and trading of the underlying instruments. Establishing fair value will require significant assumption concerning liquidity, credit worthiness, collateral realizability, optionality and expected customer behaviour. Extensive subjective judgment seriously undermines the reliability of fair value accounting as a basis of measurement (paragraph 3.5.2).*

As a result of pressure and criticisms by JWGBA, the JWG draft Standard was not taken up by any standard setters. It is not fully adopted by the two accounting standards that specifically developed for financial instruments, IAS 32 and IAS 39. The adopted approach in IAS 32 and IAS 39 is best described as mixed measurement basis which is the preferred approach of the banking group.

**A Generalised Eclectic Measurement Model, such as deprival value, that provides a framework for selecting among measurement bases should be used**

Some assets and liabilities such as most of the public

sector assets are unique with no commercial use. It is very interesting to note that deprival value or value to owners is quite popular among other generalised measurement models in public sector accounting. Deprival value has been defined as the cost to an entity if it were deprived of an asset and was required to continue to provide goods and services or deliver programs using that asset. However, this approach has been developed initially not to tackle measurement problems in valuing public sector assets but originally for the appraisal of property for insurance purposes.

This approach is based on a notional removal of an asset for measurement purposes. Under this approach, assets will be valued at an amount that represents the entire loss expected to be incurred if the entity were deprived of the service potential or future economic benefits of these assets at reporting date. The rational intentions of management play an important role here. It is assumed that if an entity were notionally deprived of an asset, the management would rationally replace the asset where it is essential to the continued provision of goods and services. However, if the asset is not needed in providing goods and services, the management would not replace it and seek compensation for the loss of that non-core asset. Deprival value provides alternative methods to better value assets and liabilities.

## **Conclusion**

This paper has discussed some problems in accounting measurement. Several reasons for departures from the traditional-based model were brought up. However, it is important to keep in mind that the reasons are related to the objective of providing information that useful for economic decision-making and is reliable. If a reliable measurement basis leads to the production of information that is relevant to decision-making needs, standard setters will prescribe that the basis of measurement be employed.

Looking at recent experience, there are strong

grounds for supposing the need to specify measurement requirements for particular industries and particular financial statement items will continue. There are five most common attitudes towards measurement. Each has its own supporters as well as opponents. As a conclusion, we can say that measurement is problematic and a concept statement on measurement that guides this process is urgently needed. It is hoped to better address concerns about consistency among industries and items than is an ad-hoc or case-by-case approach.

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