CONCEPTUAL FRAMEWORK FOR FINANCIAL REPORTING

Chapter 5: Measurement in Financial Statements

Introduction

ME1. This chapter provides guidance for selecting measures to be used in financial statements. The selection of such measures should support the objective of financial reporting.

Measurement and the Objective of Financial Reporting

ME2. The objective of general purpose financial reporting is to provide financial information about the reporting entity that is useful to present and potential equity investors, lenders, and other creditors in making decisions in those capacities. (OB2) Financial information is decision useful if it aids users in assessing future cash flow prospects of the reporting entity (OB10) as well as assessing the stewardship of the entity's management (OB12).

ME3. A number of theories of financial reporting have assumed or concluded that using a single measure would best achieve the objective of financial reporting and thus provide significant benefits to financial statement users. However, there is no agreement on what that measure should be. Furthermore, traditional accounting practices, regulatory considerations, changing business practices, and evolving needs of financial statement users has led to the use of different measures, and that situation is unlikely to change in the foreseeable future. Therefore, this chapter assumes a mixed-measure financial reporting system.

Starting with the Statement of Financial Position

ME4. Selecting measures for financial statement items starts with the statement of financial position. That statement presents the resources of an entity and claims against the entity, which are the only existing phenomena to be measured.   The statements of comprehensive income and cash flows present changes in resources and claims. The amounts of changes that involve flows of economic value such as cash flows generally are observable, but the amounts of other changes can only be determined by first applying a measure to the entity's resources and claims.

ME5. The guidance in this chapter applies primarily to assets and liabilities. Equity instruments generally are measured when issued and not remeasured unless a change in their nature or terms requires it.

Initial Measurement and Remeasurement

ME6. A measure must be selected for all recognized resources of an entity and claims against that entity at the time those resources and claims are recognized in the financial statements. That initial measure often comes from an observable arm's-length transaction and is usually referred to as historical cost for assets and as historical cost or historical proceeds for liabilities. A more accurate term in either case would be original transaction price. Initial measurement is not usually an issue when an original transaction price is available for a single asset or liability.

ME7. However, initial measurement may become an issue in the following circumstances:

a.   A group of assets or liabilities (or both) is acquired in a single transaction (for example, a business combination)

b.   An asset or liability arises without an identifiable transaction (for example, a claim arising from a lawsuit)

c.   An asset or liability will be remeasured regularly using a measure that would or could be different from the original transaction price if it had been applied at the time of the original transaction (for example, at a current exit price, which could be different from a current entry price in some circumstances).

ME8. Because measurement at dates subsequent to initial recognition, that is remeasurement, is more controversial and potentially more problematic, this chapter focuses primarily on that type of measurement. However, the concepts discussed here also apply to initial measurement whenever it is an issue.

Measurement and the Qualitative Characteristics and Constraints

ME9. The qualitative characteristics and constraints of decision-useful information described in Chapter 2 are important links between the objective of financial reporting and accounting measure choices. Considering those characteristics and constraints when making accounting measure choices increases the likelihood that a chosen measure will satisfy that objective.

ME10. This chapter considers the role of the primary qualitative characteristics—relevance and faithful representation—together with three of the enhancing qualitative characteristics—comparability, verifiability, and understandability—and the cost constraint in selecting financial statement measures. The enhancing characteristic of timeliness and the materiality constraint are not discussed in this chapter. That characteristic and that constraint affect the selection of financial statement measures only at a very general level and are not likely to have a significant marginal effect on the choice of a particular measure.

The Qualitative Characteristics and Measurement Factors

ME11. The qualitative characteristics of relevance, faithful representation, verifiability, comparability, and understandability can be associated with four factors that can guide the

selection of financial statement measures in a mixed-measure financial reporting system. Those factors are:

a.   *Value realization method* of assets and liabilities

b.   *Level of confidence* in accounting measures

c.   Use of *consistent measures* for similar items and items used together

d.   *Separability of income components* of measure changes

Hereafter, the above factors and the cost constraint are referred to collectively as measurement factors.

Relevance and Value Realization Method

ME12. The relevance of a particular measure depends primarily on the extent to which it contributes to the assessment of future cash flow prospects as well as the evaluation of past performance. Relevance depends on how users are likely to use financial statement information in their analyses. The economic value flows to investors, lenders, and other creditors is determined by the value flows to the entity itself. Consequently, the relevance of a specific measure for a particular asset or liability depends on how the future value flows it represents will arise. That characteristic is referred to as the method of value realization.

Representational Faithfulness, Verifiability, and Confidence Level

ME13. Representational faithfulness is the degree to which a financial statement representation of an underlying economic phenomenon depicts the substance of that phenomenon. In other words, does it actually represent what it purports to represent? In a measurement context, that means how confident can a user be that an amount is what it purports to be. For example, if an estimate of a current market exit price is used as the measure of an asset, how close is that estimate likely to be to the price that would be paid or received if the asset were sold on the measurement date?

ME14. A relatively high level of confidence that an amount in a statement of financial position properly depicts the phenomenon it purports to represent is highly desirable for users of financial information. The level of confidence is enhanced if the estimate is more easily and precisely verifiable. However, representing a phenomenon perfectly with a measure that is verifiable would add nothing to financial information if the phenomenon is irrelevant. In some situations, high relevance and high confidence (representational faithfulness and verifiability) can be achieved with a single measure. In other situations, the Boards may have to choose between a measure with higher relevance and lower confidence and another measure with high confidence and lower relevance.

Comparability, Understandability, and Consistent Measures for Similar Items and Items Used Together

ME15. Comparability increases if similar economic phenomena are reported in a consistent manner from entity to entity and within an entity. Comparability is valuable in its own right and also enhances understandability.

ME16. Consistent measures for assets that in combination generate future flows of economic value (for example, machinery and equipment used to produce, sell, and deliver a product) also are highly desirable. In assessing prospects for future value flows, the assets will be viewed as a group, and consistent reporting of every item in the group can only increase comparability and understandability.

Relevance, Understandability, and Separability of Income Components

ME17. Changes in measures of assets and liabilities that are reported in comprehensive income can be made more relevant and understandable by disaggregating those changes into components with different effects on future cash flow prospects.

ME18. Measures of an entity's assets and liabilities change for at least four main reasons. Some changes arise from flows of economic value either to or from the entity. Others changes are due to changes in market conditions—the supply of and demand for assets or liabilities. Yet other changes derive from changes in the quality of an asset or liability itself (for example, physical deterioration or credit risk changes). Finally, some changes arise from the operation of the terms of a contractual asset or liability, such as accrual of interest or changes in the underlying of a derivative instrument.

ME19. Changes in measures for different reasons have different effects on prospects for future cash flows. For example, the market price of a building might increase because of shortages in the materials that would be needed to build another one like it even though the utility of the building has not changed. Alternatively, the market price of that same building might increase because rental property in the area is in high demand and rents have increased. Those two would have different effects on an assessment of prospects for future economic value flows. The first might increase cash flows only if the building were sold, but the second might increase cash flows if the building is held and leased. If the measure reported for a building changed for both reasons, separate information about the different components of the total change could be very relevant to an investor or creditor.

ME20. As another example, the market price of a debt instrument held as an asset could change because market interest rates have changed, because the probability that the instrument can repay the debt has changed, or because interest accrues. Again, if the measure of the asset changes for more than one reason, information about the different components of the total change could be very relevant to an investor or creditor.

ME21. Therefore, one consideration in choosing a measure for a particular asset or liability is how the resulting changes in that measure will be reported and whether those changes can be separated into components with different implications for future economic value flows. Most importantly, would the various components of comprehensive income be made less understandable by the addition of gross change information with components that have different effects on future value flows?

Available Measures

ME22. A number of measures are available to select from in the present mixed-measure financial reporting system. Those measures may be grouped as follows:

a. Current prices

b. Past prices

c. Present value calculations

d. Adjusted past prices

e. Undiscounted future cash flows.

ME23. The measures included in each of the above groups are shown in Table A below. A description of each measure is included in the chapter's glossary. For ease of reference in the remainder of this chapter, the above groups of measures are further aggregated into current and non-current measures.

Table 1: Available Measures in Mixed-Measure Reporting System

CURRENT MEASURES	NON-CURRENT MEASURES
Current Prices:	**Past Prices:**
Current entry price (actual or estimated)	Past entry price (actual or estimated)
Current exit price (estimated)	Past exit price (estimated)
Present Value Computations:	**Adjusted Past Prices:**
Value in use	Accumulated or accreted
Fair value based amounts	Allocated or amortized
Other prescribed present value computations	Combination
	Undiscounted Future Cash Flows

Using the Measurement Factors to Select Financial Statement Measures

ME24. Viewed as isolated criteria, no single measurement factor is a sufficient guide for selecting a financial statement measure. All of the factors should be considered when choosing a measure. Nevertheless, some factors may be given more weight in the selection decision. Furthermore, depending on the asset or liability for which a measure is to be selected, an individual factor may suggest a preference for a particular measure or group of measures over others.

Relative Importance of the Measurement Factors

ME25. The value realization method of an asset or liability and the cost of reporting a measure are probably the two most important measurement factors to consider. On the one hand, the value realization method captures the relevance (that is, the qualitative benefit) of a measure to financial statement users. On the other hand, the cost of reporting a measure, even if considered only qualitatively, represents the compliance burden to financial statement preparers and auditors of reporting that same measure. Only if the benefit of reporting a particular measure exceeds its cost can the objective of financial reporting be achieved.

ME26. The remaining measurement factors—confidence level, consistent measures, and separability of income components—are helpful in refining the choice of a particular measure after a consideration of the factors of value realization method and cost have reduced the alternatives to some subset of the available measures in Table 1. A higher degree of any of those three factors increases the benefit of reporting a measure to users, although it may increase the cost of using a measure as well. In any case, those factors should supplement the selection process rather than drive it.

Implications of Measurement Factors for Selecting Measures

ME27. Table 2 below lists the measurement factors along with implications of those factors for selecting financial statement measures. The implications listed are only general, rather than determinative, for two reasons. One is that the table does not comprehensively consider the interplay of the various factors, as would be required if those factors were used in an actual selection of a measure. The other reason is that any scheme using such disparate measures as those available in a mixed-measure reporting system will necessarily require some exceptions.

ME28. A discussion of each measurement factor and its implications follows the table.

Table 2: Implications of Measurement Factors

FACTOR	IMPLICATIONS
Value realization	For liabilities and direct realization assets, current measures generally are relevant to users
	For indirect realization assets, current measures are not as relevant to users
Cost	No clear relationship between relevance of a measure and cost of reporting it
	Past prices are the least costly non-current measures
	Observed current prices are the least costly current measures
Confidence level	No clear relationship between relevance of a measure and its confidence level
	Within both current measures and non-current measures, the confidence level of a measure and the cost of reporting that measure are generally inversely related
Consistent measures	Not an issue for any particular measure
	Suggests:
	Minimal number of measures for categories of assets or liabilities
	Consistent use of measures within categories
	Limited exceptions
Separability of income components	Should be considered when choosing a current measure
	Not an issue with non-current measures

Value Realization Method

ME29. *Value realization* refers to the conversion of the economic value of an asset or liability into cash, other assets, services, or release from obligations. The method of value realization for assets may be either direct or indirect, whereas the value realization method of liabilities is always direct.

ME30. *Direct value realization* means generation of value flows in one step. Directly realized assets generate value inflows individually by being exchanged for cash or other economically valuable items or by receipt of economically valuable items according to the terms of a contract. Some examples of assets that directly generate value inflows are financial instruments, derivative instruments, and assets such as precious metals that will be sold in their current form (that is, without further processing).

ME31. Liabilities generate value outflows in one step. The debtor must perform by delivering assets, issuing liability or equity instruments, or providing services. A debtor may have to acquire or construct an asset before it can deliver that asset under the terms of a contract, but the asset acquisition or construction is a step in the value realization of the asset, not a step in the value realization of the liability.

ME32. *Indirect value realization* means generation of value flows in more than one step. For example, using machinery and equipment to convert raw materials into finished goods and then selling those goods is a method of indirectly realizing the values of the machinery, equipment, raw materials and any related assets used for sales and delivery.

ME33. Some examples of assets that generate value flows indirectly are land, buildings, vehicles, furnishings, and equipment that are used in manufacturing goods or providing services and related sales delivery and administrative activities.

ME34. Many indirect realization assets do not generate value flows by themselves but must be used with other assets to produce goods or services that can generate flows.

ME35. Most (if not all) assets that can be used to generate value flows indirectly also can be sold or exchanged. Thus, the categories of direct realization and indirect realization are not mutually exclusive and using the value realization method factor requires judgment. At a reporting date, a judgment must be made as to whether an asset is primarily held as a direct realization asset or is being used primarily as in indirect realization asset.

Relevance and Direct Realization Items

ME36. For liabilities, and for assets that are primarily direct realization assets at a reporting date, the future cash flows that are expected to be generated are the principal determinants of a current measure. Looking at this relationship in reverse, a current measure of a direct realization item relates directly to the amount, timing, and uncertainty of the future cash flows that will result from that item. Therefore, current measures of direct realization items are generally relevant to financial statement users.

ME37. Although current measures are generally relevant for reporting direct realization items, that is not always the case. Some current measures are not suitable for direct realization items

because they do not assume a direct method of value realization. Such measures include value in use and the in-use form of fair value.

Relevance and Indirect Realization Assets

ME38. The value of indirect realization assets is usually jointly realized. That is, indirectly realized assets normally produce cash flows in conjunction with other indirect realization assets. Because cash flows or other forms of value realization of indirect realization assets come from the sale of a product or service, it is difficult, if not impossible, to attribute those flows to the individual assets that jointly produce the product or service.

ME39. Conversely, changes in measures of indirect realization assets (whether those measures are current or non-current) do not necessarily lead directly to changes in future cash flows from the use of those assets. The joint effect of other recognized assets used to produce goods or services, as well as the contribution of unrecognized intangible assets and other factors (such as technical capabilities, supply chains, distribution channels, and management expertise) may affect future cash flows as much or more than changes in measures of individual assets.

ME40. Although the relationship between individual indirect realization assets and future cash flows is difficult to establish, the results of using such assets jointly are revealed in both the statement of comprehensive income and the statement of cash flows. For that reason, many financial statement users focus more on those statements than on the statement of financial position in the case of indirect realization assets.

ME41. Given the indirect relationship between future cash flows and particular indirect realization assets, as well as a reduced reliance on the statement of financial position for interpreting that relationship, current measures are generally not as relevant for indirect realization assets as they are for direct realization items. That does not mean that non-current measures are, by default, more relevant. However, it does suggest that measurement factors other than value realization might be given greater weight when selecting a measure for an indirect realization asset.

ME42. Despite the generalization that current measures are less relevant for reporting indirect realization assets, that is not always the case. Current measures that are not relevant for direct realization items, including value in use and in-use fair value, can be relevant for indirect realization assets. That is because those measures assume that an asset's value is realized indirectly with other assets rather than directly by itself.

ME43. Furthermore, current measures that are generally relevant for reporting direct realization items may be equally as relevant for indirect realization assets in some circumstances, such as when:

a.   A group of indirect realization assets is reported as a single asset and that group asset resembles a direct realization asset (for example, a cash-generating unit)

b.   The sale or exchange of an indirect realization asset is an economically significant and viable alternative to the continued use of that asset (for example, an office building)

c.   The value in exchange of an indirect realization asset is directly related to the cash flows generated by the reporting entity (for example, transportation assets used to provide a service).

Cost of Using a Measure

ME44. The most relevant measure for reporting a particular asset or liability is not necessarily either the most costly or the least costly measure to report. That is, there is no generalization that relates the relevance of a measure and the cost of reporting that measure.

ME45. However, some generalizations can be made about the cost of using various measures within the larger categories of current measures and non-current measures. Those generalizations may be helpful once a tentative choice has been made between using a current measure and using a non-current measure based on the method of value realization.

Costs of Current Measures

ME46. Current prices are probably the least costly of current measures to report if those prices are observed in markets. Observed current prices include actual current entry prices used at initial recognition, observed entry prices of assets or liabilities outside a reporting entity used to estimate the entry prices of the entity's existing assets or liabilities, and observed exit prices of assets or liabilities outside a reporting entity used to estimate the exit prices of the entity's existing assets or liabilities.

ME47. Current prices that are estimated by using some kind of model, as well as present value computations, are more costly measures. The cost of using those measures increases as the number and complexity of inputs to the model or present value computation increase.

Costs of Non-current Measures

ME48. Past prices, whether actual or estimated, are the least costly non-current measures. That is because past prices are reported as measures only subsequent to initial recognition and are not really remeasurements. When a past price is used to report an asset or liability, no remeasurement or adjustment of that measure occurs. The amount originally reported is simply reported again at subsequent reporting dates. Thus, there is almost no cost to reporting a past price.

ME49. Adjusted past prices may be the next least costly non-current measures. In general, the adjustments made to past prices that result in the measures in this group are mechanical and repetitive. They are often in the nature of calculations that require no inputs from outside an entity's accounting records once the appropriate past price or prices have been identified and the initial forecasts required for amortization or allocation have been made. However, some adjusted past prices are more complex than others, and complexity usually increases cost. Therefore, some adjusted past prices are more costly than others.

ME50. Undiscounted future cash flows may be the most costly of the non-current measures. The cost of reporting such measures depends on the number of cash flows that must be forecast and the difficulty of obtaining a reasonable forecast for each of those cash flows. Contractual cash

flows and those that are near term are easier to forecast and therefore less costly than non-contractual cash flows and those that are longer term.

ME51. Other measures are likely to be more costly to report than unadjusted past prices, adjusted past prices, and observed current prices. The most costly measures are those that must be modeled, require many inputs, and are re-estimated at every reporting date. Such measures would include level 3 fair value estimates and many present value computations.

Confidence Level

ME52. No easily generalized relationship exists between the relevance of a measure and the level of confidence that a user can have in that measure. However, there is a relationship between the confidence level of a measure and its cost. That relationship appears to exist in both current measures and non-current measures. Generally speaking, confidence level and cost are inversely related. That is, measures with a high confidence tend to be low cost.

Confidence Level of Current Measures

ME53. The highest level of confidence among current measures is probably attained in observed prices, as described in paragraph 46. Prices are the only financial reporting measures that qualify as true measurements. Unlike other measures, they compare an observable attribute of an asset or liability outside a reporting entity to the same unobserved attribute of an identical or similar asset or liability within that entity. However, the confidence level of prices is not necessarily absolute or 100 percent. To the extent that the outside asset or liability used for price attribution differs from the asset or liability in the reporting entity, the outside price will measure the inside price with error.

ME54. Estimates of prices of an entity's assets and liabilities that are not based on observable prices of identical or similar assets and liabilities outside the entity result in measures that have a lower level of confidence. Such estimates include some level 2 fair value estimates as well as all level 3 fair value estimates.

ME55. Present value computations have the lowest confidence level among current measures. Those measures involve forecasts of future cash flows, time durations, rates of return, or of other inputs that cannot be observed or verified. Furthermore, as those measures do not attempt to estimate prices, there is nothing observable against which they can be calibrated.

Confidence Level of Non-current Measures

ME56. Among non-current measures, past prices derived from market observations have the highest confidence level, followed by past prices estimated using other than observed prices.

ME57. Adjusted past prices and undiscounted future cash flows have low confidence levels. Undiscounted future cash flows depend entirely on forecasts that cannot be verified until the future becomes the present. Adjusted past prices do not purport to represent any economic phenomena. However, simpler, shorter term measures in that group, such as depreciated book value, may nevertheless approximate an economic phenomenon, such as a current price.

11

ME58. It is often assumed that non-price measures, particularly adjusted past prices, have a high level of confidence—even the highest level—because they are easily auditable. However, that assumption confuses the ability to verify the accuracy of calculations with the ability to verify faithful representation. The calculational accuracy of present value computations such as value in use and fulfillment value can easily be verified, too, but that does not mean that the computations faithfully represent the value in use or fulfillment value of the associated asset or liability.

Consistent Measures for Similar Items and Items Used Together

ME59. Assets and liabilities have many characteristics. They also may be thought of as being associated with other assets and liabilities within an entity in different ways. As a result, there are many ways in which assets and liabilities could be classified as similar or used together. Thus, the factor of consistent measures does not necessarily point to any particular measure or group of measures.

ME60. However, when this factor is considered in light of the factor of value realization method, it is easier to give it some focus. The direct value realization method points to one subset of alternative measures, whereas the indirect value realization method indicates another subset. Thus, it makes sense to apply the consistent measures factor to the classification that indicates what measures might be most relevant to financial statement users rather than to some other classification of assets and liabilities.

ME61. With that interpretation in mind, the factor of consistent measures would suggest:

a.   Minimizing the number of measures used within the categories of direct value realization items and indirect value realization assets

b.   Consistently using the same measures for the same subgroups of items within each of the two value realization categories

c.   Limiting exceptions to the measures generally indicated by the two value realization methods.

Separability of Income Components

ME62. Separability of the income components of a change in a measure is not usually an issue with non-current measures. There are no changes when past prices are used. As for adjusted past prices and undiscounted future cash flows, those measures are not associated with valuation changes. Therefore, it makes little sense to think of changes in those measures in terms of valuation components that should be separately identified in income.

ME63. It is more likely that this measurement factor will helpful when considering the choice of a current measure. In that case, all other things being equal, a current measure whose change can

be separated into relevant components should be chosen over one whose change cannot be so separated.