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NO. 284-A | SEPTEMBER 2006

# Financial Accounting Series

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## Statement of Financial Accounting Standards No. 157

Fair Value Measurements



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of the Financial Accounting Foundation

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FINANCIAL ACCOUNTING SERIES (ISSN 0885-9051) is published monthly by the Financial Accounting Foundation. Periodicals—postage paid at Norwalk, CT and at additional mailing offices. The full subscription rate is \$195 per year. POSTMASTER: Send address changes to Financial Accounting Standards Board, 401 Merritt 7, PO Box 5116, Norwalk, CT 06856-5116.

## **Summary**

This Statement defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles (GAAP), and expands disclosures about fair value measurements. This Statement applies under other accounting pronouncements that require or permit fair value measurements, the Board having previously concluded in those accounting pronouncements that fair value is the relevant measurement attribute. Accordingly, this Statement does not require any new fair value measurements. However, for some entities, the application of this Statement will change current practice.

### **Reason for Issuing This Statement**

Prior to this Statement, there were different definitions of fair value and limited guidance for applying those definitions in GAAP. Moreover, that guidance was dispersed among the many accounting pronouncements that require fair value measurements. Differences in that guidance created inconsistencies that added to the complexity in applying GAAP. In developing this Statement, the Board considered the need for increased consistency and comparability in fair value measurements and for expanded disclosures about fair value measurements.

### **Differences between This Statement and Current Practice**

The changes to current practice resulting from the application of this Statement relate to the definition of fair value, the methods used to measure fair value, and the expanded disclosures about fair value measurements.

The definition of fair value retains the exchange price notion in earlier definitions of fair value. This Statement clarifies that the exchange price is the price in an orderly transaction between market participants to sell the asset or transfer the liability in the market in which the reporting entity would transact for the asset or liability, that is, the principal or most advantageous market for the asset or liability. The transaction to sell the asset or transfer the liability is a hypothetical transaction at the measurement date, considered from the perspective of a market participant that holds the asset or owes the liability. Therefore, the definition focuses on the price that would be received to sell the asset or paid to transfer the liability (an exit price), not the price that would be paid to acquire the asset or received to assume the liability (an entry price).

This Statement emphasizes that fair value is a market-based measurement, not an entity-specific measurement. Therefore, a fair value measurement should be determined based on the assumptions that market participants would use in pricing the asset or liability. As a basis for considering market participant assumptions in fair value measurements, this Statement establishes a fair value hierarchy that distinguishes

between (1) market participant assumptions developed based on market data obtained from sources independent of the reporting entity (observable inputs) and (2) the reporting entity's own assumptions about market participant assumptions developed based on the best information available in the circumstances (unobservable inputs). The notion of unobservable inputs is intended to allow for situations in which there is little, if any, market activity for the asset or liability at the measurement date. In those situations, the reporting entity need not undertake all possible efforts to obtain information about market participant assumptions. However, the reporting entity must not ignore information about market participant assumptions that is reasonably available without undue cost and effort.

This Statement clarifies that market participant assumptions include assumptions about risk, for example, the risk inherent in a particular valuation technique used to measure fair value (such as a pricing model) and/or the risk inherent in the inputs to the valuation technique. A fair value measurement should include an adjustment for risk if market participants would include one in pricing the related asset or liability, even if the adjustment is difficult to determine. Therefore, a measurement (for example, a "mark-to-model" measurement) that does not include an adjustment for risk would not represent a fair value measurement if market participants would include one in pricing the related asset or liability.

This Statement clarifies that market participant assumptions also include assumptions about the effect of a restriction on the sale or use of an asset. A fair value measurement for a restricted asset should consider the effect of the restriction if market participants would consider the effect of the restriction in pricing the asset. That guidance applies for stock with restrictions on sale that terminate within one year that is measured at fair value under FASB Statements No. 115, *Accounting for Certain Investments in Debt and Equity Securities*, and No. 124, *Accounting for Certain Investments Held by Not-for-Profit Organizations*.

This Statement clarifies that a fair value measurement for a liability reflects its nonperformance risk (the risk that the obligation will not be fulfilled). Because nonperformance risk includes the reporting entity's credit risk, the reporting entity should consider the effect of its credit risk (credit standing) on the fair value of the liability in all periods in which the liability is measured at fair value under other accounting pronouncements, including FASB Statement No. 133, *Accounting for Derivative Instruments and Hedging Activities*.

This Statement affirms the requirement of other FASB Statements that the fair value of a position in a financial instrument (including a block) that trades in an active market should be measured as the product of the quoted price for the individual instrument times the quantity held (within Level 1 of the fair value hierarchy). The quoted price should not be adjusted because of the size of the position relative to trading volume

(blockage factor). This Statement extends that requirement to broker-dealers and investment companies within the scope of the AICPA Audit and Accounting Guides for those industries.

This Statement expands disclosures about the use of fair value to measure assets and liabilities in interim and annual periods subsequent to initial recognition. The disclosures focus on the inputs used to measure fair value and for recurring fair value measurements using significant unobservable inputs (within Level 3 of the fair value hierarchy), the effect of the measurements on earnings (or changes in net assets) for the period. This Statement encourages entities to combine the fair value information disclosed under this Statement with the fair value information disclosed under other accounting pronouncements, including FASB Statement No. 107, *Disclosures about Fair Value of Financial Instruments*, where practicable.

The guidance in this Statement applies for derivatives and other financial instruments measured at fair value under Statement 133 at initial recognition and in all subsequent periods. Therefore, this Statement nullifies the guidance in footnote 3 of EITF Issue No. 02-3, "Issues Involved in Accounting for Derivative Contracts Held for Trading Purposes and Contracts Involved in Energy Trading and Risk Management Activities." This Statement also amends Statement 133 to remove the similar guidance to that in Issue 02-3, which was added by FASB Statement No. 155, *Accounting for Certain Hybrid Financial Instruments*.

### **How the Conclusions in This Statement Relate to the FASB's Conceptual Framework**

The framework for measuring fair value considers the concepts in FASB Concepts Statement No. 2, *Qualitative Characteristics of Accounting Information*. Concepts Statement 2 emphasizes that providing comparable information enables users of financial statements to identify similarities in and differences between two sets of economic events.

The definition of fair value considers the concepts relating to assets and liabilities in FASB Concepts Statement No. 6, *Elements of Financial Statements*, in the context of market participants. A fair value measurement reflects current market participant assumptions about the future inflows associated with an asset (future economic benefits) and the future outflows associated with a liability (future sacrifices of economic benefits).

This Statement incorporates aspects of the guidance in FASB Concepts Statement No. 7, *Using Cash Flow Information and Present Value in Accounting Measurements*, as clarified and/or reconsidered in this Statement. This Statement does not revise Concepts Statement 7. The Board will consider the need to revise Concepts Statement 7 in its conceptual framework project.

The expanded disclosures about the use of fair value to measure assets and liabilities should provide users of financial statements (present and potential investors, creditors, and others) with information that is useful in making investment, credit, and similar decisions—the first objective of financial reporting in FASB Concepts Statement No. 1, *Objectives of Financial Reporting by Business Enterprises*.

### **How the Changes in This Statement Improve Financial Reporting**

A single definition of fair value, together with a framework for measuring fair value, should result in increased consistency and comparability in fair value measurements.

The expanded disclosures about the use of fair value to measure assets and liabilities should provide users of financial statements with better information about the extent to which fair value is used to measure recognized assets and liabilities, the inputs used to develop the measurements, and the effect of certain of the measurements on earnings (or changes in net assets) for the period.

The amendments made by this Statement advance the Board's initiatives to simplify and codify the accounting literature, eliminating differences that have added to the complexity in GAAP.

### **Costs and Benefits of Applying This Statement**

The framework for measuring fair value builds on current practice and requirements. However, some entities will need to make systems and other changes to comply with the requirements of this Statement. Some entities also might incur incremental costs in applying the requirements of this Statement. However, the benefits from increased consistency and comparability in fair value measurements and expanded disclosures about those measurements should be ongoing.

### **The Effective Date of This Statement**

This Statement is effective for financial statements issued for fiscal years beginning after November 15, 2007, and interim periods within those fiscal years. Earlier application is encouraged, provided that the reporting entity has not yet issued financial statements for that fiscal year, including financial statements for an interim period within that fiscal year.

The provisions of this Statement should be applied prospectively as of the beginning of the fiscal year in which this Statement is initially applied, except as follows. The provisions of this Statement should be applied retrospectively to the following financial

instruments as of the beginning of the fiscal year in which this Statement is initially applied (a limited form of retrospective application):

- a. A position in a financial instrument that trades in an active market held by a broker-dealer or investment company within the scope of the AICPA Audit and Accounting Guides for those industries that was measured at fair value using a blockage factor prior to initial application of this Statement
- b. A financial instrument that was measured at fair value at initial recognition under Statement 133 using the transaction price in accordance with the guidance in footnote 3 of Issue 02-3 prior to initial application of this Statement
- c. A hybrid financial instrument that was measured at fair value at initial recognition under Statement 133 using the transaction price in accordance with the guidance in Statement 133 (added by Statement 155) prior to initial application of this Statement.

The transition adjustment, measured as the difference between the carrying amounts and the fair values of those financial instruments at the date this Statement is initially applied, should be recognized as a cumulative-effect adjustment to the opening balance of retained earnings (or other appropriate components of equity or net assets in the statement of financial position) for the fiscal year in which this Statement is initially applied.



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Fair Value Measurements

September 2006



Financial Accounting Standards Board  
of the Financial Accounting Foundation

401 MERRITT 7, PO BOX 5116, NORWALK, CONNECTICUT 06856-5116

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# Statement of Financial Accounting Standards No. 157

## Fair Value Measurements

September 2006

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# Statement of Financial Accounting Standards No. 157

## Fair Value Measurements

September 2006

### OBJECTIVE

1. This Statement defines fair value, establishes a framework for measuring fair value, and expands disclosures about fair value measurements. Where applicable, this Statement simplifies and codifies related guidance within generally accepted accounting principles (GAAP).

### STANDARDS OF FINANCIAL ACCOUNTING AND REPORTING

#### Scope

2. This Statement applies under other accounting pronouncements<sup>1</sup> that require or permit fair value measurements, except as follows:

- a. This Statement does not apply under accounting pronouncements that address share-based payment transactions: FASB Statement No. 123 (revised 2004), *Share-Based Payment*, and its related interpretive accounting pronouncements that address share-based payment transactions.
- b. This Statement does not eliminate the practicability exceptions to fair value measurements in accounting pronouncements within the scope of this Statement.<sup>2</sup>

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<sup>1</sup>This Statement uses the term *accounting pronouncements* consistent with its use in paragraph 2(b) of FASB Statement No. 154, *Accounting Changes and Error Corrections*.

<sup>2</sup>Accounting pronouncements that permit practicability exceptions to fair value measurements in specified circumstances include APB Opinion No. 29, *Accounting for Nonmonetary Transactions*, FASB Statements No. 87, *Employers' Accounting for Pensions*, No. 106, *Employers' Accounting for Postretirement Benefits Other Than Pensions*, No. 107, *Disclosures about Fair Value of Financial Instruments*, No. 116, *Accounting for Contributions Received and Contributions Made*, No. 140, *Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities*, No. 141, *Business Combinations*, No. 143, *Accounting for Asset Retirement Obligations*, No. 146, *Accounting for Costs Associated with Exit or Disposal Activities*, and No. 153, *Exchanges of Nonmonetary Assets*, and FASB Interpretations No. 45, *Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others*, and No. 47, *Accounting for Conditional Asset Retirement Obligations*. Also included among those pronouncements are AICPA Audit and Accounting Guide, *Not-for-Profit Organizations*, and EITF Issues No. 85-40, "Comprehensive Review of Sales of Marketable Securities with Put Arrangements," and No. 99-17, "Accounting for Advertising Barter Transactions."

3. This Statement does not apply under accounting pronouncements that require or permit measurements that are similar to fair value but that are not intended to measure fair value, including the following:

- a. Accounting pronouncements that permit measurements that are based on, or otherwise use, vendor-specific objective evidence of fair value<sup>3</sup>
- b. ARB No. 43, Chapter 4, “Inventory Pricing.”

4. Appendix D lists pronouncements of the Accounting Principles Board (APB) and the FASB existing at the date of this Statement that are within the scope of this Statement. Appendix E lists those APB and FASB pronouncements that are amended by this Statement.

## Measurement

### Definition of Fair Value

5. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

### *The Asset or Liability*

6. A fair value measurement is for a particular asset or liability.<sup>4</sup> Therefore, the measurement should consider attributes specific to the asset or liability, for example, the condition and/or location of the asset or liability and restrictions, if any, on the sale or use of the asset at the measurement date. The asset or liability might be a standalone asset or liability (for example, a financial instrument or an operating asset) or a group of assets and/or liabilities (for example, an asset group, a reporting unit, or a business). Whether the asset or liability is a standalone asset or liability or a group of assets and/or liabilities depends on its unit of account. The unit of account determines what is being measured by reference to the level at which the asset or liability is aggregated (or

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<sup>3</sup>Accounting pronouncements that permit measurements that are based on, or otherwise use, vendor-specific objective evidence of fair value include AICPA Statement of Position 97-2, *Software Revenue Recognition*, as modified by AICPA Statement of Position 98-9, *Modification of SOP 97-2, Software Revenue Recognition, With Respect to Certain Transactions*. Also included among those pronouncements are EITF Issues No. 00-3, “Application of AICPA Statement of Position 97-2 to Arrangements That Include the Right to Use Software Stored on Another Entity’s Hardware,” and No. 00-21, “Revenue Arrangements with Multiple Deliverables.”

<sup>4</sup>The definition of fair value focuses on assets and liabilities because they are a primary subject of accounting measurement. However, the definition of fair value also should be applied to instruments measured at fair value that are classified in stockholders’ equity.

disaggregated) for purposes of applying other accounting pronouncements. The unit of account for the asset or liability should be determined in accordance with the provisions of other accounting pronouncements, except as provided in paragraph 27.

### ***The Price***

7. A fair value measurement assumes that the asset or liability is exchanged in an orderly transaction between market participants to sell the asset or transfer the liability at the measurement date. An orderly transaction is a transaction that assumes exposure to the market for a period prior to the measurement date to allow for marketing activities that are usual and customary for transactions involving such assets or liabilities; it is not a forced transaction (for example, a forced liquidation or distress sale). The transaction to sell the asset or transfer the liability is a hypothetical transaction at the measurement date, considered from the perspective of a market participant that holds the asset or owes the liability. Therefore, the objective of a fair value measurement is to determine the price that would be received to sell the asset or paid to transfer the liability at the measurement date (an exit price).

### ***The Principal (or Most Advantageous) Market***

8. A fair value measurement assumes that the transaction to sell the asset or transfer the liability occurs in the principal market for the asset or liability or, in the absence of a principal market, the most advantageous market for the asset or liability. The principal market is the market in which the reporting entity would sell the asset or transfer the liability with the greatest volume and level of activity for the asset or liability. The most advantageous market is the market in which the reporting entity would sell the asset or transfer the liability with the price that maximizes the amount that would be received for the asset or minimizes the amount that would be paid to transfer the liability, considering transaction costs in the respective market(s). In either case, the principal (or most advantageous) market (and thus, market participants) should be considered from the perspective of the reporting entity, thereby allowing for differences between and among entities with different activities. If there is a principal market for the asset or liability, the fair value measurement shall represent the price in that market (whether that price is directly observable or otherwise determined using a valuation technique), even if the price in a different market is potentially more advantageous at the measurement date.

9. The price in the principal (or most advantageous) market used to measure the fair value of the asset or liability shall not be adjusted for transaction costs.<sup>5</sup> Transaction costs represent the incremental direct costs to sell the asset or transfer the liability in the principal (or most advantageous) market for the asset or liability.<sup>6</sup> Transaction costs are not an attribute of the asset or liability; rather, they are specific to the transaction and will differ depending on how the reporting entity transacts. However, transaction costs do not include the costs that would be incurred to transport the asset or liability to (or from) its principal (or most advantageous) market. If location is an attribute of the asset or liability (as might be the case for a commodity), the price in the principal (or most advantageous) market used to measure the fair value of the asset or liability shall be adjusted for the costs, if any, that would be incurred to transport the asset or liability to (or from) its principal (or most advantageous) market.

### ***Market Participants***

10. Market participants are buyers and sellers in the principal (or most advantageous) market for the asset or liability that are:

- a. Independent of the reporting entity; that is, they are not related parties<sup>7</sup>
- b. Knowledgeable, having a reasonable understanding about the asset or liability and the transaction based on all available information, including information that might be obtained through due diligence efforts that are usual and customary
- c. Able to transact for the asset or liability
- d. Willing to transact for the asset or liability; that is, they are motivated but not forced or otherwise compelled to do so.

11. The fair value of the asset or liability shall be determined based on the assumptions that market participants would use in pricing the asset or liability. In developing those assumptions, the reporting entity need not identify specific market participants. Rather, the reporting entity should identify characteristics that distinguish market participants generally, considering factors specific to (a) the asset or liability, (b) the principal (or most advantageous) market for the asset or liability, and (c) market participants with whom the reporting entity would transact in that market.

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<sup>5</sup>Transaction costs should be accounted for in accordance with the provisions of other accounting pronouncements.

<sup>6</sup>Incremental direct costs to sell the asset or transfer the liability refer to those costs that result directly from and are essential to that transaction and that would not have been incurred by the reporting entity had the decision to sell the asset (or transfer the liability) not been made (similar to cost to sell, as defined in paragraph 35 of FASB Statement No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*).

<sup>7</sup>This Statement uses the term *related parties* consistent with its use in FASB Statement No. 57, *Related Party Disclosures*.

### *Application to Assets*

12. A fair value measurement assumes the highest and best use of the asset by market participants, considering the use of the asset that is physically possible, legally permissible, and financially feasible at the measurement date. In broad terms, highest and best use refers to the use of an asset by market participants that would maximize the value of the asset or the group of assets within which the asset would be used. Highest and best use is determined based on the use of the asset by market participants, even if the intended use of the asset by the reporting entity is different.

13. The highest and best use of the asset establishes the valuation premise used to measure the fair value of the asset. Specifically:

- a. *In-use*. The highest and best use of the asset is in-use if the asset would provide maximum value to market participants principally through its use in combination with other assets as a group (as installed or otherwise configured for use). For example, that might be the case for certain nonfinancial assets. If the highest and best use of the asset is in-use, the fair value of the asset shall be measured using an in-use valuation premise. When using an in-use valuation premise, the fair value of the asset is determined based on the price that would be received in a current transaction to sell the asset assuming that the asset would be used with other assets as a group and that those assets would be available to market participants. Generally, assumptions about the highest and best use of the asset should be consistent for all of the assets of the group within which it would be used.
- b. *In-exchange*. The highest and best use of the asset is in-exchange if the asset would provide maximum value to market participants principally on a standalone basis. For example, that might be the case for a financial asset. If the highest and best use of the asset is in-exchange, the fair value of the asset shall be measured using an in-exchange valuation premise. When using an in-exchange valuation premise, the fair value of the asset is determined based on the price that would be received in a current transaction to sell the asset standalone.

14. Because the highest and best use of the asset is determined based on its use by market participants, the fair value measurement considers the assumptions that market participants would use in pricing the asset, whether using an in-use or an in-exchange valuation premise.<sup>8</sup>

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<sup>8</sup>The fair value of an asset in-use is determined based on the use of the asset together with other assets as a group (consistent with its highest and best use from the perspective of market participants), even if the asset that is the subject of the measurement is aggregated (or disaggregated) at a different level for purposes of applying other accounting pronouncements.

### *Application to Liabilities*

15. A fair value measurement assumes that the liability is transferred to a market participant at the measurement date (the liability to the counterparty continues; it is not settled) and that the nonperformance risk relating to that liability is the same before and after its transfer. Nonperformance risk refers to the risk that the obligation will not be fulfilled and affects the value at which the liability is transferred. Therefore, the fair value of the liability shall reflect the nonperformance risk relating to that liability. Nonperformance risk includes but may not be limited to the reporting entity's own credit risk. The reporting entity shall consider the effect of its credit risk (credit standing) on the fair value of the liability in all periods in which the liability is measured at fair value. That effect may differ depending on the liability, for example, whether the liability is an obligation to deliver cash (a financial liability) or an obligation to deliver goods or services (a nonfinancial liability), and the terms of credit enhancements related to the liability, if any.

### **Fair Value at Initial Recognition**

16. When an asset is acquired or a liability is assumed in an exchange transaction for that asset or liability, the transaction price represents the price paid to acquire the asset or received to assume the liability (an entry price). In contrast, the fair value of the asset or liability represents the price that would be received to sell the asset or paid to transfer the liability (an exit price). Conceptually, entry prices and exit prices are different. Entities do not necessarily sell assets at the prices paid to acquire them. Similarly, entities do not necessarily transfer liabilities at the prices received to assume them.

17. In many cases, the transaction price will equal the exit price and, therefore, represent the fair value of the asset or liability at initial recognition. In determining whether a transaction price represents the fair value of the asset or liability at initial recognition, the reporting entity shall consider factors specific to the transaction and the asset or liability. For example, a transaction price might not represent the fair value of an asset or liability at initial recognition if:

- a. The transaction is between related parties.
- b. The transaction occurs under duress or the seller is forced to accept the price in the transaction. For example, that might be the case if the seller is experiencing financial difficulty.
- c. The unit of account represented by the transaction price is different from the unit of account for the asset or liability measured at fair value. For example, that might be the case if the asset or liability measured at fair value is only one

of the elements in the transaction, the transaction includes unstated rights and privileges that should be separately measured, or the transaction price includes transaction costs.

- d. The market in which the transaction occurs is different from the market in which the reporting entity would sell the asset or transfer the liability, that is, the principal or most advantageous market. For example, those markets might be different if the reporting entity is a securities dealer that transacts in different markets, depending on whether the counterparty is a retail customer (retail market) or another securities dealer (inter-dealer market).

### **Valuation Techniques**

18. Valuation techniques consistent with the market approach, income approach, and/or cost approach shall be used to measure fair value. Key aspects of those approaches are summarized below:

- a. *Market approach.* The market approach uses prices and other relevant information generated by market transactions involving identical or comparable assets or liabilities (including a business). For example, valuation techniques consistent with the market approach often use market multiples derived from a set of comparables. Multiples might lie in ranges with a different multiple for each comparable. The selection of where within the range the appropriate multiple falls requires judgment, considering factors specific to the measurement (qualitative and quantitative). Valuation techniques consistent with the market approach include matrix pricing. Matrix pricing is a mathematical technique used principally to value debt securities without relying exclusively on quoted prices for the specific securities, but rather by relying on the securities' relationship to other benchmark quoted securities.
- b. *Income approach.* The income approach uses valuation techniques to convert future amounts (for example, cash flows or earnings) to a single present amount (discounted). The measurement is based on the value indicated by current market expectations about those future amounts. Those valuation techniques include present value techniques; option-pricing models, such as the Black-Scholes-Merton formula (a closed-form model) and a binomial model (a lattice model),

which incorporate present value techniques;<sup>9</sup> and the multiperiod excess earnings method, which is used to measure the fair value of certain intangible assets.<sup>10</sup>

- c. *Cost approach.* The cost approach is based on the amount that currently would be required to replace the service capacity of an asset (often referred to as current replacement cost). From the perspective of a market participant (seller), the price that would be received for the asset is determined based on the cost to a market participant (buyer) to acquire or construct a substitute asset of comparable utility, adjusted for obsolescence. Obsolescence encompasses physical deterioration, functional (technological) obsolescence, and economic (external) obsolescence and is broader than depreciation for financial reporting purposes (an allocation of historical cost) or tax purposes (based on specified service lives).

19. Valuation techniques that are appropriate in the circumstances and for which sufficient data are available shall be used to measure fair value. In some cases, a single valuation technique will be appropriate (for example, when valuing an asset or liability using quoted prices in an active market for identical assets or liabilities). In other cases, multiple valuation techniques will be appropriate (for example, as might be the case when valuing a reporting unit). If multiple valuation techniques are used to measure fair value, the results (respective indications of fair value) shall be evaluated and weighted, as appropriate, considering the reasonableness of the range indicated by those results. A fair value measurement is the point within that range that is most representative of fair value in the circumstances.

20. Valuation techniques used to measure fair value shall be consistently applied. However, a change in a valuation technique or its application (for example, a change in its weighting when multiple valuation techniques are used) is appropriate if the change results in a measurement that is equally or more representative of fair value in the circumstances. That might be the case if, for example, new markets develop, new information becomes available, information previously used is no longer available, or valuation techniques improve. Revisions resulting from a change in the valuation technique or its application shall be accounted for as a change in accounting estimate (FASB Statement No. 154, *Accounting Changes and Error Corrections*,

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<sup>9</sup>The guidance in this Statement does not apply for the fair-value-based measurements using option-pricing models under Statement 123(R).

<sup>10</sup>The use of the multiperiod excess earnings method to measure the fair value of in-process research and development is discussed in AICPA Practice Aid, *Assets Acquired in a Business Combination to Be Used in Research and Development Activities: A Focus on Software, Electronic Devices, and Pharmaceutical Industries*.

paragraph 19). The disclosure provisions of Statement 154 for a change in accounting estimate are not required for revisions resulting from a change in a valuation technique or its application.

### **Inputs to Valuation Techniques**

21. In this Statement, *inputs* refer broadly to the assumptions that market participants would use in pricing the asset or liability, including assumptions about risk, for example, the risk inherent in a particular valuation technique used to measure fair value (such as a pricing model) and/or the risk inherent in the inputs to the valuation technique. Inputs may be observable or unobservable:

- a. *Observable inputs* are inputs that reflect the assumptions market participants would use in pricing the asset or liability developed based on market data obtained from sources independent of the reporting entity.
- b. *Unobservable inputs* are inputs that reflect the reporting entity's own assumptions about the assumptions market participants would use in pricing the asset or liability developed based on the best information available in the circumstances.

Valuation techniques used to measure fair value shall maximize the use of observable inputs and minimize the use of unobservable inputs.

### **Fair Value Hierarchy**

22. To increase consistency and comparability in fair value measurements and related disclosures, the fair value hierarchy prioritizes the inputs to valuation techniques used to measure fair value into three broad levels. The fair value hierarchy gives the highest priority to quoted prices (unadjusted) in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). In some cases, the inputs used to measure fair value might fall in different levels of the fair value hierarchy. The level in the fair value hierarchy within which the fair value measurement in its entirety falls shall be determined based on the lowest level input that is significant to the fair value measurement in its entirety. Assessing the significance of a particular input to the fair value measurement in its entirety requires judgment, considering factors specific to the asset or liability.

23. The availability of inputs relevant to the asset or liability and the relative reliability of the inputs might affect the selection of appropriate valuation techniques. However, the fair value hierarchy prioritizes the inputs to valuation techniques, not the valuation techniques. For example, a fair value measurement using a present value technique

might fall within Level 2 or Level 3, depending on the inputs that are significant to the measurement in its entirety and the level in the fair value hierarchy within which those inputs fall.

### ***Level 1 Inputs***

24. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date. An active market for the asset or liability is a market in which transactions for the asset or liability occur with sufficient frequency and volume to provide pricing information on an ongoing basis. A quoted price in an active market provides the most reliable evidence of fair value and shall be used to measure fair value whenever available, except as discussed in paragraphs 25 and 26.

25. If the reporting entity holds a large number of similar assets or liabilities (for example, debt securities) that are required to be measured at fair value, a quoted price in an active market might be available but not readily accessible for each of those assets or liabilities individually. In that case, fair value may be measured using an alternative pricing method that does not rely exclusively on quoted prices (for example, matrix pricing) as a practical expedient. However, the use of an alternative pricing method renders the fair value measurement a lower level measurement.

26. In some situations, a quoted price in an active market might not represent fair value at the measurement date. That might be the case if, for example, significant events (principal-to-principal transactions, brokered trades, or announcements) occur after the close of a market but before the measurement date. The reporting entity should establish and consistently apply a policy for identifying those events that might affect fair value measurements. However, if the quoted price is adjusted for new information, the adjustment renders the fair value measurement a lower level measurement.

27. If the reporting entity holds a position in a single financial instrument (including a block) and the instrument is traded in an active market, the fair value of the position shall be measured within Level 1 as the product of the quoted price for the individual instrument times the quantity held. The quoted price shall not be adjusted because of the size of the position relative to trading volume (blockage factor). The use of a blockage factor is prohibited, even if a market's normal daily trading volume is not

sufficient to absorb the quantity held and placing orders to sell the position in a single transaction might affect the quoted price.<sup>11</sup>

### ***Level 2 Inputs***

28. Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. If the asset or liability has a specified (contractual) term, a Level 2 input must be observable for substantially the full term of the asset or liability. Level 2 inputs include the following:

- a. Quoted prices for similar assets or liabilities in active markets
- b. Quoted prices for identical or similar assets or liabilities in markets that are not active, that is, markets in which there are few transactions for the asset or liability, the prices are not current, or price quotations vary substantially either over time or among market makers (for example, some brokered markets), or in which little information is released publicly (for example, a principal-to-principal market)
- c. Inputs other than quoted prices that are observable for the asset or liability (for example, interest rates and yield curves observable at commonly quoted intervals, volatilities, prepayment speeds, loss severities, credit risks, and default rates)
- d. Inputs that are derived principally from or corroborated by observable market data by correlation or other means (market-corroborated inputs).

29. Adjustments to Level 2 inputs will vary depending on factors specific to the asset or liability. Those factors include the condition and/or location of the asset or liability, the extent to which the inputs relate to items that are comparable to the asset or liability, and the volume and level of activity in the markets within which the inputs are observed. An adjustment that is significant to the fair value measurement in its entirety might render the measurement a Level 3 measurement, depending on the level in the fair value hierarchy within which the inputs used to determine the adjustment fall.

### ***Level 3 Inputs***

30. Level 3 inputs are unobservable inputs for the asset or liability. Unobservable inputs shall be used to measure fair value to the extent that observable inputs are not available, thereby allowing for situations in which there is little, if any, market activity

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<sup>11</sup>The guidance in this Statement applies for positions in financial instruments (including blocks) held by all entities, including broker-dealers and investment companies within the scope of the AICPA Audit and Accounting Guides for those industries.

for the asset or liability at the measurement date. However, the fair value measurement objective remains the same, that is, an exit price from the perspective of a market participant that holds the asset or owes the liability. Therefore, unobservable inputs shall reflect the reporting entity's own assumptions about the assumptions that market participants would use in pricing the asset or liability (including assumptions about risk). Unobservable inputs shall be developed based on the best information available in the circumstances, which might include the reporting entity's own data. In developing unobservable inputs, the reporting entity need not undertake all possible efforts to obtain information about market participant assumptions. However, the reporting entity shall not ignore information about market participant assumptions that is reasonably available without undue cost and effort. Therefore, the reporting entity's own data used to develop unobservable inputs shall be adjusted if information is reasonably available without undue cost and effort that indicates that market participants would use different assumptions.

#### ***Inputs Based on Bid and Ask Prices***

31. If an input used to measure fair value is based on bid and ask prices (for example, in a dealer market), the price within the bid-ask spread that is most representative of fair value in the circumstances shall be used to measure fair value, regardless of where in the fair value hierarchy the input falls (Level 1, 2, or 3). This Statement does not preclude the use of mid-market pricing or other pricing conventions as a practical expedient for fair value measurements within a bid-ask spread.

#### **Disclosures**

32. For assets and liabilities that are measured at fair value on a recurring basis in periods subsequent to initial recognition (for example, trading securities), the reporting entity shall disclose information that enables users of its financial statements to assess the inputs used to develop those measurements and for recurring fair value measurements using significant unobservable inputs (Level 3), the effect of the measurements on earnings (or changes in net assets) for the period. To meet that objective, the reporting entity shall disclose the following information for each interim and annual period (except as otherwise specified) separately for each major category of assets and liabilities:

- a. The fair value measurements at the reporting date
- b. The level within the fair value hierarchy in which the fair value measurements in their entirety fall, segregating fair value measurements using quoted prices in active markets for identical assets or liabilities (Level 1), significant other observable inputs (Level 2), and significant unobservable inputs (Level 3)

- c. For fair value measurements using significant unobservable inputs (Level 3), a reconciliation of the beginning and ending balances, separately presenting changes during the period attributable to the following:<sup>12</sup>
  - (1) Total gains or losses for the period (realized and unrealized), segregating those gains or losses included in earnings (or changes in net assets), and a description of where those gains or losses included in earnings (or changes in net assets) are reported in the statement of income (or activities)
  - (2) Purchases, sales, issuances, and settlements (net)
  - (3) Transfers in and/or out of Level 3 (for example, transfers due to changes in the observability of significant inputs)
- d. The amount of the total gains or losses for the period in subparagraph (c)(1) above included in earnings (or changes in net assets) that are attributable to the change in unrealized gains or losses relating to those assets and liabilities still held at the reporting date and a description of where those unrealized gains or losses are reported in the statement of income (or activities)
- e. In annual periods only, the valuation technique(s) used to measure fair value and a discussion of changes in valuation techniques, if any, during the period.

33. For assets and liabilities that are measured at fair value on a nonrecurring basis in periods subsequent to initial recognition (for example, impaired assets), the reporting entity shall disclose information that enables users of its financial statements to assess the inputs used to develop those measurements. To meet that objective, the reporting entity shall disclose the following information for each interim and annual period (except as otherwise specified) separately for each major category of assets and liabilities:

- a. The fair value measurements recorded during the period and the reasons for the measurements
- b. The level within the fair value hierarchy in which the fair value measurements in their entirety fall, segregating fair value measurements using quoted prices in active markets for identical assets or liabilities (Level 1), significant other observable inputs (Level 2), and significant unobservable inputs (Level 3)
- c. For fair value measurements using significant unobservable inputs (Level 3), a description of the inputs and the information used to develop the inputs
- d. In annual periods only, the valuation technique(s) used to measure fair value and a discussion of changes, if any, in the valuation technique(s) used to measure similar assets and/or liabilities in prior periods.

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<sup>12</sup>For derivative assets and liabilities, the reconciliation disclosure required by paragraph 32(c) may be presented net.

34. The quantitative disclosures required by this Statement shall be presented using a tabular format. (See Appendix A.)

35. The reporting entity is encouraged, but not required, to combine the fair value information disclosed under this Statement with the fair value information disclosed under other accounting pronouncements (for example, FASB Statement No. 107, *Disclosures about Fair Value of Financial Instruments*) in the periods in which those disclosures are required, if practicable. The reporting entity also is encouraged, but not required, to disclose information about other similar measurements (for example, inventories measured at market value under ARB 43, Chapter 4), if practicable.

### **Effective Date and Transition**

36. This Statement shall be effective for financial statements issued for fiscal years beginning after November 15, 2007, and interim periods within those fiscal years. Earlier application is encouraged, provided that the reporting entity has not yet issued financial statements for that fiscal year, including any financial statements for an interim period within that fiscal year.

37. This Statement shall be applied prospectively as of the beginning of the fiscal year in which this Statement is initially applied, except as follows. This Statement shall be applied retrospectively to the following financial instruments as of the beginning of the fiscal year in which this Statement is initially applied (a limited form of retrospective application):

- a. A position in a financial instrument that trades in an active market held by a broker-dealer or investment company within the scope of the AICPA Audit and Accounting Guides for those industries that was measured at fair value using a blockage factor prior to initial application of this Statement
- b. A financial instrument that was measured at fair value at initial recognition under Statement 133 using the transaction price in accordance with the guidance in footnote 3 of EITF Issue No. 02-3, "Issues Involved in Accounting for Derivative Contracts Held for Trading Purposes and Contracts Involved in Energy Trading and Risk Management Activities," prior to initial application of this Statement
- c. A hybrid financial instrument that was measured at fair value at initial recognition under Statement 133 using the transaction price in accordance with the guidance in Statement 133 (added by FASB Statement No. 155, *Accounting for Certain Hybrid Financial Instruments*) prior to initial application of this Statement.

38. At the date this Statement is initially applied to the financial instruments in paragraph 37(a)–(c), a difference between the carrying amounts and the fair values of those instruments shall be recognized as a cumulative-effect adjustment to the opening balance of retained earnings (or other appropriate components of equity or net assets in the statement of financial position) for that fiscal year, presented separately. The disclosure requirements of Statement 154 for a change in accounting principle do not apply.

39. The disclosure requirements of this Statement (paragraphs 32–35), including those disclosures that are required in annual periods only, shall be applied in the first interim period of the fiscal year in which this Statement is initially applied. The disclosure requirements of this Statement need not be applied for financial statements for periods presented prior to initial application of this Statement.

**The provisions of this Statement need  
not be applied to immaterial items.**

*This Statement was adopted by the unanimous vote of the seven members of the Financial Accounting Standards Board:*

Robert H. Herz, *Chairman*  
George J. Batavick  
G. Michael Crooch  
Thomas J. Linsmeier  
Leslie F. Seidman  
Edward W. Trott  
Donald M. Young



## **Appendix A**

### **IMPLEMENTATION GUIDANCE**

#### **Introduction**

A1. This appendix describes in general terms certain provisions of this Statement and provides examples that incorporate simplified assumptions to illustrate the application of those provisions. This Statement sets out a framework for measuring fair value, which refers to certain valuation concepts and practices. However, this Statement is not intended to establish valuation standards.

#### **The Fair Value Measurement Approach**

A2. This Statement clarifies fair value in terms of the price in an orderly transaction between market participants to sell an asset or transfer a liability in the principal (or most advantageous) market for the asset or liability. The transaction to sell the asset or transfer the liability is a hypothetical transaction at the measurement date, considered from the perspective of a market participant that holds the asset or owes the liability. Therefore, the objective of a fair value measurement is to determine the price that would be received to sell the asset or paid to transfer the liability at the measurement date (an exit price). Because that exit price objective applies for all assets and liabilities measured at fair value, any fair value measurement requires that the reporting entity determine:

- a. The particular asset or liability that is the subject of the measurement (consistent with its unit of account)
- b. For an asset, the valuation premise appropriate for the measurement (consistent with its highest and best use)
- c. The principal (or most advantageous) market for the asset or liability (for an asset, consistent with its highest and best use)
- d. The valuation technique(s) appropriate for the measurement, considering the availability of data with which to develop inputs that represent the assumptions that market participants would use in pricing the asset or liability and the level in the fair value hierarchy within which the inputs fall.

A3. The judgments applied in different valuation situations often will be different. The examples in this appendix illustrate, in qualitative terms, the judgments a reporting entity that measures assets and/or liabilities at fair value might apply in varying valuation situations.

### **The Valuation Premise**

A4. The valuation premise used to measure the fair value of an asset depends on the highest and best use of the asset by market participants. If the asset would provide maximum value to market participants principally through its use in combination with other assets as a group (highest and best use is “in-use”), the asset would be measured using an in-use valuation premise. If the asset would provide maximum value to market participants principally on a standalone basis (highest and best use is “in-exchange”), the asset would be measured using an in-exchange valuation premise.

A5. When measuring the fair value of an asset in-use, the in-use valuation premise can be incorporated in the measurement differently, depending on the circumstances. For example:

- a. The fair value of the asset might be the same whether using an in-use or an in-exchange valuation premise. For example, that might be the case if the asset is a business (such as a reporting unit) that market participants would continue to operate. In that case, the transaction would involve the business in its entirety. The use of the assets as a group in the context of an ongoing business would generate synergies that would be available to market participants (market participant synergies).
- b. The in-use valuation premise might be incorporated in the fair value of the asset through adjustments to the value of the asset in-exchange. For example, that might be the case if the asset is a machine and the fair value measurement is determined using an observed price for a similar machine (not installed or otherwise configured for use), adjusted for transportation and installation costs so that the fair value measurement reflects the current condition and location of the machine (installed and configured for use).
- c. The in-use valuation premise might be incorporated in the fair value of the asset through the market participant assumptions used to measure the fair value of the asset. For example, if the asset is work-in-process inventory that is unique and market participants would complete the inventory into finished goods, the fair value of the inventory would assume that any specialized machinery necessary to complete the inventory into finished goods would be available to market

participants. In that case, market participants would have the specialized machinery in place or would acquire the specialized machinery in conjunction with the inventory.

- d. The in-use valuation premise might be incorporated in the fair value of the asset through the valuation technique used to measure the fair value of the asset. For example, that might be the case when using the multiperiod excess earnings method to measure the fair value of certain intangible assets because that valuation technique specifically considers the contribution of any complementary assets in the group in which an intangible asset would be used.
- e. In more limited situations, the asset might be measured at an amount that approximates its fair value in-use when allocating the fair value of the asset group within which the asset is used to the individual assets of the group. For example, that might be the case if the valuation involves real property and the fair value of improved property (an asset group) is allocated to its component assets (such as land and improvements).

### **Highest and Best Use**

A6. Highest and best use is a valuation concept that refers broadly to the use of an asset that would maximize the value of the asset or the group of assets in which the asset would be used by market participants. For some assets, in particular, nonfinancial assets, application of the highest-and-best-use concept could have a significant effect on the fair value measurement. Examples 1–3 illustrate the application of the highest-and-best-use concept in situations in which nonfinancial assets are newly acquired.

#### ***Example 1—Asset Group***

A7. The reporting entity, a strategic buyer, acquires a group of assets (Assets A, B, and C) in a business combination. Asset C is billing software developed by the acquired entity for its own use in conjunction with Assets A and B (related assets). The reporting entity measures the fair value of each of the assets individually, consistent with the specified unit of account for the assets. The reporting entity determines that each asset would provide maximum value to market participants principally through its use in combination with other assets as a group (highest and best use is in-use).

A8. In this instance, the market in which the reporting entity would sell the assets is the market in which it initially acquired the assets (that is, the “entry” and “exit” markets from the perspective of the reporting entity are the same). Market participant buyers with whom the reporting entity would transact in that market have characteristics that are generally representative of both financial buyers and strategic buyers and

include those buyers that initially bid for the assets.<sup>13</sup> As discussed below, differences between the indicated fair values of the individual assets relate principally to the use of the assets by those market participants within different asset groups:

- a. *Strategic buyer asset group.* The reporting entity, a strategic buyer, determines that strategic buyers have related assets that would enhance the value of the group within which the assets would be used (market participant synergies). Those assets include a substitute asset for Asset C (the billing software), which would be used for only a limited transition period and could not be sold standalone at the end of that period. Because strategic buyers have substitute assets, Asset C would not be used for its full remaining economic life. The indicated fair values of Assets A, B, and C within the strategic buyer asset group (reflecting the synergies resulting from the use of the assets within that group) are \$360, \$260, and \$30, respectively. The indicated fair value of the assets as a group within the strategic buyer asset group is \$650.
- b. *Financial buyer asset group.* The reporting entity determines that financial buyers do not have related or substitute assets that would enhance the value of the group within which the assets would be used. Because financial buyers do not have substitute assets, Asset C (the billing software) would be used for its full remaining economic life. The indicated fair values of Assets A, B, and C within the financial buyer asset group are \$300, \$200, and \$100, respectively. The indicated fair value of the assets as a group within the financial buyer asset group is \$600.

A9. The fair values of Assets A, B, and C would be determined based on the use of the assets as a group within the strategic buyer group (\$360, \$260, and \$30). Although the use of the assets within the strategic buyer group does not maximize the fair value of each of the assets individually, it maximizes the fair value of the assets as a group (\$650).

#### ***Example 2—Land***

A10. The reporting entity acquires land in a business combination. The land is currently developed for industrial use as a site for a manufacturing facility. The current use of land often is presumed to be its highest and best use. However, nearby sites have recently been developed for residential use as sites for high-rise condominiums. Based on that development and recent zoning and other changes to facilitate that development,

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<sup>13</sup>While market participant buyers might be broadly classified as strategic and/or financial buyers, there often will be differences among the market participant buyers within each of those groups, reflecting, for example, different uses for an asset and different operating strategies.

the reporting entity determines that the land currently used as a site for a manufacturing facility could be developed as a site for residential use (for high-rise condominiums).

A11. In this instance, the highest and best use of the land would be determined by comparing (a) the fair value of the manufacturing operation, which presumes that the land would continue to be used as currently developed for industrial use (in-use) and (b) the value of the land as a vacant site for residential use, considering the demolition and other costs necessary to convert the land to a vacant site (in-exchange). The highest and best use of the land would be determined based on the higher of those values.<sup>14</sup>

### *Example 3—IPR&D Project*

A12. The reporting entity acquires an in-process research and development (IPR&D) project in a business combination. The reporting entity does not intend to complete the IPR&D project. If completed, the IPR&D project would compete with one of its own IPR&D projects (to provide the next generation of the reporting entity's commercialized technology). Instead, the reporting entity intends to hold (lock up) the IPR&D project to prevent its competitors from obtaining access to the technology. The IPR&D project is expected to provide defensive value, principally by improving the prospects for the reporting entity's own competing technology. For purposes of measuring the fair value of the IPR&D project at initial recognition, the highest and best use of the IPR&D project would be determined based on its use by market participants. For example:

- a. The highest and best use of the IPR&D project would be in-use if market participants would continue to develop the IPR&D project and that use would maximize the value of the group of assets in which the IPR&D project would be used. That might be the case if market participants do not have similar technology (in development or commercialized). The fair value of the IPR&D project, measured using an in-use valuation premise, would be determined based on the price that would be received in a current transaction to sell the IPR&D project, assuming that the IPR&D would be used with its complementary assets as a group and that those complementary assets would be available to market participants.
- b. The highest and best use of the IPR&D project also would be in-use if, for competitive reasons, market participants would lock up the IPR&D project and that use would maximize the value of the group of assets in which the IPR&D project would be used (as a locked-up project). That might be the case if market

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<sup>14</sup>In situations involving real estate appraisal, the determination of highest and best use in the manner described above also might consider other factors relating to the manufacturing operation, including its assets and liabilities.

participants have technology in a more advanced stage of development that would compete with the IPR&D project (if completed) and the IPR&D project would be expected to provide defensive value (if locked up). The fair value of the IPR&D project, measured using an in-use valuation premise, would be determined based on the price that would be received in a current transaction to sell the IPR&D project, assuming that the IPR&D would be used (locked up) with its complementary assets as a group and that those complementary assets would be available to market participants.

- c. The highest and best use of the IPR&D project would be in-exchange if market participants would discontinue the development of the IPR&D project. That might be the case if the IPR&D project is not expected to provide a market rate of return (if completed) and would not otherwise provide defensive value (if locked up). The fair value of the IPR&D project, measured using an in-exchange valuation premise, would be determined based on the price that would be received in a current transaction to sell the IPR&D project standalone (which might be zero).

### **Valuation Techniques**

A13. This Statement emphasizes that valuation techniques consistent with the market approach, income approach, and/or cost approach should be used to measure fair value. In some cases, a single valuation technique will be appropriate. In other cases, multiple valuation techniques will be appropriate. If multiple valuation techniques are used, the reporting entity should evaluate the results (respective indications of fair value), considering the reasonableness of the range indicated by those results. The fair value measurement is the point within that range that is most representative of fair value in the circumstances. Examples 4 and 5 illustrate the use of multiple valuation techniques.

#### ***Example 4—Machine Held and Used***

A14. The reporting entity tests for impairment an asset group that is held and used in operations. The asset group is impaired. The reporting entity measures the fair value of a machine that is used in the asset group as a basis for allocating the impairment loss to the assets of the group in accordance with FASB Statement No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*. The machine, initially purchased from an outside vendor, was subsequently customized by the reporting entity for use in its operations. However, the customization of the machine was not extensive. The reporting entity determines that the asset would provide maximum value to market participants through its use in combination with other assets as a group (as installed or otherwise configured for use). Therefore, the highest and best use of the machine is in-use.

A15. The reporting entity determines that sufficient data are available to apply the cost approach and, because the customization of the machine was not extensive, the market approach. The income approach is not used because the machine does not have a separately identifiable income stream from which to develop reliable estimates of future cash flows. Further, information about short-term and intermediate-term lease rates for similar used machinery that otherwise could be used to project an income stream (lease payments over remaining service lives) is not available. The market and cost approaches are applied as follows:

- a. *Market approach.* The market approach is applied using quoted prices for similar machines adjusted for differences between the machine (as customized) and the similar machines. The measurement reflects the price that would be received for the machine in its current condition (used) and location (installed and configured for use), thereby including installation and transportation costs. The fair value indicated by that approach ranges from \$40,000 to \$48,000.
- b. *Cost approach.* The cost approach is applied by estimating the amount that currently would be required to construct a substitute (customized) machine of comparable utility. The estimate considers the condition of the machine (for example, physical deterioration, functional obsolescence, and economic obsolescence) and includes installation costs. The fair value indicated by that approach ranges from \$40,000 to \$52,000.

A16. The reporting entity determines that the fair value indicated by the market approach is more representative of fair value than the fair value indicated by the cost approach and, therefore, ascribes more weight to the results of the market approach. That determination is based on the relative reliability of the inputs, considering the degree of comparability between the machine and the similar machines. In particular:

- a. The inputs used in the market approach (quoted prices for similar machines) require relatively fewer and less subjective adjustments than the inputs used in the cost approach.
- b. The range indicated by the market approach overlaps with, but is narrower than, the range indicated by the cost approach.
- c. There are no known unexplained differences (between the machine and the similar machines) within that range.

The reporting entity further determines that the higher end of the range indicated by the market approach is most representative of fair value, largely because the majority of

relevant data points in the market approach fall at or near the higher end of the range. Accordingly, the reporting entity determines that the fair value of the machine is \$48,000.

*Example 5—Software Asset*

A17. The reporting entity acquires a group of assets. The asset group includes an income-producing software asset internally developed for license to customers and its complementary assets (including a related database with which the software asset is used). For purposes of allocating the cost of the group to the individual assets acquired, the reporting entity measures the fair value of the software asset. The reporting entity determines that the software asset would provide maximum value to market participants through its use in combination with other assets (its complementary assets) as a group. Therefore, the highest and best use of the software asset is in-use. (In this instance, the licensing of the software asset, in and of itself, does not render the highest and best use of the software asset in-exchange.)

A18. The reporting entity determines that in addition to the income approach, sufficient data might be available to apply the cost approach but not the market approach. Information about market transactions for comparable software assets is not available. The income and cost approaches are applied as follows:

- a. *Income approach.* The income approach is applied using a present value technique. The cash flows used in that technique reflect the income stream expected to result from the software asset (license fees from customers) over its economic life. The fair value indicated by that approach is \$15 million.
- b. *Cost approach.* The cost approach is applied by estimating the amount that currently would be required to construct a substitute software asset of comparable utility (considering functional, technological, and economic obsolescence). The fair value indicated by that approach is \$10 million.

A19. Through its application of the cost approach, the reporting entity determines that market participants would not be able to replicate a substitute software asset of comparable utility. Certain attributes of the software asset are unique, having been developed using proprietary information, and cannot be readily replicated. The reporting entity determines that the fair value of the software asset is \$15 million, as indicated by the income approach.

## **Inputs to Valuation Techniques**

A20. This Statement emphasizes that valuation techniques used to measure the fair value of an asset or liability should maximize the use of observable inputs, that is, inputs that reflect the assumptions market participants would use in pricing the asset or liability developed based on market data obtained from sources independent of the reporting entity. Examples of markets in which inputs might be observable for some assets and liabilities (for example, financial instruments) include the following:

- a. *Exchange market.* In an active exchange market, closing prices are both readily available and generally representative of fair value. An example of such a market is the New York Stock Exchange.
- b. *Dealer market.* In a dealer market, dealers stand ready to trade (either buy or sell for their own account), thereby providing liquidity by using their capital to hold an inventory of the items for which they make a market. Typically, bid and ask prices (representing the price the dealer is willing to pay and the price at which the dealer is willing to sell, respectively) are more readily available than closing prices. Over-the-counter markets (where prices are publicly reported by the National Association of Securities Dealers Automated Quotations systems or by Pink Sheets LLC) are dealer markets. For example, the market for U.S. Treasury securities is a dealer market. Dealer markets also exist for some other assets and liabilities, including other financial instruments, commodities, and physical assets (for example, certain used equipment).
- c. *Brokered market.* In a brokered market, brokers attempt to match buyers with sellers but do not stand ready to trade for their own account. In other words, brokers do not use their own capital to hold an inventory of the items for which they make a market. The broker knows the prices bid and asked by the respective parties, but each party is typically unaware of another party's price requirements. Prices of completed transactions are sometimes available. Brokered markets include electronic communication networks, in which buy and sell orders are matched, and commercial and residential real estate markets.
- d. *Principal-to-principal market.* Principal-to-principal transactions, both originations and resales, are negotiated independently with no intermediary. Little information about those transactions may be released publicly.

## **Fair Value Hierarchy**

A21. To increase consistency and comparability in fair value measurements and related disclosures, this Statement establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three broad levels. The level

in the fair value hierarchy within which the fair value measurement in its entirety falls is determined based on the lowest level input that is significant to the measurement in its entirety.

### ***Level 1 Inputs***

A22. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date. A Level 1 input will be available for many financial assets and liabilities, some of which might be exchanged in multiple active markets (for example, on different exchanges). Therefore, the emphasis within Level 1 is on determining both of the following:

- a. The principal market for the asset or liability or, in the absence of a principal market, the most advantageous market for the asset or liability, considered from the perspective of the reporting entity; and
- b. Whether the reporting entity has the ability to access the price in that market for the asset or liability at the measurement date.

Example 6 illustrates the use of Level 1 inputs to measure the fair value of a financial asset that trades in multiple active markets with different prices.

#### **Example 6—Level 1 principal (or most advantageous) market**

A23. A financial asset is traded on two different exchanges with different prices. The reporting entity transacts in both markets and has the ability to access the price in those markets for the asset at the measurement date. In Market A, the price that would be received is \$26, and transaction costs in that market are \$3 (the net amount that would be received is \$23). In Market B, the price that would be received is \$25, and transaction costs in that market are \$1 (the net amount that would be received in Market B is \$24).

- a. If Market A is the principal market for the asset (the market in which the reporting entity would sell the asset with the greatest volume and level of activity for the asset), the fair value of the asset would be measured using the price that would be received in that market (\$26).
- b. If neither market is the principal market for the asset, the fair value of the asset would be measured using the price in the most advantageous market. The most advantageous market is the market in which the reporting entity would sell the asset with the price that maximizes the amount that would be received for the asset, considering transaction costs in the respective markets (that is, the net

amount that would be received in the respective markets). Because the price in Market B adjusted for transaction costs would maximize the net amount that would be received for the asset (\$24), the fair value of the asset would be measured using the price in that market (\$25). Although transaction costs are considered in determining the most advantageous market, the price in that market used to measure the fair value of the asset is not adjusted for those costs.

### ***Level 2 Inputs***

A24. Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly through corroboration with observable market data (market-corroborated inputs). If the asset or liability has a specified (contractual) term, a Level 2 input must be observable for substantially the full term of the asset or liability. An adjustment to a Level 2 input that is significant to the fair value measurement in its entirety might render the measurement a Level 3 measurement, depending on the level in the fair value hierarchy within which the inputs used to determine the adjustment fall. Examples of Level 2 inputs for particular assets and liabilities follow.

- a. *Receive-fixed, pay-variable interest rate swap based on the LIBOR swap rate.* A Level 2 input would include the LIBOR swap rate if that rate is observable at commonly quoted intervals for the full term of the swap.
- b. *Receive-fixed, pay-variable interest rate swap based on a foreign-denominated yield curve.* A Level 2 input would include the swap rate based on a foreign-denominated yield curve that is observable at commonly quoted intervals for substantially the full term of the swap. That would be the case if the term of the swap is 10 years and that rate is observable at commonly quoted intervals for 9 years, provided that any reasonable extrapolation of the yield curve for year 10 would not be significant to the fair value measurement of the swap in its entirety.
- c. *Receive-fixed, pay-variable interest rate swap based on a specific bank's prime rate.* A Level 2 input would include the bank's prime rate derived through extrapolation if the extrapolated values are corroborated by observable market data, for example, by correlation with an interest rate that is observable over substantially the full term of the swap.
- d. *Three-year option on exchange-traded shares.* A Level 2 input would include the implied volatility for the shares derived through extrapolation to year 3 if (1) prices for one- and two-year options on the shares are observable and (2) the extrapolated implied volatility of a three-year option is corroborated by observable market data for substantially the full term of the option. In that case, the implied volatility could be derived by extrapolating from the implied volatility of

the one- and two-year options on the shares and corroborated by the implied volatility for three-year options on comparable entities' shares, provided that correlation with the one- and two-year implied volatilities is established.

- e. *Licensing arrangement.* For a licensing arrangement that is acquired in a business combination and that was recently negotiated with an unrelated party by the acquired entity (the party to the licensing arrangement), a Level 2 input would include the royalty rate at inception of the arrangement.
- f. *Finished goods inventory at retail outlet.* For finished goods inventory that is acquired in a business combination, a Level 2 input would include either a price to customers in a retail market or a wholesale price to retailers in a wholesale market, adjusted for differences between the condition and location of the inventory item and the comparable (similar) inventory items so that the fair value measurement reflects the price that would be received in a transaction to sell the inventory to another retailer that would complete the requisite selling efforts. Conceptually, the fair value measurement should be the same, whether adjustments are made to a retail price (downward) or to a wholesale price (upward). Generally, the price that requires the least amount of subjective adjustments should be used for the fair value measurement.
- g. *Building held and used.* A Level 2 input would include the price per square foot for the building (a valuation multiple) derived from observable market data, for example, multiples derived from prices in observed transactions involving comparable (similar) buildings in similar locations.
- h. *Reporting unit.* A Level 2 input would include a valuation multiple (for example, a multiple of earnings or revenue or a similar performance measure) derived from observable market data, for example, multiples derived from prices in observed transactions involving comparable (similar) businesses, considering operational, market, financial, and nonfinancial factors.

### ***Level 3 Inputs***

A25. Level 3 inputs are unobservable inputs for the asset or liability, that is, inputs that reflect the reporting entity's own assumptions about the assumptions market participants would use in pricing the asset or liability (including assumptions about risk) developed based on the best information available in the circumstances. Assumptions about risk include the risk inherent in a particular valuation technique used to measure fair value (such as a pricing model) and/or the risk inherent in the inputs to the valuation technique.<sup>15</sup> Examples of Level 3 inputs for particular assets and liabilities follow.

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<sup>15</sup>A measurement (for example, a "mark-to-model" measurement) that does not include an adjustment for risk would not represent a fair value measurement if market participants would include one in pricing the related asset or liability.

- a. *Long-dated currency swap.* A Level 3 input would include interest rates in a specified currency that are not observable and cannot be corroborated by observable market data at commonly quoted intervals or otherwise for substantially the full term of the currency swap. The interest rates in a currency swap are the swap rates calculated from the respective countries' yield curves.
- b. *Three-year option on exchange-traded shares.* A Level 3 input would include historical volatility, that is, the volatility for the shares derived from the shares' historical prices. Historical volatility typically does not represent current market participant expectations about future volatility, even if it is the only information available to price an option.
- c. *Interest rate swap.* A Level 3 input would include an adjustment to a mid-market consensus (nonbinding) price for the swap developed using data that are not directly observable and that cannot otherwise be corroborated by observable market data.
- d. *Asset retirement obligation at initial recognition.* A Level 3 input would include expected cash flows (adjusted for risk) developed using the reporting entity's own data if there is no information reasonably available without undue cost and effort that indicates that market participants would use different assumptions. That Level 3 input would be used in a present value technique together with other inputs, for example (1) a risk-free interest rate or (2) a credit-adjusted risk-free rate if the effect of the reporting entity's credit standing on the fair value of the liability is reflected in the discount rate rather than in the expected cash flows.<sup>16</sup>
- e. *Reporting unit.* A Level 3 input would include a financial forecast (for example, of cash flows or earnings) developed using the reporting entity's own data if there is no information reasonably available without undue cost and effort that indicates that market participants would use different assumptions.

### **Transaction Prices and Initial Fair Value Measurements**

A26. This Statement clarifies that in many cases the transaction price, that is, the price paid (received) for a particular asset (liability), will represent the fair value of that asset (liability) at initial recognition, but not presumptively.<sup>17</sup> Example 7 illustrates situa-

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<sup>16</sup>FASB Statement No. 143, *Accounting for Asset Retirement Obligations*, illustrates the application of the expected present value technique to an asset retirement obligation measured at fair value at initial recognition under that Statement. (See Appendix C of Statement 143.)

<sup>17</sup>The guidance in this Statement applies for derivatives and other financial instruments that are measured at fair value under FASB Statement No. 133, *Accounting for Derivative Instruments and Hedging Activities*, including hybrid financial instruments. Therefore, this Statement nullifies the guidance in footnote 3 of EITF Issue No. 02-3, "Issues Involved in Accounting for Derivative Contracts Held for Trading Purposes and Contracts Involved in Energy Trading and Risk Management Activities."

tions in which the price in a transaction involving a derivative instrument might (and might not) represent the fair value of the instrument.

**Example 7—Interest Rate Swap at Initial Recognition**

A27. Entity A (a retail counterparty) enters into an interest rate swap in a retail market with Entity B (a securities dealer) for no initial consideration (transaction price is zero). Entity A transacts only in the retail market. Entity B transacts in the retail market (with retail counterparties) and in the inter-dealer market (with securities dealer counterparties).

- a. *Entity A (retail counterparty)*. From the perspective of Entity A, the retail market in which it initially transacted is the principal market for the swap; if Entity A were to transfer its rights and obligations under the swap, it would do so with a securities dealer counterparty in that market. In that case, the transaction price (zero) would represent the fair value of the swap to Entity A at initial recognition, that is, the price that Entity A would receive (or pay) to sell (or transfer) the swap in a transaction with a securities dealer counterparty in the retail market (an exit price).<sup>18</sup> That price would not be adjusted for any incremental (transaction) costs that would be charged by that securities dealer counterparty.
- b. *Entity B (securities dealer)*. From the perspective of Entity B, the inter-dealer market (not the retail market in which it initially transacted) is the principal market for the swap; if Entity B were to transfer its rights and obligations under the swap, it would do so with a securities dealer in that market. Because the market in which Entity B initially transacted is different from the principal market for the swap, the transaction price (zero) would not necessarily represent the fair value of the swap to Entity B at initial recognition.

**Restricted Assets**

A28. The effect on a fair value measurement of a restriction on the sale or use of an asset by a reporting entity will differ depending on whether the restriction would be considered by market participants in pricing the asset. Examples 8 and 9 illustrate the effect of restrictions in determining the fair value of an asset.

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<sup>18</sup>If the transaction price represents fair value at initial recognition and a pricing model will be used to measure fair value in subsequent periods, the model should be calibrated so that the model value at initial recognition equals the transaction price.

### *Example 8—Restriction on Sale of Security*

A29. The reporting entity holds a security of an issuer for which sale is legally restricted for a specified period. (For example, such a restriction could limit sale to qualifying investors, as may be the case under Rule 144 or similar rules of the Securities and Exchange Commission.) The restriction is specific to (an attribute of) the security and, therefore, would transfer to market participants. In that case, the fair value of the security would be based on the quoted price for an otherwise identical unrestricted security of the same issuer that trades in a public market, adjusted to reflect the effect of the restriction. The adjustment would reflect the amount market participants would demand because of the risk relating to the inability to access a public market for the security for the specified period.<sup>19</sup> The adjustment will vary depending on the nature and duration of the restriction, the extent to which buyers are limited by the restriction (for example, there might be a large number of qualifying investors), and factors specific to both the security and the issuer (qualitative and quantitative).<sup>20</sup>

### *Example 9—Restrictions on Use of Asset*

A30. A donor contributes land in an otherwise developed residential area to a not-for-profit neighborhood association (Association). The land is currently used as a playground. The donor specifies that the land must continue to be used by the Association as a playground in perpetuity. Upon review of relevant documentation (legal and other), the Association determines that the fiduciary responsibility to meet the donor's restriction would not otherwise transfer to market participants if the asset was to be sold by the Association, that is, the donor restriction on the use of the land is specific to the Association. Absent the restriction on the use of the land by the Association, the land could be used as a site for residential development. In addition, the land has an easement for utility lines on a portion of the property.

- a. *Donor restriction on use of land.* Because in this instance the donor restriction on the use of the land is specific to the Association, the restriction would not transfer to market participants. Therefore, the fair value of the land would be based on the

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<sup>19</sup>The guidance in this Statement applies for equity securities with restrictions that terminate within one year that are measured at fair value under FASB Statements No. 115, *Accounting for Certain Investments in Debt and Equity Securities*, and No. 124, *Accounting for Certain Investments Held by Not-for-Profit Organizations*.

<sup>20</sup>ASR No. 113, *Statement Regarding "Restricted Securities,"* provides related guidance.

higher of its fair value in-use as a playground or fair value in-exchange as a site for residential development, regardless of the restriction on the use of the land by the Association.<sup>21</sup>

- b. *Easement for utility lines.* Because the easement for utility lines is specific to (an attribute of) the land, it would transfer to market participants. Therefore, the fair value measurement of the land would consider the effect of the easement, regardless of whether highest and best use is in-use as a playground or in-exchange as a site for residential development.

### **Liabilities and Credit Risk**

A31. Nonperformance risk relating to a liability includes the reporting entity's credit risk. The reporting entity should consider the effect of its credit risk (credit standing) on the fair value of the liability in all periods in which the liability is measured at fair value because those who might hold the entity's obligations as assets would consider the effect of the entity's credit standing in determining the prices they would be willing to pay. For example, assume that Entity X and Entity Y each enter into a contractual obligation to pay cash (\$500) to Entity Z in 5 years. Entity X has a AA credit rating and can borrow at 6 percent, while Entity Y has a BBB credit rating and can borrow at 12 percent. Entity X will receive about \$374 in exchange for its promise (the present value of \$500 in 5 years at 6 percent). Entity Y will receive about \$284 in exchange for its promise (the present value of \$500 in 5 years at 12 percent). The fair value of the liability to each entity (the proceeds) incorporates that entity's credit standing. Example 10 illustrates the effect of credit standing on the fair value of a financial liability at initial recognition and in subsequent periods.

#### ***Example 10—Structured Note***

A32. On January 1, 2007, Entity A, an investment bank with a AA credit rating, issues a five-year fixed rate note to Entity B. The contractual principal amount to be paid by Entity A at maturity is linked to the S&P 500 index. No credit enhancements are issued in conjunction with or otherwise related to the contract (that is, no collateral is posted and there is no third-party guarantee). Entity A elects to account for the entire note at fair value in accordance with FASB Statement No. 155, *Accounting for Certain Hybrid*

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<sup>21</sup>The donor restriction, which is legally binding on the Association, would be indicated through classification of the associated net assets (permanently restricted) and disclosure of the nature of the restriction in accordance with paragraphs 12 and 14 of FASB Statement No. 117, *Financial Statements of Not-for-Profit Organizations*.

*Financial Instruments.* The fair value of the note (the obligation of Entity A) during 2007 is measured using an expected present value technique. Changes in fair value are discussed below.

- a. *Fair value at January 1, 2007.* The expected cash flows used in the expected present value technique are discounted at the risk-free rate (using the treasury yield curve at January 1, 2007), plus the current market observable AA corporate bond spread to treasuries adjusted (up or down) for Entity A's specific credit risk (credit-adjusted risk-free rate). Therefore, the fair value of the obligation of Entity A at initial recognition considers nonperformance risk, including that entity's credit risk (presumably, reflected in the proceeds).
- b. *Fair value at March 31, 2007.* During March 2007, the credit spread for AA corporate bonds widens, with no changes to the specific credit risk of Entity A. The expected cash flows used in the expected present value technique are discounted at the risk-free rate (using the treasury yield curve at March 31, 2007), plus the current market observable AA corporate bond spread to treasuries, adjusted for Entity A's specific credit risk (credit-adjusted risk-free rate). Entity A's specific credit risk is unchanged from initial recognition. Therefore, the fair value of the obligation of Entity A changes due to changes in credit spreads generally. Changes in credit spreads reflect current market participant assumptions about changes in nonperformance risk generally.
- c. *Fair value at June 30, 2007.* As of June 30, 2007, there have been no changes to the AA corporate bond spreads. However, based on structured note issuances corroborated with other qualitative information, Entity A determines that its own specific credit worthiness has strengthened within the AA credit spread. The expected cash flows used in the expected present value technique are discounted at the risk-free rate (using the treasury yield curve at June 30, 2007), plus the current market observable AA corporate bond spread to treasuries (unchanged from March 31, 2007), adjusted for Entity A's specific credit risk (credit-adjusted risk-free rate). Therefore, the fair value of the obligation of Entity A changes due to the change in its own specific credit risk within the AA corporate bond spread.

## **Fair Value Disclosures**

A33. This Statement requires disclosures about the fair value of assets and liabilities recognized in the statement of financial position in periods subsequent to initial recognition, whether the measurements are made on a recurring basis (for example, trading securities) or on a nonrecurring basis (for example, impaired assets). Quantitative disclosures using a tabular format are required in all periods (interim and annual). Qualitative (narrative) disclosures about the valuation techniques used to

measure fair value are required in all annual periods. The disclosures required by paragraph 32(a)–(d) and paragraph 33(a) and (b) are illustrated below.

**Assets Measured at Fair Value on a Recurring Basis**

A34. For assets and liabilities measured at fair value on a recurring basis during the period, this Statement requires quantitative disclosures about the fair value measurements separately for each major category of assets and liabilities (paragraph 32(a) and (b)). For assets, that information might be presented as follows:

<b>Description</b>	<b>12/31/XX</b>	<b>Fair Value Measurements at Reporting Date Using</b>		
		<b>Quoted Prices in Active Markets for Identical Assets (Level 1)</b>	<b>Significant Other Observable Inputs (Level 2)</b>	<b>Significant Unobservable Inputs (Level 3)</b>
Trading securities	\$115	\$105	\$10	
Available-for-sale securities	75	75		
Derivatives	60	25	15	\$20
Venture capital investments	10			10
Total	<u>\$260</u>	<u>\$205</u>	<u>\$25</u>	<u>\$30</u>

(Note: For liabilities, a similar table should be presented.)

**Assets Measured at Fair Value on a Recurring Basis Using Significant Unobservable Inputs (Level 3)**

A35. For assets and liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3) during the period, this Statement requires a reconciliation of the beginning and ending balances, separately for each major category of assets and liabilities, except for derivative assets and liabilities, which may be presented net (paragraph 32(c) and (d)). For assets, the reconciliation might be presented as follows:

(\$ in 000s)	Fair Value Measurements Using Significant Unobservable Inputs (Level 3)		
	Derivatives	Venture Capital Investments	Total
Beginning balance	\$14	\$11	\$25
Total gains or losses (realized/unrealized)			
Included in earnings (or changes in net assets)	11	(3)	8
Included in other comprehensive income	4		4
Purchases, issuances, and settlements	(7)	2	(5)
Transfers in and/or out of Level 3	(2)	0	(2)
Ending balance	<u>\$20</u>	<u>\$10</u>	<u>\$30</u>
The amount of total gains or losses for the period included in earnings (or changes in net assets) attributable to the change in unrealized gains or losses relating to assets still held at the reporting date	<u>\$ 7</u>	<u>\$ 2</u>	<u>\$ 9</u>

(Note: For liabilities, a similar table should be presented.)

Gains and losses (realized and unrealized) included in earnings (or changes in net assets) for the period (above) are reported in trading revenues and in other revenues as follows:

	Trading Revenues	Other Revenues
Total gains or losses included in earnings (or changes in net assets) for the period (above)	<u>\$11</u>	<u>\$(3)</u>
Change in unrealized gains or losses relating to assets still held at reporting date	<u>\$ 7</u>	<u>\$ 2</u>

### Assets Measured at Fair Value on a Nonrecurring Basis

A36. For each major category of assets and liabilities measured at fair value on a nonrecurring basis during the period, this Statement requires disclosures about the fair value measurements (paragraph 33(a) and (b)). That information might be presented as follows:

Description	Year Ended 12/31/XX	Fair Value Measurements Using			Total Gains (Losses)
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	
Long-lived assets held and used	\$75		\$75		\$(25)
Goodwill	30			\$30	(35)
Long-lived assets held for sale	26		26		(15)
					<u>\$(75)</u>

In accordance with the provisions of Statement 144, long-lived assets held and used with a carrying amount of \$100 million were written down to their fair value of \$75 million, resulting in an impairment charge of \$25 million, which was included in earnings for the period.

In accordance with the provisions of Statement 142, goodwill with a carrying amount of \$65 million was written down to its implied fair value of \$30 million, resulting in an impairment charge of \$35 million, which was included in earnings for the period.

In accordance with the provisions of Statement 144, long-lived assets held for sale with a carrying amount of \$35 million were written down to their fair value of \$26 million, less cost to sell of \$6 million (or \$20 million), resulting in a loss of \$15 million, which was included in earnings for the period.

## Appendix B

### PRESENT VALUE TECHNIQUES

#### Introduction

B1. FASB Concepts Statement No. 7, *Using Cash Flow Information and Present Value in Accounting Measurements*, provides guidance for using present value techniques to measure fair value. That guidance focuses on a traditional or discount rate adjustment technique and an expected cash flow (expected present value) technique. This appendix clarifies that guidance.<sup>22</sup> This appendix neither prescribes the use of one specific present value technique nor limits the use of present value techniques to measure fair value to the techniques discussed herein. The present value technique used to measure fair value will depend on facts and circumstances specific to the asset or liability being measured (for example, whether comparable assets or liabilities can be observed in the market) and the availability of sufficient data.

#### The Components of a Present Value Measurement

B2. Present value is a tool used to link uncertain future amounts (cash flows or values) to a present amount using a discount rate (an application of the income approach) that is consistent with value maximizing behavior and capital market equilibrium. A fair value measurement of an asset or liability, using present value, should capture the following elements from the perspective of market participants as of the measurement date:

- a. An estimate of future cash flows for the asset or liability being measured.
- b. Expectations about possible variations in the amount and/or timing of the cash flows representing the uncertainty inherent in the cash flows.
- c. The time value of money, represented by the rate on risk-free monetary assets that have maturity dates or durations that coincide with the period covered by the cash flows (risk-free interest rate). For present value computations denominated in nominal U.S. dollars, the yield curve for U.S. Treasury securities determines the appropriate risk-free interest rate. U.S. Treasury securities are deemed (default) risk free because they pose neither uncertainty in timing nor risk of default to the holder.

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<sup>22</sup>That guidance is included or otherwise referred to principally in paragraphs 39–46, 51, 62–71, 114, and 115 of Concepts Statement 7.

- d. The price for bearing the uncertainty inherent in the cash flows (risk premium).
- e. Other case-specific factors that would be considered by market participants.
- f. In the case of a liability, the nonperformance risk relating to that liability, including the reporting entity's (obligor's) own credit risk.

## **General Principles**

B3. Present value techniques differ in how they capture those elements. However, certain general principles govern the application of any present value technique:

- a. Cash flows and discount rates should reflect assumptions that market participants would use in pricing the asset or liability.
- b. Cash flows and discount rates should consider only factors attributed to the asset (or liability) being measured.
- c. To avoid double counting or omitting the effects of risk factors, discount rates should reflect assumptions that are consistent with those inherent in the cash flows.<sup>23</sup>
- d. Assumptions about cash flows and discount rates should be internally consistent. For example, nominal cash flows (that include the effect of inflation) should be discounted at a rate that includes the effect of inflation. The nominal risk-free interest rate includes the effect of inflation. Real cash flows (that exclude the effect of inflation) should be discounted at a rate that excludes the effect of inflation. Similarly, after-tax cash flows should be discounted using an after-tax discount rate. Pretax cash flows should be discounted at a rate consistent with those cash flows (for example, a U.S. Treasury rate is quoted on a pretax basis, as is a LIBOR rate or a prevailing term loan rate).
- e. Discount rates should be consistent with the underlying economic factors of the currency in which the cash flows are denominated.

## **Risk and Uncertainty**

B4. A fair value measurement, using present value, is made under conditions of uncertainty because the cash flows used are estimates rather than known amounts. In

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<sup>23</sup>For example, a discount rate that reflects expectations about future defaults is appropriate if using contractual cash flows of a loan (discount rate adjustment technique). That same rate would not be used if using expected (probability-weighted) cash flows (expected present value technique) because the expected cash flows already reflect assumptions about future defaults; instead, a discount rate that is commensurate with the risk inherent in the expected cash flows should be used.

many cases, both the amount and timing of the cash flows will be uncertain. Even contractually fixed amounts, like the payments on a loan, will be uncertain if there is risk of default.

B5. Risk-averse market participants generally seek compensation for bearing the uncertainty inherent in the cash flows of an asset or liability (risk premium). A fair value measurement should include a risk premium reflecting the amount market participants would demand because of the risk (uncertainty) in the cash flows. Otherwise, the measurement would not faithfully represent fair value. In some cases, determining the appropriate risk premium might be difficult. However, the degree of difficulty alone is not a sufficient basis on which to exclude a risk adjustment.

B6. Present value techniques differ in how they adjust for risk and in the type of cash flows they use. For example, the discount rate adjustment technique uses a risk-adjusted discount rate and contractual, promised, or most likely cash flows; Method 1 of the expected present value technique uses a risk-free rate and risk-adjusted expected cash flows; and Method 2 of the expected present value technique uses a risk-adjusted discount rate (which is different from the rate used in the discount rate adjustment technique) and expected cash flows. Those present value techniques are discussed below.

### **Discount Rate Adjustment Technique**

B7. The discount rate adjustment technique uses a single set of cash flows from the range of possible estimated amounts, whether contractual or promised (as is the case for a bond) or most likely cash flows. In all cases, those cash flows are conditional upon the occurrence of specified events (for example, contractual or promised cash flows for a bond are conditional on the event of no default by the debtor). The discount rate used in the discount rate adjustment technique is derived from observed rates of return for comparable assets or liabilities that are traded in the market. Accordingly, the contractual, promised, or most likely cash flows are discounted at a rate that corresponds to an observed market rate associated with such conditional cash flows (market rate of return).

B8. The application of the discount rate adjustment technique requires an analysis of market data for comparable assets or liabilities. Comparability is established by considering the nature of the cash flows (for example, whether the cash flows are contractual or noncontractual and are likely to respond similarly to changes in economic conditions), as well as other factors (for example, credit standing, collateral, duration, restrictive covenants, and liquidity). Alternatively, if a single comparable asset or liability does not fairly reflect the risk inherent in the cash flows of the asset or

liability being measured, it may be possible to derive a discount rate using data for several comparable assets or liabilities in conjunction with the risk-free yield curve (a “build-up” approach).

B9. To illustrate a build-up approach, assume that Asset A is a contractual right to receive \$800 in 1 year (no timing uncertainty). There is an established market for comparable assets, and information about those assets, including price information, is available. Of those comparable assets:

- a. Asset B is a contractual right to receive \$1,200 in 1 year and has a market price of \$1,083. Thus, the implied annual rate of return (1-year market rate of return) is 10.8 percent  $[(\$1,200/\$1,083) - 1]$ .
- b. Asset C is a contractual right to receive \$700 in 2 years and has a market price of \$566. Thus, the implied annual rate of return (2-year market rate of return) is 11.2 percent  $[(\$700/\$566)^{0.5} - 1]$ .
- c. All three assets are comparable with respect to risk (dispersion of possible payoffs and credit).

B10. Based on the timing of the contractual payments to be received relative to Asset A (one year for Asset B versus two years for Asset C), Asset B is deemed more comparable to Asset A. Using the contractual payment to be received for Asset A (\$800) and the 1-year market rate derived from Asset B (10.8 percent), the fair value of Asset A is \$722  $(\$800/1.108)$ . Alternatively, in the absence of available market information for Asset B, the one-year market rate could be derived from Asset C using the build-up approach. In that case, the 2-year market rate indicated by Asset C (11.2 percent) would be adjusted to a 1-year market rate based on the term structure of the risk-free yield curve. Additional information and analysis also might be required to determine if the risk premium for one-year and two-year assets is the same. If it is determined that the risk premium for one-year and two-year assets is not the same, the two-year market rate of return would be further adjusted for that effect.

B11. In applying the discount rate adjustment technique to fixed claims, the adjustment for risk inherent in the cash flows of the asset or liability being measured is included in the discount rate. In some applications of the discount rate adjustment technique to cash flows that are other than fixed claims, an adjustment to the cash flows also may be necessary to achieve comparability with the observed asset or liability from which the discount rate is derived.

## Expected Present Value Technique

B12. The expected present value technique uses as a starting point a set of cash flows that, in theory, represents the probability-weighted average of all possible cash flows (expected cash flows). The resulting estimate is identical to *expected value*, which, in statistical terms, is the weighted average of a discrete random variable's possible values where the respective probabilities are used as weights. Because all possible cash flows are probability weighted, the resulting expected cash flow is not conditional upon the occurrence of any specified event (as are the cash flows used in the discount rate adjustment technique).

B13. In making an investment decision, risk-averse market participants would consider the risk inherent in the expected cash flows. Portfolio theory distinguishes between two types of risk. The first is risk specific to a particular asset or liability, also referred to as unsystematic (diversifiable) risk. The second is general market risk, also referred to as systematic (nondiversifiable) risk. The systematic or nondiversifiable risk of an asset (or liability) refers to the amount by which the asset (or liability) increases the variance of a diversified portfolio when it is added to that portfolio. Portfolio theory holds that in a market in equilibrium, market participants will be compensated only for bearing the systematic or nondiversifiable risk inherent in the cash flows. (In markets that are inefficient or out of equilibrium, other forms of return or compensation might be available.)

B14. Method 1 of the expected present value technique adjusts the expected cash flows for the systematic (market) risk by subtracting a cash risk premium (risk-adjusted expected cash flows). These risk-adjusted expected cash flows represent a certainty-equivalent cash flow, which is discounted at a risk-free interest rate. A *certainty-equivalent cash flow* refers to an expected cash flow (as defined), adjusted for risk such that one is indifferent to trading a certain cash flow for an expected cash flow. For example, if one were willing to trade an expected cash flow of \$1,200 for a certain cash flow of \$1,000, the \$1,000 is the certainty equivalent of the \$1,200 (the \$200 would represent the cash risk premium). In that case, one would be indifferent as to the asset held.

B15. In contrast, Method 2 of the expected present value technique adjusts for systematic (market) risk by adding a risk premium to the risk-free interest rate. Accordingly, the expected cash flows are discounted at a rate that corresponds to an expected rate associated with probability-weighted cash flows (expected rate of return). Models used for pricing risky assets, such as the Capital Asset Pricing Model, can be used to estimate the expected rate of return. Because the discount rate used in the discount rate adjustment technique is a rate of return relating to conditional

cash flows, it likely will be higher than the discount rate used in Method 2 of the expected present value technique, which is an expected rate of return relating to expected or probability-weighted cash flows.

B16. To illustrate Methods 1 and 2, assume that an asset has expected cash flows of \$780 in 1 year based on the possible cash flows and probabilities shown below. The applicable risk-free interest rate for cash flows with a 1-year horizon is 5 percent, and the systematic risk premium is 3 percent.

<u>Possible Cash Flows</u>	<u>Probability</u>	<u>Probability-Weighted Cash Flows</u>
\$500	15%	\$75
\$800	60%	\$480
\$900	25%	\$225
Expected cash flows		<u>\$780</u>

B17. In this simple illustration, the expected cash flows (\$780) represent the probability-weighted average of the 3 possible outcomes. In more realistic situations, there could be many possible outcomes. However, it is not always necessary to consider distributions of literally all possible cash flows using complex models and techniques to apply the expected present value technique. Rather, it should be possible to develop a limited number of discrete scenarios and probabilities that capture the array of possible cash flows. For example, a reporting entity might use realized cash flows for some relevant past period, adjusted for changes in circumstances occurring subsequently (for example, changes in external factors, including economic or market conditions, industry trends, and competition as well as changes in internal factors impacting the entity more specifically), considering the assumptions of market participants.

B18. In theory, the present value (fair value) of the asset’s cash flows is the same (\$722) whether determined under Method 1 or Method 2, as indicated below. Specifically:

- a. Under Method 1, the expected cash flows are adjusted for systematic (market) risk. In the absence of market data directly indicating the amount of the risk adjustment, such adjustment could be derived from an asset pricing model using the concept of certainty equivalents. For example, the risk adjustment (cash risk premium of \$22) could be determined based on the systematic risk premium of 3 percent ( $\$780 - [\$780 \times (1.05/1.08)]$ ), which results in risk-adjusted expected

cash flows of \$758 ( $\$780 - \$22$ ). The \$758 is the certainty equivalent of \$780 and is discounted at the risk-free interest rate (5 percent). The present value (fair value) of the asset is \$722 ( $\$758/1.05$ ).

- b. Under Method 2, the expected cash flows are not adjusted for systematic (market) risk. Rather, the adjustment for that risk is included in the discount rate. Thus, the expected cash flows are discounted at an expected rate of return of 8 percent (the 5 percent risk-free interest rate plus the 3 percent systematic risk premium). The present value (fair value) of the asset is \$722 ( $\$780/1.08$ ).

B19. When using an expected present value technique to measure fair value, either Method 1 or Method 2 could be used. The selection of Method 1 or Method 2 will depend on facts and circumstances specific to the asset or liability being measured, the extent to which sufficient data are available, and the judgments applied.



## Appendix C

### BACKGROUND INFORMATION AND BASIS FOR CONCLUSIONS

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## Appendix C

### BACKGROUND INFORMATION AND BASIS FOR CONCLUSIONS

#### Introduction

C1. This appendix summarizes considerations that Board members deemed significant in reaching the conclusions in this Statement. It includes the reasons for accepting certain views and rejecting others. Individual Board members gave greater weight to some factors than to others.

#### Background Information

C2. In many accounting pronouncements, the Board has concluded that fair value information is relevant, and users of financial statements generally have agreed. Paragraph 47 of FASB Concepts Statement No. 2, *Qualitative Characteristics of Accounting Information*, states, “To be relevant to investors, creditors, and others for investment, credit, and similar decisions, accounting information must be capable of making a difference in a decision by helping users to form predictions about the outcomes of past, present, and future events or to confirm or correct expectations.”

C3. Some have expressed concerns about the ability to apply the fair value measurement objective in GAAP, including in response to the FASB Proposal, *Principles-Based Approach to U.S. Standard Setting*, issued in October 2002.<sup>24</sup> In large part, those concerns focus on the reliability of the measurements in the absence of quoted market prices, including concerns about the ability to verify the measurements. Paragraph 59 of Concepts Statement 2 states, “The reliability of a measure rests on the faithfulness with which it represents what it purports to represent, coupled with an assurance for the user, which comes through verification, that it has that representational quality.”

C4. The Board believes that, in part, those concerns result because there is limited guidance for applying the fair value measurement objective in GAAP. The guidance that currently exists has evolved piecemeal over time and is dispersed among the accounting pronouncements that require fair value measurements. Differences in that

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<sup>24</sup>In July 2003, the Securities and Exchange Commission (SEC) published, “Study Pursuant to Section 108(d) of the Sarbanes-Oxley Act of 2002 on the Adoption by the United States Financial Reporting System of a Principles-Based Accounting System,” which encouraged a move to more “objectives-oriented” accounting standards.

guidance have created inconsistencies that have added to the complexity in GAAP. There also is limited conceptual guidance for addressing measurement issues in the Board's conceptual framework.

C5. In June 2003, the Board added the fair value measurement project to its agenda to address fair value measurement issues broadly.<sup>25</sup> At that time, the Board agreed that, conceptually, the definition of fair value and its application in GAAP should be the same for all assets and liabilities. This Statement is the result of that project. This Statement defines fair value, establishes a framework for measuring fair value, and expands disclosures about fair value measurements. This Statement also simplifies and codifies the related guidance that currently exists for developing fair value measurements, eliminating differences that have added to the complexity in GAAP. This Statement applies under other accounting pronouncements that require or permit fair value measurements, the Board having previously concluded in those pronouncements that fair value is the relevant measurement attribute. This Statement does not require any new fair value measurements.

C6. In June 2004, the Board issued an Exposure Draft, *Fair Value Measurements*, and received comment letters from nearly 100 respondents. In September 2004, the Board held public roundtable meetings with some of those respondents to discuss significant issues raised in the comment letters. In October 2005, the Board issued a proposed FASB Staff Position (FSP) FAS 133-a, "Accounting for Unrealized Gains (Losses) Relating to Derivative Instruments Measured at Fair Value under Statement 133," to address related practice issues under EITF Issue No. 02-3, "Issues Involved in Accounting for Derivative Contracts Held for Trading Purposes and Contracts Involved in Energy Trading and Risk Management Activities," raised by respondents to the Exposure Draft. (See paragraphs C10–C17.) The Board received comment letters from 25 respondents (principally, financial institutions).

C7. In developing this Statement, the Board considered comments from respondents to the Exposure Draft and to proposed FSP FAS 133-a, as well as input from the Valuation Resource Group, the Financial Accounting Standards Advisory Council, the User Advisory Council, members of the Investor Task Force, and other interested parties. In response, the Board reconsidered and/or clarified certain aspects of the proposals in the Exposure Draft.

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<sup>25</sup>The Board has a separate project on its agenda to improve its conceptual framework.

## Scope

### Share-Based Payment Transactions

C8. Accounting pronouncements that require fair value measurements but that are excluded from the scope of this Statement are limited to FASB Statement No. 123 (revised 2004), *Share-Based Payment*, and its related interpretive accounting pronouncements that address share-based payment transactions. The fair value measurement objective in Statement 123(R) is generally consistent with the fair value measurement objective in this Statement. However, for certain share-based payment transactions with employees, the measurements at the grant date are fair-value-based measurements, not fair value measurements. Although some measurements in Statement 123(R) are fair value measurements, the Board decided for practical reasons to exclude Statement 123(R) in its entirety from the scope of this Statement.

### Leasing Transactions

C9. In the Exposure Draft, the Board decided to exclude from the scope of this Statement FASB Statement No. 13, *Accounting for Leases*, and other accounting pronouncements that require fair value measurements for leasing transactions. At that time, the Board was concerned that applying the fair value measurement objective in this Statement to leasing transactions could have unintended consequences when considered together with longstanding valuation practices common within the leasing industry. The Board decided to defer consideration of fair value measurement issues specific to those transactions. However, respondents indicated that the fair value measurement objective for leasing transactions is generally consistent with the fair value measurement objective in this Statement and that the guidance in this Statement should apply for the fair value measurements required for those transactions. Others in the leasing industry subsequently affirmed that view. Based on that input, the Board decided to include those accounting pronouncements in the scope of this Statement.

### EITF Issue 02-3

C10. In the Exposure Draft, the Board decided to exclude from the scope of this Statement the guidance in footnote 3 of Issue 02-3, which stated:

The FASB staff believes that, in the absence of (a) quoted market prices in an active market, (b) observable prices of other current market transactions, or (c) other observable data supporting a valuation technique, the transaction price represents the best information available with which to estimate fair value at the inception of the arrangement. Therefore, in the

FASB staff's view an entity should not recognize an unrealized gain or loss at inception of a derivative instrument unless the fair value of that instrument is obtained from a quoted market price in an active market or is otherwise evidenced by comparison to other observable current market transactions or based on a valuation technique incorporating observable market data. For example, a valuation technique that includes extrapolated price curves with little or no observable market inputs for any significant duration of the instrument should not result in an initial fair value estimate that differs from the transaction price for the instrument taken as a whole, because, in this example, the transaction price is the best evidence of the instrument's fair value at that point in time.

C11. The guidance in footnote 3 of Issue 02-3 applied for derivatives (and other instruments measured at fair value at initial recognition under FASB Statement No. 133, *Accounting for Derivative Instruments and Hedging Activities*). That guidance precluded immediate recognition in earnings of an unrealized gain or loss, measured as the difference between the transaction price and the fair value of the instrument at initial recognition, if the fair value of the instrument was determined using significant unobservable inputs. However, Issue 02-3 did not provide guidance for when to subsequently recognize that unrealized gain or loss in earnings. As a result, practice was diverse with regard to both the method and timing of revenue recognition. For example, some entities recognized the unrealized gain or loss in earnings when the fair value of the instrument was observable (generally, at or near the end of the contract). Other entities amortized the unrealized gain or loss in earnings over the term of the instrument. In the Exposure Draft, the Board acknowledged that issue but decided not to address that issue in this Statement because it raised recognition issues similar to those that were being addressed in its revenue recognition project.

C12. Respondents disagreed with that scope exclusion. They said that for many entities, in particular, financial institutions, Issue 02-3 is significant and that the Board should address related issues in this Statement, focusing on potential inconsistencies between the guidance in footnote 3 of Issue 02-3 and the related guidance proposed in the Exposure Draft. In response, the Board decided to address those issues separately in proposed FSP FAS 133-a.

C13. In proposed FSP FAS 133-a, the Board decided that an instrument should be measured at fair value under Statement 133 using the guidance in this Statement and that an unrealized gain or loss should not be recognized in earnings until a minimum reliability threshold for the measurement is met. In reaching that decision, the Board concluded that for some entities, in particular, securities dealers that transact in different markets with different counterparties, the transaction price (an entry price) might not

represent the fair value of the instrument (an exit price) at initial recognition. The Board agreed that, conceptually, an unrealized gain or loss at initial recognition should be immediately recognized in earnings. However, the Board observed that if the fair value of the instrument is measured using significant unobservable inputs, some (or all) of the unrealized gain or loss might represent measurement error, raising concerns about the reliability of the measurement and the effect of the measurement on earnings. Therefore, the minimum reliability threshold would have precluded recognition in earnings of an unrealized gain or loss at initial recognition if the fair value of the instrument is measured using significant unobservable inputs. Instead, the unrealized gain or loss at initial recognition would have been recognized as a deferred credit or debit, separate from the instrument.

C14. Respondents to proposed FSP FAS 133-a generally agreed that the proposed FSP would represent an improvement over the related guidance in Issue 02-3, largely because an instrument would be measured at its fair value at initial recognition and in all subsequent periods. However, many of those respondents expressed concerns that the minimum reliability threshold approach for revenue recognition would add to the complexity in GAAP. They indicated that if the measurement objective is fair value, then financial reporting should reflect that measurement and the consequences of using that measurement.

C15. In response, the Board met with some respondents to develop an alternative approach focusing on expanded disclosures about fair value measurements using significant unobservable inputs and the effect of the measurements on earnings for the period. The Board discussed that alternative disclosure approach with certain users of financial statements, including members of the Investor Task Force that concentrate on the investment banking, energy trading, and insurance industries, and members of the User Advisory Council. Those users generally supported that disclosure approach (over the minimum reliability threshold approach). In particular, they indicated that the expanded disclosures would allow users of financial statements to make more informed judgments and adjustments to their own models.

C16. Based on the input received, the Board decided not to impose the minimum reliability threshold in proposed FSP FAS 133-a. The Board agreed that the fair value measurement objective in this Statement should apply for fair value measurements at initial recognition under Statement 133 (an exit price objective). Consistent with that objective, this Statement clarifies that the measurements should be adjusted for risk, that is, the amount market participants would demand because of the risk (uncertainty) inherent in a particular valuation technique used to measure fair value (such as a pricing model) and/or the risk inherent in the inputs to the valuation technique (a risk premium notion). Accordingly, a measurement (for example, a “mark-to-model” measurement)

that does not include an adjustment for risk would not represent a fair value measurement if market participants would include one in pricing the related asset or liability.

C17. To improve transparency in financial reporting, the Board decided to require expanded disclosures about fair value measurements using significant unobservable inputs and the effects of such measurements on earnings. This Statement includes those expanded disclosure requirements (for all assets and liabilities measured at fair value on a recurring basis using significant unobservable inputs) and nullifies the guidance in footnote 3 of Issue 02-3.

#### **Statement 114**

C18. In the Exposure Draft, the Board decided to exclude FASB Statement No. 114, *Accounting by Creditors for Impairment of a Loan*, from the scope of this Statement. The Board clarified that the measurement for impaired loans, determined using a present value technique, is not a fair value measurement. Respondents agreed. However, they noted that the practical expedient in Statement 114 (observable market price or the fair value of collateral if the loan is collateral-dependent) is a fair value measurement. They said that when the practical expedient is used, the guidance in this Statement should apply. The Board agreed and decided to include Statement 114 in the scope of this Statement as it relates to the practical expedient.

#### **Opinion 21**

C19. In this Statement, the Board affirmed that the measurement for receivables and payables in APB Opinion No. 21, *Interest on Receivables and Payables*, determined using a present value technique, is a fair value measurement. The discount rate for contractual (promised) cash flows described in that Opinion (rate commensurate with the risk) embodies the same notion as the discount rate used in the traditional approach (or discount rate adjustment technique) described in FASB Concepts Statement No. 7, *Using Cash Flow Information and Present Value in Accounting Measurements*, and clarified in this Statement. Paragraph 13 of Opinion 21 explains:

The objective is to approximate the rate which would have resulted if an independent borrower and an independent lender had negotiated a similar transaction under comparable terms and conditions with the option to pay the cash price upon purchase or to give a note for the amount of the purchase which bears the prevailing rate of interest to maturity.

C20. Accordingly, the guidance for using present value techniques to measure fair value in this Statement applies for the measurements required under Opinion 21. It also applies for the similar measurements required under other accounting pronouncements.

### **Practicability Exceptions**

C21. The Board observed that some of the accounting pronouncements within the scope of this Statement permit practicability exceptions to fair value measurements in specified circumstances. Those practicability exceptions include the following:

- a. The use of a transaction price (an entry price) to measure fair value (an exit price) at initial recognition (guarantees under FASB Interpretation No. 45, *Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others*, and financial assets and liabilities under FASB Statement No. 140, *Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities*)
- b. An exemption to the requirement to measure fair value if it is not practicable to do so (financial instruments under FASB Statement No. 107, *Disclosures about Fair Value of Financial Instruments*, and financial assets obtained and financial liabilities incurred in a sale under Statement 140 and EITF Issue No. 85-40, "Comprehensive Review of Sales of Marketable Securities with Put Arrangements")
- c. An exemption to the requirement to measure fair value if fair value is not reasonably determinable (nonmonetary assets under APB Opinion No. 29, *Accounting for Nonmonetary Transactions*, FASB Statement No. 153, *Exchanges of Nonmonetary Assets*, and EITF Issue No. 99-17, "Accounting for Advertising Barter Transactions"; asset retirement obligations under FASB Statement No. 143, *Accounting for Asset Retirement Obligations*, and FASB Interpretation No. 47, *Accounting for Conditional Asset Retirement Obligations*; restructuring obligations under FASB Statement No. 146, *Accounting for Costs Associated with Exit or Disposal Activities*; and participation rights under FASB Statements No. 87, *Employers' Accounting for Pensions*, and No. 106, *Employers' Accounting for Postretirement Benefits Other Than Pensions*)
- d. An exemption to the requirement to measure fair value if fair value cannot be measured with sufficient reliability (contributions under FASB Statement No. 116, *Accounting for Contributions Received and Contributions Made*, and AICPA Audit and Accounting Guide, *Not-for-Profit Organizations*)
- e. The use of certain of the measurement methods referred to in paragraph 37 of FASB Statement No. 141, *Business Combinations*, that allow measurements other than fair value for certain assets acquired and liabilities assumed in a business combination.

C22. The Board acknowledged the inconsistencies created by those practicability exceptions. However, the Board decided for practical reasons not to address those inconsistencies in this Statement. The Board is addressing issues relating to some practicability exceptions in other agenda projects (for example, its business combinations project). Other practicability exceptions raise issues about what to measure at fair value that are beyond the scope of this Statement.

### **Other Similar Measurements**

C23. This Statement does not apply under accounting pronouncements that permit measurements that are based on, or otherwise use, vendor-specific objective evidence of fair value. Those accounting pronouncements include AICPA Statement of Position 97-2, *Software Revenue Recognition*, as modified by AICPA Statement of Position 98-9, *Modification of SOP 97-2, Software Revenue Recognition, With Respect to Certain Transactions*, and EITF Issue No. 00-21, “Revenue Arrangements with Multiple Deliverables.” In those accounting pronouncements, vendor-specific objective evidence of fair value refers to the price for a deliverable established by the reporting entity. Issue 00-21 further refers to the price for a deliverable established by a third-party vendor as a practical expedient to vendor-specific objective evidence of fair value. Conceptually, vendor-specific objective evidence of fair value is a measurement determined based on a transaction price (an entry price) that is different from a fair value measurement (an exit price), whether considered from the perspective of the reporting entity or a third-party vendor (as a practical expedient).

C24. This Statement also does not apply for the market value measurement that results when measuring inventories at the lower of cost or market under ARB No. 43, Chapter 4, “Inventory Pricing.” ARB 43, Chapter 4, places upper and lower limits on the measurement that may not result in a fair value measurement.

### **Definition of Fair Value**

C25. The definition of fair value in this Statement retains the exchange price notion contained, either explicitly or implicitly, in earlier definitions of fair value. However, this Statement clarifies that the exchange price is the price in an orderly transaction between market participants to sell the asset or transfer the liability in the principal (or most advantageous) market for the asset or liability. The Board affirmed that the transaction to sell the asset or transfer the liability is an orderly transaction, not a forced transaction (for example, if the seller is experiencing financial difficulty), that assumes exposure to the market for a period prior to the measurement date to allow for information dissemination and marketing in order to transact at the most advantageous price for the asset or liability at the measurement date. To convey that notion more

clearly, the Board revised the definition of fair value in this Statement to refer to an orderly transaction, as do other definitions used in valuations for purposes other than financial reporting that are similar to fair value (for example, fair market value).

C26. The transaction to sell the asset or transfer the liability is a hypothetical transaction at the measurement date, considered from the perspective of a market participant that holds the asset or owes the liability. Therefore, the objective of a fair value measurement is to determine the price that would be received for the asset or paid to transfer the liability at the measurement date, that is, an exit price. The Board concluded that an exit price objective is appropriate because it embodies current expectations about the future inflows associated with the asset and the future outflows associated with the liability from the perspective of market participants. The emphasis on inflows and outflows is consistent with the definitions of assets and liabilities in FASB Concepts Statement No. 6, *Elements of Financial Statements*. Paragraph 25 of Concepts Statement 6 defines *assets* in terms of future economic benefits (future inflows). Paragraph 35 of Concepts Statement 6 defines *liabilities* in terms of future sacrifices of economic benefits (future outflows).

#### **Principal (or Most Advantageous) Markets**

C27. The Exposure Draft emphasized within Level 1 of the fair value hierarchy that the price in the most advantageous market for the asset or liability should be used to measure the fair value of the asset or liability. The most advantageous market is the market in which the reporting entity would sell the asset or transfer the liability with the price that maximizes the amount that would be received for the asset or minimizes the amount that would be paid to transfer the liability, considering transaction costs in the respective markets. The Board concluded that a most advantageous market approach is reasonable based on the assumption that the goal of most entities is to maximize profits or net assets. The most advantageous market approach embodies both the buying side and the selling side of rational economic behavior and is consistent with normal profit motivations.

C28. Respondents generally agreed with that most advantageous market approach. However, some respondents interpreted the related guidance within Level 1 as requiring the use of prices in most advantageous markets over prices in principal markets, referring to possible conflicts with ASR No. 118, *Accounting for Investment Securities by Registered Investment Companies*, and its principal market approach for registered funds. They noted that an approach that prioritizes prices in most advantageous markets over prices in principal markets would not be cost effective because it would require continuous evaluations of prices for multiple assets and liabilities as a

basis for determining which of those prices are the most advantageous at the measurement date. The Board agreed that its intent was not to require that entities continuously search across all possible markets in which transactions for the related asset or liability can be observed for the most advantageous price for the asset or liability. To convey its intent more clearly, the Board clarified its view that generally the principal market for an asset or liability (the market in which the reporting entity would sell the asset or transfer the liability with the greatest volume and level of activity for the asset or liability) will represent the most advantageous market for the asset or liability. Accordingly, this Statement specifies that if there is a principal market for the asset or liability (determined under ASR 118 or otherwise), the fair value measurement should represent the price in that market (whether observable or otherwise determined using a valuation technique), even if the price in a different market is potentially more advantageous at the measurement date.

C29. Some respondents further indicated that to achieve consistency in applying the fair value measurement objective in this Statement, the principal (or most advantageous) market approach should not be limited to Level 1; it is a general principle that should apply broadly. The Board agreed and decided to expand the principal (or most advantageous) market approach so that it applies broadly. The Board observed that because different entities (and operating units within those entities) with different activities transact in different markets, the principal (or most advantageous) market for the same asset or liability might be different for different entities. Because financial reporting is from the perspective of the reporting entity, the Board determined that an exit price should be determined based on the interaction of market participants (buyers and sellers) in the principal (or most advantageous) market considered from the perspective of the reporting entity, thereby allowing for differences between and among entities.

C30. The Board affirmed that the price in the principal (or most advantageous) market used to measure the fair value of an asset or liability should not be adjusted for transaction costs. Transaction costs refer to the incremental direct costs to transact in the principal (or most advantageous) market for the asset or liability, similar to cost to sell as defined in paragraph 35 of FASB Statement No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*, and may differ, depending on how the reporting entity transacts. In other words, transaction costs are not an attribute of an asset or liability.

C31. In response to related issues raised by some respondents, the Board clarified that transaction costs are different from transportation costs, that is, the costs that would be incurred to transport the asset or liability to (or from) its principal (or most advantageous) market. This Statement clarifies that if location is an attribute of the asset

or liability (for example, a commodity), the price in the principal (or most advantageous) market used to measure the fair value of the asset or liability should be adjusted for those costs.

### **Market Participants**

C32. This Statement emphasizes that a fair value measurement is a market-based measurement, not an entity-specific measurement. Therefore, a fair value measurement should be determined based on the assumptions that market participants—buyers and sellers in the principal (or most advantageous) market for the asset or liability—would use in pricing the asset or liability. Paragraph 26 of Concepts Statement 7 explains:

Among their many functions, markets are systems that transmit information in the form of prices. Marketplace participants attribute prices to assets and, in doing so, distinguish the risks and rewards of one asset from those of another. Stated differently, the market’s pricing mechanism ensures that unlike things do not appear alike and that like things do not appear to be different (a qualitative characteristic of accounting information). An observed market price encompasses the consensus view of all marketplace participants about an asset or liability’s utility, future cash flows, the uncertainties surrounding those cash flows, and the amount that marketplace participants demand for bearing those uncertainties.

C33. To convey more clearly the idea of a measurement that is made from the perspective of market participants, this Statement clarifies the “willing parties” referred to in earlier definitions of fair value in the context of market participants, referring to buyers and sellers in the principal (or most advantageous) market for the asset or liability that are independent of the reporting entity (unrelated), knowledgeable, and both able and willing to transact.

C34. In that context, some respondents questioned the extent to which market participants would be expected to be knowledgeable, referring to markets that are characterized by information asymmetry, where some market participants have information about an asset or liability that is not available to other market participants. The Board agreed that it would be reasonable to presume that a market participant that is both able and willing to transact for the asset or liability would undertake efforts necessary to become sufficiently knowledgeable about the asset or liability based on available information, including information obtained through usual and customary due diligence efforts, and would factor any related risk into the fair value measurement.

## **Application to Assets**

C35. For an asset, a fair value measurement assumes the highest and best use of the asset by market participants.

### ***Highest and Best Use***

C36. Highest and best use is a valuation concept used to value many assets (for example, real estate). In broad terms, the highest and best use of an asset refers to the use of an asset that would maximize the fair value of the asset or the group of assets in which the asset would be used by market participants. Highest and best use is determined based on the use of the asset by market participants, even if the intended use of the asset by the reporting entity is different. Paragraph 32(a) of Concepts Statement 7 explains:

The entity's managers might intend a different use or settlement than that anticipated by others. For example, they might intend to operate a property as a bowling alley, even though others in the marketplace consider its highest and best use to be a parking lot.

C37. This Statement incorporates that highest-and-best-use concept as a basis for selecting the valuation premise that should be used to measure the fair value of the asset. If the highest and best use of an asset is in-use, the fair value of the asset would be measured using an in-use valuation premise, reflecting the price that would be received in a current transaction to sell the asset assuming that the asset would be used with other assets as a group and that those assets would be available to market participants. If the highest and best use of an asset is in-exchange, the fair value of the asset would be measured using an in-exchange valuation premise, reflecting the price that would be received in a current transaction to sell the asset standalone.

C38. In the context of the related guidance included in the Exposure Draft, some respondents referred to possible conflicts between the in-use valuation premise and the exchange notion encompassed within the definition of fair value. In this Statement, the Board clarified that the exchange notion applies regardless of the valuation premise used to measure the fair value of an asset. Whether using an in-use or an in-exchange valuation premise, the measurement is a market-based measurement determined based on the use of an asset by market participants, not a value determined based solely on the use of an asset by the reporting entity (a value-in-use or entity-specific measurement).

## **Application to Liabilities**

C39. For a liability, a fair value measurement assumes that the liability is transferred to a market participant at the measurement date and that the nonperformance risk relating to that liability (that is, the risk that the obligation will not be fulfilled) is the same before and after its transfer.

### *The Transfer*

C40. Because the liability is transferred to a market participant, the liability continues; it is not settled with the counterparty. The Board acknowledged that in some cases, the reporting entity might not have the intent to transfer the liability to a third party. For example, the reporting entity might have advantages (or disadvantages) relative to the market that would make it more (or less) beneficial for the reporting entity to perform or otherwise settle the liability using its own internal resources. However, the Board agreed that the fair value of the liability from the perspective of a market participant is the same regardless of how the reporting entity intends to settle the liability. Conceptually, a fair value measurement provides a market benchmark to use as a basis for assessing the reporting entity's advantages (or disadvantages) in performance or settlement relative to the market. Specifically, when a liability is measured at fair value, the relative efficiency of the reporting entity in settling the liability using its own internal resources appears in earnings over the course of its settlement, not before.

C41. In the context of both assets and liabilities, paragraph 33 of Concepts Statement 7 explains:

If the entity measures an asset or liability at fair value, its comparative advantage or disadvantage will appear in earnings as it realizes assets or settles liabilities for amounts different [from] fair value. The effect on earnings appears when the advantage is employed to achieve cost savings or the disadvantage results in excess costs. In contrast, if the entity measures an asset or liability using a measurement other than fair value, its comparative advantage or disadvantage is embedded in the measurement of the asset or liability at initial recognition. If the offsetting entry is to revenue or expense, measurements other than fair value cause the future effects of this comparative advantage or disadvantage to be recognized in earnings at initial measurement.

### *Nonperformance Risk and Credit Standing*

C42. Nonperformance risk includes (but may not be limited to) the reporting entity's own credit risk. In the Exposure Draft, the Board concluded, as it did in Concepts Statement 7, that a fair value measurement for a liability always considers the credit risk of the entity obligated to perform. Those who might hold the reporting entity's obligations as assets would consider the effect of the entity's credit risk in determining the prices they would be willing to pay. Therefore, this Statement clarifies that a fair value measurement for a liability should consider the effect of the reporting entity's own credit risk (credit standing) on the fair value of the liability in all periods in which the liability is measured at fair value.

C43. Respondents agreed that, conceptually, the effect of the reporting entity's own credit standing should be considered in all liability measurements at fair value. However, they expressed concerns about requiring that the reporting entity consider the effect of changes in its credit standing in liability remeasurements at fair value, noting that related issues are not clearly and consistently addressed in GAAP (including Statements 107 and 133).

C44. Paragraph 68 of Statement 107 states:

The Board acknowledges that, as for assets with no quoted prices, variations in the methods used to estimate the fair value of liabilities with no quoted prices might reduce the comparability of fair value information among entities. Some entities will estimate fair value by using an incremental rate of borrowing that considers changes in an entity's own credit risk, while others will use a settlement rate that ignores at least part of those credit risk changes. However, the Board concluded that it should not, at this time, prescribe a single method to be used for all unquoted liabilities.

C45. Similarly, paragraph 316 of Statement 133 states:

Some respondents to the Exposure Draft noted that Statement 107 permits an entity to choose whether to consider changes in its own creditworthiness in determining the fair value of its debt and asked for further guidance on that issue. The definition of fair value in Statement 125 says that in measuring liabilities at fair value by discounting estimated future cash flows, an objective is to use discount rates at which those liabilities could be settled in an arm's-length transaction. However, the FASB's pronouncements to date have not broadly addressed

whether changes in a debtor's creditworthiness after incurrence of a liability should be reflected in measuring its fair value. Pending resolution of the broad issue of the effect of a debtor's creditworthiness on the fair value of its liabilities, the Board decided to use the definition in Statement 125 but not to provide additional guidance on reflecting the effects of changes in creditworthiness.

C46. Respondents' concerns focused on the counterintuitive and potentially confusing reporting that could result from including the effect of changes in the reporting entity's credit standing in liability remeasurements at fair value ("gains" for credit deterioration and "losses" for credit improvements). Respondents acknowledged that liabilities currently remeasured at fair value on a regular basis are limited largely to derivative liabilities under Statement 133. However, they stated that issues related to credit standing and liability remeasurements will become more pervasive as more liabilities are remeasured at fair value on a regular basis (referring to other agenda projects, including the fair value option project). Respondents urged the Board to address related issues in this Statement.

C47. In its redeliberations, the Board noted that in Concepts Statement 7, it considered issues related to credit standing and liability remeasurements similar to those referred to by respondents. Paragraphs 83–88 of Concepts Statement 7 explain:

The role of an entity's credit standing in the accounting measurement of its liabilities has been a controversial question among accountants. The entity's credit standing clearly affects the interest rate at which it borrows in the marketplace. The initial proceeds of a loan, therefore, always reflect the entity's credit standing at that time. Similarly, the price at which others buy and sell the entity's loan includes their assessment of the entity's ability to repay. . . . However, some have questioned whether an entity's financial statements should reflect the effect of its credit standing (or changes in credit standing).

Some suggest that the measurement objective for liabilities is fundamentally different from the measurement objective for assets. In their view, financial statement users are better served by liability measurements that focus on the entity's obligation. They suggest a measurement approach in which financial statements would portray the present value of an obligation such that two entities with the same obligation but different credit standing would report the same carrying amount. Some existing accounting pronouncements take this approach, most notably FASB Statements No. 87, *Employers' Accounting for Pensions*, and No. 106, *Employers' Accounting for Postretirement Benefits Other Than Pensions*.

However, there is no convincing rationale for why the initial measurement of some liabilities would necessarily include the effect of credit standing (as in a loan for cash) while others might not (as in a warranty liability or similar item). Similarly, there is no rationale for why, in initial or fresh-start measurement, the recorded amount of a liability should reflect something other than the price that would exist in the marketplace. Consistent with its conclusions on fair value (refer to paragraph 30), the Board found no rationale for taking a different view in subsequent fresh-start measurements of an existing asset or liability than would pertain to measurements at initial recognition.

Some argue that changes in an entity's credit standing are not relevant to users of financial statements. In their view, a fresh-start measurement that reflects changes in credit standing produces accounting results that are confusing. If the measurement includes changes in credit standing, and an entity's credit standing declines, the fresh-start measurement of its liabilities declines. That decline in liabilities is accompanied by an increase in owners' equity, a result that they find counterintuitive. How, they ask, can a bad thing (declining credit standing) produce a good thing (increased owners' equity)?

Like all measurements at fair value, fresh-start measurement of liabilities can produce unfamiliar results when compared with reporting the liabilities on an amortized basis. A change in credit standing represents a change in the relative positions of the two classes of claimants (shareholders and creditors) to an entity's assets. If the credit standing diminishes, the fair value of creditors' claims diminishes. The amount of shareholders' residual claim to the entity's assets may appear to increase, but that increase probably is offset by losses that may have occasioned the decline in credit standing. Because shareholders usually cannot be called on to pay a corporation's liabilities, the amount of their residual claims approaches, and is limited by, zero. Thus, a change in the position of borrowers necessarily alters the position of shareholders, and vice versa.

The failure to include changes in credit standing in the measurement of a liability ignores economic differences between liabilities. Consider the case of an entity that has two classes of borrowing. Class One was transacted when the entity had a strong credit standing and a correspondingly low interest rate. Class Two is new and was transacted under the entity's current lower credit standing. Both classes trade in the marketplace based on the entity's current credit standing. If the two liabilities are subject to fresh-start measurement, failing to include changes in the

entity's credit standing makes the classes of borrowings seem different—even though the marketplace evaluates the quality of their respective cash flows as similar to one another.

C48. The Board further noted that in the amendment to IAS 39, *Financial Instruments: Recognition and Measurement—The Fair Value Option*, the International Accounting Standards Board (IASB) considered similar issues in the context of a financial liability. Paragraph BC89 of the IAS 39 amendment explains that in reaching its decision to include credit risk relating to a financial liability in the measurement of that liability, the IASB noted that “. . . credit risk affects the value at which liabilities could be repurchased or settled. Accordingly, the fair value of a financial liability reflects the credit risk relating to that liability.”

C49. In its redeliberations, the Board affirmed that, conceptually, credit standing is an essential component of a fair value measurement. A measurement that does not consider the effect of the reporting entity's credit standing is not a fair value measurement. The Board acknowledged the practical concerns about credit standing and liability remeasurements at fair value expressed by respondents. Some Board members share those concerns, especially considering situations in which the reporting entity is experiencing financial difficulty and reports gains resulting from credit deterioration that cannot be immediately realized. However, the Board agreed that those concerns derive from a threshold issue that relates principally to the selection of the appropriate measurement attribute for liability remeasurements. The Board plans to continue to address the issue of which measurement attribute should be required for liability remeasurements in individual accounting pronouncements on a project-by-project basis.

#### **Interaction between Fair Value and Fair Market Value**

C50. The Board agreed that the measurement objective encompassed in the definition of fair value used for financial reporting purposes is generally consistent with similar definitions of fair market value used for valuation purposes. For example, the definition of fair market value in Internal Revenue Service Revenue Ruling 59-60 (the legal standard of value in many valuation situations) refers to “the price at which property would change hands between a willing buyer and a willing seller when the former is not under any compulsion to buy and the latter is not under any compulsion to sell, both parties having reasonable knowledge of relevant facts.” However, the Board observed that the definition of fair market value relates principally to assets (property). Further, the definition has a significant body of interpretive case law, developed in the context of tax regulation. Because such interpretive case law, in the context of financial

reporting, may not be relevant, the Board chose not to adopt the definition of fair market value, and its interpretive case law, for financial reporting purposes.

### **Fair Value at Initial Recognition**

C51. Respondents indicated that the guidance in the Exposure Draft was ambiguous about when a price in an actual transaction that involves the reporting entity should be used to measure the fair value of an asset or liability at initial recognition. Many of those respondents referred to related practice issues under Issue 02-3 (and its guidance in footnote 3 for fair value measurements at initial recognition). In its redeliberations, the Board considered that issue largely in the context of the related guidance in paragraphs 7 and 27 of Concepts Statement 7, which state:

At initial recognition, the cash or equivalent amount paid or received (historical cost or proceeds) is usually assumed to approximate fair value, absent evidence to the contrary.

A transaction in the marketplace—an exchange for cash at or near to the date of the transaction—is the most common trigger for accounting recognition, and accountants typically accept actual exchange prices as fair value in measuring those transactions, absent persuasive evidence to the contrary. Indeed, the usual condition for using a measurement other than the exchange price is a conclusion that the stated price is not representative of fair value. [Footnote reference omitted.]

C52. In this Statement, the Board clarified that in situations in which the reporting entity acquires an asset or assumes a liability in an exchange transaction, the transaction price represents the price paid to acquire the asset or received to assume the liability (an entry price). The fair value of the asset or liability represents the price that would be received to sell the asset or paid to transfer the liability (an exit price). Conceptually, entry and exit prices are different. Entities do not necessarily sell or otherwise dispose of assets at the prices paid to acquire them. Similarly, entities do not necessarily transfer liabilities at the prices paid to assume them. The Board agreed that in many cases the transaction price will equal the exit price and, therefore, represent the fair value of the asset or liability at initial recognition, but not presumptively (a change to Concepts Statement 7). This Statement includes examples of factors the reporting entity should consider in determining whether a transaction price represents the fair value of the asset or liability at initial recognition. The Board plans to consider those factors in assessing the appropriate measurement attribute at initial recognition in individual accounting pronouncements on a project-by-project basis.

## **Valuation Techniques**

C53. This Statement emphasizes that valuation techniques used to measure fair value should be consistent with the market approach, income approach, and/or cost approach. The related guidance in the Exposure Draft contained references to the use of “multiple” valuation techniques consistent with all three valuation approaches whenever the information necessary to apply those techniques is available without undue “cost and effort.” In its redeliberations, the Board reconsidered and/or clarified certain aspects of that guidance.

### **Single versus Multiple Valuation Techniques**

C54. Several respondents interpreted the related guidance in the Exposure Draft as requiring the use of multiple valuation techniques in all cases (except as otherwise indicated, for example, when valuing an asset or liability using quoted prices in an active market for identical assets or liabilities). They emphasized that in many cases, multiple valuation techniques would not be appropriate or cost beneficial. The Board affirmed that its intent was not to require the use of multiple valuation techniques. To convey its intent more clearly, the Board clarified that, consistent with existing valuation practice, valuation techniques that are appropriate in the circumstances and for which sufficient data are available should be used to measure fair value. This Statement does not specify the valuation technique that should be used in any particular circumstances. Determining the appropriateness of valuation techniques in the circumstances requires judgment.

C55. The Exposure Draft referred to the cost and effort involved in obtaining the information used in a particular valuation technique as a basis for determining whether to use that valuation technique. Some respondents pointed out that the most appropriate valuation technique also might be the most costly valuation technique and that cost and effort should not be a basis for determining whether to use that valuation technique. Moreover, a cost-and-effort criterion likely would not be consistently applied. The Board agreed and removed that cost-and-effort criterion from this Statement.

C56. The Board expects that in some cases, a single valuation technique will be used. In other cases, multiple valuation techniques will be used, and the results of those techniques evaluated and weighted, as appropriate, in determining fair value. The Board acknowledged that valuation techniques will differ, depending on the asset or liability and the availability of data. However, in all cases, the objective is to use the valuation technique (or combination of valuation techniques) that is appropriate in the circumstances and for which there are sufficient data.

## **Consistency Constraint**

C57. This Statement emphasizes the need for consistency in the valuation technique(s) used to measure fair value. This Statement does not preclude a change in the valuation technique used to measure fair value or its application (for example, a change in its weighting when multiple valuation techniques are used), provided that the change results in a measurement that is equally or more representative of fair value in the circumstances. The Board decided that absent an error (for example, in the selection and/or application of a valuation technique), revisions resulting from a change in the valuation technique used or its application should be accounted for as a change in accounting estimate in accordance with the provisions of FASB Statement No. 154, *Accounting Changes and Error Corrections*. The Board concluded that in those situations, the disclosure requirements in Statement 154 for a change in accounting estimate would not be cost beneficial. Therefore, those disclosures are not required.

## **Present Value Techniques**

C58. Valuation techniques consistent with the income approach include the present value techniques discussed in Concepts Statement 7, specifically, the (a) traditional approach (or discount rate adjustment technique) and (b) expected cash flow approach (or expected present value technique). In this Statement, the Board clarified aspects of the guidance for applying those present value techniques in Concepts Statement 7.

C59. Those clarifications focus principally on the adjustment for risk (systematic or nondiversifiable risk) when using an expected present value technique. The Board understands that because Concepts Statement 7 refers to the appropriate discount rate for expected cash flows as the risk-free interest rate, the related guidance could be interpreted as requiring that the adjustment for risk be reflected only in the expected cash flows. However, in many valuation situations, the adjustment for risk is reflected in the discount rate, that is, as an adjustment to the risk-free interest rate. The Board agreed that it was not its intent to preclude that approach. To convey its intent more clearly, the Board expanded the guidance in Concepts Statement 7 to clarify that when using an expected present value technique, the adjustment for risk may be reflected in either:

- a. The expected cash flows, in which case the risk-adjusted expected cash flows should be discounted at a risk-free interest rate (Method 1); or
- b. The discount rate, in which case the unadjusted expected cash flows should be discounted at a risk-adjusted discount rate, that is, the risk-free interest rate, adjusted for risk (Method 2).

C60. In its discussions, the Board acknowledged, as it did in paragraph 68 of Concepts Statement 7, that “. . . the appropriate risk premium consistent with fair value may be difficult to determine.” However, the Board decided that the potential difficulty of determining the appropriate risk premium is not, in and of itself, a sufficient basis for excluding that adjustment (in effect, permitting the use of no risk adjustment). Risk is an essential element of any present value technique. Therefore, a fair value measurement, using present value, should include an adjustment for risk if market participants would include one in pricing the related asset or liability.

C61. This Statement incorporates the related guidance in Concepts Statement 7, as clarified. (See Appendix B.) However, the Board decided not to revise Concepts Statement 7 in this project to reflect conforming changes to that guidance. Some respondents indicated that leaving the conceptual guidance in Concepts Statement 7 unchanged would create conflicts between the Concepts Statements and Level A GAAP that would be confusing. The Board acknowledged those concerns but concluded that it was not necessary to revise Concepts Statement 7 at this time. The Board will consider the need to revise Concepts Statement 7 in its conceptual framework project.

#### **Multiperiod Excess Earnings Method**

C62. In response to questions raised by some respondents, the Board clarified that valuation techniques consistent with the income approach also include the multiperiod excess earnings method discussed in the AICPA Practice Aid, *Assets Acquired in a Business Combination to Be Used in Research and Development Activities: A Focus on Software, Electronic Devices, and Pharmaceutical Industries* (Practice Aid). However, for in-process research and development (IPR&D), the Board observed that the related guidance in the Practice Aid could be interpreted as permitting a fair value measurement using an in-exchange valuation premise (to value the IPR&D standalone) in some situations in which this Statement would require a fair value measurement using an in-use valuation premise (to value the IPR&D within a group of assets). For example, that might be the case if, for competitive reasons, the reporting entity intends to hold (lock up) IPR&D acquired in a business combination that market participants would develop (and use within a group of assets). The Board agreed that the multiperiod excess earnings method should continue to be used under this Statement. However, consistent with the related guidance in this Statement, the valuation premise used for the fair value measurement should be determined based on the use of an asset by market participants, even if the intended use by the reporting entity is different.

## **Inputs to Valuation Techniques**

C63. In this Statement, *inputs* refer broadly to the assumptions that market participants would use in pricing the asset or liability, including assumptions about risk. The Board decided that a necessary input to a valuation technique is an adjustment for risk. The measurement should include an adjustment for risk whenever market participants would include one in pricing the related asset or liability (consistent with the risk premium notion in Concepts Statement 7, reconsidered in this Statement) so that the measurement reflects an exit price for the related asset or liability, that is, the price the reporting entity would receive (or pay) in a transaction to sell (or transfer) the related asset (or liability). In this Statement, the Board focused on the need to adjust for the risk inherent in a particular valuation technique used to measure fair value, such as a pricing model (model risk) and/or the risk inherent in the inputs to the valuation technique (input risk).

## **Fair Value Hierarchy**

C64. To increase consistency and comparability in fair value measurements and related disclosures, this Statement establishes a fair value hierarchy that prioritizes the inputs used to measure fair value into three broad levels, considering the relative reliability of the inputs. The availability of inputs might affect the valuation technique(s) used to measure fair value. However, the fair value hierarchy focuses on the inputs, not the valuation techniques, thereby requiring judgment in the selection and application of valuation techniques.

C65. Many respondents generally agreed that prioritizing the inputs used to measure fair value is important and that the fair value hierarchy provides a useful construct for considering the relative reliability of fair value measurements. However, several respondents urged the Board to revise the fair value hierarchy initially proposed in the Exposure Draft to convey more clearly a continuum of inputs. The principal concerns focused on the use of the fair value hierarchy as a framework for disclosures about fair value measurements. In response, the Board subsequently revised the fair value hierarchy, as discussed below.

### **Level 1 Inputs**

C66. Like the Exposure Draft, this Statement includes within Level 1 quoted prices (unadjusted) in active markets for identical assets or liabilities. The Board affirmed its conclusion in other accounting pronouncements that quoted prices in active markets

generally provide the most reliable evidence of fair value and should be used to measure fair value whenever available. For example, paragraph 57 of Statement 107 states:

The Board concluded that quoted market prices provide the most reliable measure of fair value. Quoted market prices are easy to obtain and are reliable and verifiable. They are used and relied upon regularly and are well understood by investors, creditors, and other users of financial information. In recent years, new markets have developed and some existing markets have evolved from thin to active markets, thereby increasing the ready availability of reliable fair value information.

C67. The Board also affirmed its decision in the Exposure Draft that a fair value measurement within Level 1 should be based on a quoted price in an active market that the reporting entity has the ability to access for the asset or liability at the measurement date. Because a quoted price, alone, forms the basis for the measurement, the access requirement within Level 1 limits discretion in pricing the asset or liability, including in situations in which there are multiple markets for the asset or liability with different prices and no single market represents a principal market for the asset or liability.

#### *Adjustments to Quoted Prices in Active Markets*

C68. The Exposure Draft emphasized that a quoted price (unadjusted) in an active market should be used to measure fair value whenever it is available. Some respondents interpreted the related guidance as requiring the use of a quoted price in an active market without regard to whether that price is readily available or representative of fair value. Those respondents referred to possible conflicts with ASR 118, which requires adjustments to a quoted price in those situations (fair value pricing). In its redeliberations, the Board affirmed that its intent was not to preclude adjustments to a quoted price if that price is not readily available or representative of fair value, noting that in those situations, the market for the particular asset or liability might not be active. To convey its intent more clearly, the Board clarified that in those situations, the fair value of the asset or liability should be measured using the quoted price, as adjusted, but within a lower level of the fair value hierarchy.

C69. A few respondents referred to situations in which an entity holds a large number of similar assets and liabilities (for example, debt securities) that are required to be measured at fair value and a quoted price in an active market is not readily accessible for each of those assets and liabilities. They indicated that in those situations, the fair value hierarchy should allow for practical considerations and trade-offs in selecting the valuation technique used to measure fair value within Level 1, considering the number

of assets and/or liabilities required to be measured in a financial reporting period and the timing of that reporting. The Board subsequently revised the guidance within Level 1 to allow for the use of an alternative pricing method that does not rely exclusively on quoted prices (for example, matrix pricing) as a practical expedient in the limited situations referred to. However, when the practical expedient within Level 1 is used, the fair value measurement is a lower level measurement.

C70. The Board observed that in some cases, significant events (for example, principal-to-principal transactions, brokered trades, or announcements) might occur after the close of a market but before the measurement date. In those cases, a quoted price in that market might not be representative of fair value at the measurement date. The Board affirmed its view in the Exposure Draft that the reporting entity need not undertake all possible efforts to obtain information about after-hours trading or news events. However, the reporting entity should not ignore information that is available at the reporting date (for example, a large change in the price in another market after the close of the principal market in which the asset or liability trades). The Board agreed that entities should establish and consistently apply a policy for identifying those events that might affect fair value measurements. However, if a quoted price is adjusted for new information, the fair value measurement is a lower level measurement.

### ***Financial Instruments***

C71. Prior to this Statement, the FASB, the AICPA Accounting Standards Executive Committee (AcSEC), the Securities and Exchange Commission (SEC), and others considered issues relating to fair value measurements involving financial instruments. The threshold issue focused on whether the appropriate unit of account for a block position in an instrument that trades in an active market is (a) the individual trading unit, where the fair value measurement would be determined as the product of the quoted price for the individual instrument times the quantity held ( $P \times Q$ ), or (b) the block, where the fair value measurement would be determined using the quoted price, adjusted because of the size of the position relative to trading volume (blockage factor).

C72. In other FASB Statements (including Statements 107 and 133, and FASB Statements No. 115, *Accounting for Certain Investments in Debt and Equity Securities*, and No. 124, *Accounting for Certain Investments Held by Not-for-Profit Organizations*), the Board decided that for a block, the fair value measurement should be based on the individual trading unit, determined using  $P \times Q$ . Therefore, those Statements preclude the use of a blockage factor, even if the normal trading volume for one day is

not sufficient to absorb the quantity held and placing orders to sell the position in a single transaction might affect the quoted price.

C73. Paragraph 58 of Statement 107 states:

Although many respondents to the 1990 and 1987 Exposure Drafts agreed with the usefulness of disclosing quoted market prices derived from active markets, some argued that quoted prices from thin markets do not provide relevant measures of fair value, particularly when an entity holds a large amount of a thinly traded financial instrument that could not be absorbed by the market in a single transaction. The Board considered this issue and reiterated its belief that quoted prices, even from thin markets, provide useful information because investors and creditors regularly rely on those prices to make their decisions. The Board noted that providing the liquidation value of a block of financial instruments is not the objective of this Statement. The Board also concluded that requiring the use of available quoted market prices would increase the comparability of the disclosures among entities.

C74. Similarly, paragraph 315 of Statement 133 states:

The definition of fair value requires that fair value be determined as the product of the number of trading units of an asset times a quoted market price if available [as required by Statement 107]. . . . Some respondents to the Exposure Draft indicated that the guidance in Statement 107 (and implicitly the definition of *fair value* in this Statement) should be revised to require or permit consideration of a discount in valuing a large asset position. They asserted that an entity that holds a relatively large amount (compared with average trading volume) of a traded asset and liquidates the entire amount at one time likely would receive an amount less than the quoted market price. Although respondents generally focused on a discount, holding a relatively large amount of an asset might sometimes result in a premium over the market price for a single trading unit. The Board currently believes that the use of a blockage factor would lessen the reliability and comparability of reported estimates of fair value.

C75. For broker-dealers and certain investment companies (investment companies other than registered funds subject to SEC reporting requirements that used blockage factors in financial statements for fiscal years ending on or before May 31, 2000), the AICPA Audit and Accounting Guides for those industries allowed an exception to the

requirement of other FASB pronouncements to use P×Q to measure the fair value of a block. Specifically, the Guides permitted a fair value measurement using a blockage factor, where appropriate.

C76. In developing this Statement, the Board decided to address that inconsistency within GAAP. The Board considered the earlier work completed by AcSEC through its Blockage Factor Task Force, which was formed in 2000 to address issues specific to the use of blockage factors (discounts) by broker-dealers and investment companies. Based on its discussions with industry representatives (broker-dealers, mutual funds, and other investment companies) and a review of relevant academic research and market data, the task force affirmed that discounts involving large blocks exist, generally increasing as the size of the block to be traded (expressed as a percentage of the daily trading volume) increases but that the methods for measuring the blockage factors (discounts) vary among entities and are largely subjective.

C77. In the Exposure Draft, the Board acknowledged the diversity in practice with respect to the methods for measuring blockage factors (discounts). However, the Board agreed that for entities that regularly buy and sell securities in blocks, the financial reporting that would result when using P×Q to measure the fair value of a block position would not be representationally faithful of the underlying business activities. In particular, if a block is purchased at a discount to the quoted price, a fair value measurement using P×Q would give the appearance of a gain upon buying the block, followed by a reported loss on subsequently selling the block (at a discount to the quoted price). At that time, the Board understood that for blocks held by broker-dealers, industry practice was to also sell the securities in blocks. In view of that selling practice (in blocks), the Board decided that this Statement should allow the exception to P×Q in the Guides to continue, thereby permitting the use of blockage factors by broker-dealers and certain investment companies that buy or sell securities in blocks.

C78. Many respondents, in particular, broker-dealers, agreed with that decision. However, during its redeliberations, the Board discussed the need for expanded disclosures about blocks measured using blockage factors with representative preparers (broker-dealers) and users (analysts that follow broker-dealers). Through those discussions, the Board learned that for blocks held by broker-dealers, industry practice is often to sell the securities in multiple transactions involving quantities that might be large but that are not necessarily blocks; that is, the securities could be sold at the quoted price for an individual trading unit. Because of that selling practice, the majority of the Board decided that there was no compelling reason to allow the exception to P×Q in the Guides to continue under this Statement, noting that revised IAS 39 includes

similar guidance in paragraph AG72, which states that “the fair value of a portfolio of financial instruments is the product of the number of units of the instrument and its quoted market price.”

C79. In reaching that decision, the majority of the Board affirmed its conclusions relating to the prohibition on the use of blockage factors in other FASB Statements. In particular, the Board emphasized that when a quoted price in an active market for a security is available, that price should be used to measure fair value without regard to an entity’s intent to transact at that price. Basing the fair value on the quoted price results in comparable reporting. Adjusting the price for the size of the position introduces management intent (to trade in blocks) into the measurement, reducing comparability. Following the reasoning used in Statement 107, the quoted price provides useful information because investors regularly rely on quoted prices for decision making. Also, the decision to exchange a large position in a single transaction at a price lower than the price that would be available if the position were to be exchanged in multiple transactions (in smaller quantities) is a decision whose consequences should be reported when that decision is executed. Until that transaction occurs, the entity that holds the block has the ability to effect the transaction either in the block market or in another market (the principal or more advantageous market for the individual trading unit).

C80. This Statement precludes the use of blockage factors and eliminates the exception to P×Q in the Guides for a financial instrument that trades in an active market (within Level 1). In other words, the unit of account for an instrument that trades in an active market is the individual trading unit. This Statement amends Statements 107, 115, 124, 133, and 140 to remove the similar unit-of-account guidance in those accounting pronouncements, which referred to a fair value measurement using P×Q for an instrument that trades in any market, including a market that is not active, for example, a thin market (within Level 2). In this Statement, the Board decided not to specify the unit of account for an instrument that trades in a market that is not active. The Board plans to address unit-of-account issues broadly in its conceptual framework project.

## **Level 2 Inputs**

C81. The Exposure Draft limited the inputs within Level 2 to quoted prices in active markets for similar assets or liabilities, adjusted for differences that are objectively determinable. Several respondents indicated that because all adjustments involve some degree of subjective judgment and estimation, Level 2 would be overly restrictive. The Board agreed and decided to broaden Level 2 to include all inputs other than quoted prices included within Level 1 that are observable for the asset or liability.

C82. Observable inputs within Level 2 include inputs that are directly observable for the asset or liability (including quoted prices for similar assets or liabilities) as well as inputs that are not directly observable for the asset or liability but that are derived principally from or corroborated by observable market data through correlation or by other means (market-corroborated inputs). The concept of market-corroborated inputs is intended to incorporate observable market data (such as interest rates and yield curves that are observable at commonly quoted intervals), based on an assessment of factors relevant to the asset or liability. The Board concluded that market-corroborated inputs are observable inputs and that fair value measurements using market-corroborated inputs (within Level 2) should be distinguished from fair value measurements using unobservable inputs (within Level 3).

### **Level 3 Inputs**

C83. The Exposure Draft included within a single level (Level 3) observable inputs other than quoted prices in active markets (for identical or similar assets or liabilities) together with all unobservable inputs (previously referred to as entity inputs). Several respondents observed that fair value measurements reported and disclosed within Level 3 would be overly broad. In particular, they indicated that the measurements would range widely in reliability and that including such a wide range in a single level could be misleading to users of financial statements. Some fair value measurements would be objectively determined (using quoted inputs other than prices), while other fair value measurements would be more subjectively determined (using unobservable inputs). The Board agreed and decided to limit Level 3 inputs to unobservable inputs.

C84. In reaching that decision, the Board affirmed its conclusion in other accounting pronouncements that unobservable inputs should be used to measure fair value to the extent that observable inputs are not available, allowing for situations in which there might be little, if any, market activity for the asset or liability at the measurement date. However, the fair value measurement objective remains the same—an exit price from the perspective of a market participant that holds the asset or owes the liability. Therefore, unobservable inputs should reflect the reporting entity's own assumptions about the assumptions market participants would use in pricing the asset or liability (including assumptions about risk) developed based on the best information available in the circumstances.

C85. The Board agreed that in many cases, the best information available with which to develop unobservable inputs might be the reporting entity's own data. The Board affirmed its view in Concepts Statement 7 (and other existing accounting pronouncements) that the reporting entity may use its own data to develop unobservable inputs, provided that there is no information reasonably available without undue cost and effort

that indicates that market participants would use different assumptions in pricing the asset or liability. Paragraph 38 of Concepts Statement 7 explains:

. . . an entity that uses cash flows in accounting measurements often has little or no information about some or all of the assumptions that marketplace participants would use in assessing the fair value of an asset or a liability. In those situations, the entity must necessarily use the information that is available without undue cost and effort in developing cash flow estimates. The use of an entity's own assumptions about future cash flows is compatible with an estimate of fair value, as long as there are no contrary data indicating that marketplace participants would use different assumptions. If such data exist, the entity must adjust its assumptions to incorporate that market information.

C86. In this Statement, the Board clarified that the reporting entity need not undertake all possible efforts to obtain information about the assumptions that market participants would use in pricing the asset or liability or otherwise establish the absence of contrary data indicating that market participants would use different assumptions. However, the reporting entity must not ignore information about market participant assumptions that is available within reasonable cost-benefit constraints.

C87. Within Level 3, unobservable inputs relevant to the asset or liability should be used as a basis for replicating the actions of market participants in a hypothetical transaction for the asset or liability at the measurement date. The Board understands that for some, a measurement using a hypothetical construct that relies on unobservable inputs raises concerns about the resulting fair value measurement. In particular, some believe that a hypothetical construct might not faithfully represent an actual economic phenomenon and, as such, would seem to be of questionable relevance to users of financial statements. Some Board members share those concerns. However, the Board agreed that concerns about fair value measurements that are predicated on hypothetical transactions in hypothetical markets derive from a threshold issue that relates principally to the selection of the appropriate measurement attribute, an area of focus in the Board's conceptual framework project. The Board plans to continue to address the issue of which measurement attribute should be required in individual accounting pronouncements on a project-by-project basis.

#### **Inputs Based on Bid and Ask Prices**

C88. The Board observed that in some situations, inputs might be determined based on bid and ask prices, for example, in a dealer market where the bid price represents the price the dealer is willing to pay and the ask price represents the price at which the

dealer is willing to sell. The related guidance in ASR 118 provides entities (investment companies and broker-dealers) with flexibility in selecting the bid-ask pricing method used to measure fair value. Accordingly, the practice that has evolved under ASR 118 is diverse.

C89. In the Exposure Draft, the Board agreed that a single bid-ask spread pricing method would maximize the consistency and comparability of fair value measurements within Level 1. At that time, the Board decided to require the use of bid prices for long positions (assets) and ask prices for short positions (liabilities), similar to the related guidance in paragraph BC99 of revised IAS 39, which states:

The Board confirmed the proposal in the Exposure Draft that the appropriate quoted market price for an asset held or liability to be issued is usually the current bid price and, for an asset to be acquired or liability held, the asking price. It concluded that applying mid-market prices to an individual instrument is not appropriate because it would result in entities recognising up-front gains or losses for the difference between the bid-ask price and the mid-market price.

C90. Respondents agreed that a single bid-ask spread pricing method would maximize the consistency and comparability of fair value measurements using bid and ask prices. However, many respondents stated that because different market participants transact at different prices within a bid-ask spread, the resulting measurements would not be relevant in all cases. Some of those respondents emphasized that for entities that enter into derivative instruments to manage risk, the bid-ask spread pricing method would create operational difficulties because many of those instruments are traded in active dealer markets and currently valued using other pricing methods (for example, mid-market prices or prices within a range of observable bid and ask prices). Other respondents indicated that the bid-ask spread pricing method within Level 1 would create inconsistencies between fair value measurements using bid and ask prices within Level 1 and fair value measurements using bid and ask prices within other levels of the fair value hierarchy. Respondents stated that this Statement should allow an approach consistent with the related guidance in ASR 118.

C91. In its redeliberations, the Board reconsidered the required bid-ask spread pricing method within Level 1. The Board decided that the price within the bid-ask spread that is most representative of fair value in the circumstances should be used to measure the fair value of the related asset or liability within all levels of the fair value hierarchy, provided that the price is consistently determined. In reaching that decision, the Board observed that in many situations, bid and ask prices establish the boundaries within which market participants would negotiate the price in the exchange for the related

asset or liability. The Board concluded that having clarified the fair value measurement objective in this Statement, entities should use judgment in meeting that objective. Accordingly, bid-ask spread pricing methods appropriate under ASR 118 are appropriate under this Statement. The use of bid prices for long positions (assets) and ask prices for short positions (liabilities) is permitted but not required.

C92. Because the Exposure Draft would have required the use of bid prices for long positions (assets) and ask prices for short positions (liabilities), the Board initially decided to specify the pricing for offsetting positions to preclude recognition of up-front gains or losses. Specifically, the Board decided to require the use of mid-market prices for the matched portion and bid and ask prices for the net open position, as appropriate, similar to the related guidance in paragraph BC100 of revised IAS 39. Because this Statement does not require the use of bid prices for long positions (assets) and ask prices for short positions (liabilities), the Board decided not to include in this Statement the guidance for offsetting positions in the Exposure Draft.

## **Disclosures**

C93. The Board observed that few of the accounting pronouncements that require fair value measurements also require disclosures about those measurements. Further, the required disclosures vary. The Board decided that having established a framework for measuring fair value, this Statement should require expanded disclosures about fair value measurements. Because at initial recognition many assets and liabilities are measured in the statement of financial position at amounts that approximate fair value (for example, in a business combination), the Board decided to limit the disclosures to fair value measurements in periods subsequent to initial recognition, whether the measurements are made on a recurring or nonrecurring basis.

C94. Some respondents disagreed with the Board's decision to include expanded disclosures about fair value measurements in this Statement. They indicated that, instead, the Board should develop a comprehensive disclosure framework and reconsider all related disclosures currently required under existing accounting pronouncements in the context of that framework. Some of those respondents further indicated that the Board should consider disclosures about fair value (and changes in fair value) in its project on financial statement presentation (formerly, financial performance reporting by business enterprises). In the Exposure Draft, the Board considered the interaction between that project and the fair value measurement project. Based on input initially received from members of the User Advisory Council and others, the Board decided that until such time as a final Statement in that project is issued, expanded disclosures about fair value measurements would provide information that is useful to users of financial statements. The Board agreed that the issues raised

by respondents indicate the need to reconsider or otherwise clarify some of the disclosure requirements initially proposed in the Exposure Draft, but not eliminate those requirements from this Statement altogether, noting that some entities (in particular, entities in the financial services industry) already are making similar disclosures in SEC filings.

### **Fair Value Measurements**

C95. The Board affirmed that the reporting entity should disclose information that enables users of its financial statements to assess the extent to which fair value is used to measure assets and liabilities in periods subsequent to initial recognition and the inputs used for fair value measurements. In the Exposure Draft, the Board concluded that information about the inputs used for fair value measurements would allow users of financial statements to assess the relative reliability of the measurements. Many respondents generally agreed with those disclosures, subject to clarifications to conform the disclosures to the levels within the fair value hierarchy, as revised. Therefore, the disclosures required by this Statement segregate fair value measurements using quoted prices in active markets for identical assets or liabilities (Level 1), significant other observable inputs (Level 2), and significant unobservable inputs (Level 3), separately for each major category of assets and liabilities. To improve consistency in the fair value measurements disclosed, this Statement specifies that the level within the fair value hierarchy in which a fair value measurement in its entirety falls should be determined based on the lowest level input that is significant to the measurement in its entirety.

### **Level 3 Reconciliation for Recurring Fair Value Measurements**

C96. The Board affirmed that the reporting entity should disclose information that enables users of its financial statements to assess the effects of recurring fair value measurements on earnings (or changes in net assets) for the period. That disclosure is limited to recurring fair value measurements because similar disclosures for nonrecurring fair value measurements (for example, impaired assets) are currently required under other accounting pronouncements.

C97. In the Exposure Draft, the Board decided that the disclosures for recurring fair value measurements should focus principally on earnings (or changes in net assets), separate from other comprehensive income, and the unrealized gains or losses included in earnings (or changes in net assets) for the period. In reaching that decision, the Board concluded that information about unrealized gains or losses included in earnings would allow users to broadly assess the quality of reported earnings. However, some respondents disagreed. They stated that disclosures about unrealized gains or losses,

alone, would not be cost beneficial and, in some cases, could be misleading. For example, users of financial statements might conclude that unrealized gains or losses are of a lesser quality than realized gains or losses, which might not be the case. Also, because some entities do not currently capture that information, incremental systems changes (in some cases significant) would be required to comply with the disclosures. Those respondents encouraged the Board to reconsider the disclosures.

C98. Concurrent with its redeliberations of related issues in proposed FSP FAS 133-a, the Board discussed the need for expanded disclosures about fair value measurements with certain users of financial statements, including members of the Investor Task Force that concentrate on the investment banking, energy trading, and insurance industries, and members of the User Advisory Council. Those discussions focused on expanded disclosures about recurring fair value measurements using significant unobservable inputs (within Level 3) and the effect of the measurements on earnings for the period. Those users strongly supported the expanded disclosures. They indicated that the expanded disclosures would allow users of financial statements to make more informed judgments and segregate the effects of fair value measurements that are inherently subjective, enhancing their ability to assess the quality of earnings broadly. Based on that input, the Board concluded that expanded disclosures about recurring fair value measurements and the effect of the measurements on earnings (or changes in net assets) for the period, separate from other comprehensive income, would provide useful information to users of financial statements and should be required in this Statement.

C99. To balance the needs of users with the concerns of respondents, the Board discussed the expanded disclosures with some respondents (principally, financial institutions). Those respondents indicated that expanded disclosures for recurring fair value measurements within Level 3 could be provided within reasonable cost-benefit constraints if presented in the form of a reconciliation of beginning and ending balances that segregates all changes during the period for each major category of assets and liabilities, except as follows. They stated that because the same derivative can be an asset in one reporting period and a liability in the next reporting period, separate (gross) presentation for derivative assets and liabilities would not be cost beneficial. In particular, systems changes would be needed to track and reconcile the information necessary to separately capture the related earnings effects. In considering that presentation issue, the Board agreed that the information conveyed by those disclosures would be more meaningful if presented separate (gross) rather than net. However, the Board decided that presentation issues for derivatives disclosures should be considered in the context of its current project on derivatives disclosures. The Board decided to allow derivatives to be presented net for purposes of the reconciliation disclosure in this Statement.

C100. The reconciliation of beginning and ending balances of recurring fair value measurements within Level 3 required in this Statement segregates changes from all sources, including total gains or losses recognized in earnings (or changes in net assets) during the period. The Board concluded (and respondents agreed) that disclosure of total gains or losses would provide needed context for disclosure of the change in unrealized gains or losses recognized in earnings (or changes in net assets) during the period relating to the assets and liabilities measured within Level 3 that are still held at the end of the period. The Board further concluded that because subsequent changes in fair value reflect changes in economic conditions without regard to whether an entity has transacted, disclosure of total gains or losses would provide incremental information about changes in shareholder wealth due to changes in economic conditions that would further enable users of financial statements to assess the effects of fair value measurements on earnings (or changes in net assets) for the period.

#### **Other Disclosures**

C101. A few respondents stated that this Statement should standardize disclosures of the discount rate and assumptions used in valuation techniques to measure fair value. The Board affirmed its view in the Exposure Draft that standardizing those disclosures for all assets and liabilities measured at fair value (for example, requiring disclosure of assumptions used to measure fair value) would not be practical. By way of example, the Board referred to other accounting pronouncements in which it reached different decisions on whether to require disclosures about significant assumptions. The Board noted that in some cases, an overwhelming volume of information would need to be disclosed for that information to be meaningful. Because sensitivity disclosures rely largely on those assumptions, the Board also decided not to require sensitivity disclosures (for example, market risk disclosures), as further suggested by some respondents. Instead, this Statement establishes broad disclosure objectives, which the Board expects to consider as a basis for requiring more specific disclosures in individual accounting pronouncements that require fair value measurements on a project-by-project basis.

C102. A few respondents also referred to the disclosures about the fair value of financial instruments required by Statement 107. They suggested that the Board consolidate those disclosures with the disclosures in this Statement. The Board disagreed. The disclosures required by Statement 107 are specific to financial instruments, as defined in that Statement, and extend beyond the measurements themselves. Further, those disclosures apply regardless of whether a financial instrument is recognized in the statement of financial position and measured at fair value. The Board agreed that the disclosures required by this Statement should be encouraged for financial instruments disclosed at fair value, including financial instruments recognized

in the statement of financial position at amounts other than fair value (for example, loans carried at cost). Therefore, this Statement amends Statement 107 to refer to the related disclosures in this Statement.

C103. A few respondents also referred to possible conflicts and overlap with SEC disclosure requirements within management discussion and analysis, noting that to varying degrees the disclosures required by this Statement would duplicate those and other industry-specific disclosures made outside the basic financial statements. The Board affirmed its view in the Exposure Draft that the disclosures required by this Statement supplement related disclosures made outside the basic financial statements. The disclosures required by this Statement apply for all entities that hold assets and liabilities recognized in the statement of financial position that are measured at fair value. Further, all entities should include those disclosures within the basic financial statements.

C104. The Board emphasized that consistent with its related codification initiatives, the fair value information disclosed under this Statement should be combined and disclosed together with the fair value information disclosed under other pronouncements, including Statement 107 (for example, in a single fair value footnote), where practicable. The Board concluded that having those disclosures available in one place would enhance users' understanding about fair value and the use of fair value in financial reporting.

#### **Amendment to Opinion 28**

C105. In the Exposure Draft, the Board decided that the disclosures required by this Statement should be made in all interim periods. Some respondents emphasized that those disclosures in all interim periods would not be cost beneficial. The Board acknowledged those concerns. However, the Board affirmed its conclusion in the Exposure Draft that fair value disclosures in interim periods would provide timely information to users about fair value measurements and factors affecting those measurements during the year. Moreover, increased information about fair value on an ongoing basis would enhance users' understanding of fair value and the use of fair value in financial reporting. Because of respondents' concerns, the Board decided to limit the disclosures that are required in interim periods to quantitative disclosures. To communicate more clearly the information conveyed by those quantitative disclosures, the Board decided to require tabular presentation (in all periods). In reaching that decision, the Board considered related research, which indicates that tabular presentation of financial information is an important communications tool. This Statement amends APB Opinion No. 28, *Interim Financial Reporting*, to require those disclosures

in all interim periods. Qualitative disclosures, for example, narrative disclosure about the valuation techniques used to measure fair value, are required only in annual periods.

### **Effective Date and Transition**

C106. The Board decided that this Statement should be effective for financial statements issued for fiscal years beginning after November 15, 2007, and interim periods within those fiscal years. Because this Statement applies under other accounting pronouncements that require fair value measurements and does not require any new fair value measurements, the Board believes that the extended transition period under this Statement provides sufficient time for entities, their auditors, and users of financial statements to prepare for implementation of the provisions of this Statement. The Board encourages earlier application, provided that the reporting entity has not yet issued financial statements for that fiscal year (annual or interim).

C107. The Board agreed, as it did in the Exposure Draft, that because the substantive guidance in this Statement focuses broadly on the methods used to measure fair value, application of that guidance could result in a change in the method of applying an accounting principle. However, because the methods used to measure fair value are referred to generally, for example, in the context of inputs requiring both quantitative and qualitative assessments, the Board concluded that a change in the methods used to measure fair value would be inseparable from a change in the fair value measurements (that is, as new events occur or as new information is obtained, for example, through better insight or improved judgment). Therefore, the Board decided that the guidance in this Statement should be applied prospectively (similar to a change in accounting estimate) as of the beginning of the fiscal year in which this Statement is initially applied, except as discussed below.

C108. For the change in accounting for derivative (or other) instruments under Issue 02-3, the Board concluded that application of the guidance in this Statement would result in a change in the method of applying an accounting principle and that the change in the method would be separable from the change in the fair value measurements. Therefore, the Board decided that the guidance in this Statement should be applied retrospectively (similar to a change in accounting principle), but on a limited basis as of the beginning of the fiscal year in which this Statement is initially applied, considering the practical limitations involved in applying the change in method in all prior periods. Therefore, the difference between the carrying amount and the fair value of a derivative (or other instrument) that was measured at initial recognition using the transaction price in accordance with the guidance in footnote 3 of Issue 02-3 prior to initial application of this Statement should be recognized as a cumulative-effect

adjustment to the opening balance of retained earnings (or other appropriate components of equity or net assets in the statement of financial position) for that fiscal year, presented separately.

C109. For the change in accounting for positions in financial instruments (including blocks) held by broker-dealers and certain investment companies, the Board agreed that application of the guidance in this Statement would result in a change in the method of applying an accounting principle that would be separable from the change in fair value measurements. The Board observed that because the information necessary to apply that change in accounting principle retrospectively to all prior periods presented should be available, the guidance in this Statement could be applied retrospectively (similar to a change in accounting principle) in all prior periods. However, the Board decided that three different transition approaches in this Statement (including two different transition approaches for financial instruments) would be unduly burdensome. Therefore, the Board decided for practical reasons that the limited retrospective transition approach for the change in accounting under Issue 02-3 also should apply for the change in accounting for positions in financial instruments (including blocks) held by broker-dealers and investment companies.

C110. To achieve comparability in future periods, all of the disclosures required by this Statement, including disclosures about the valuation techniques used to measure fair value required in annual periods only, are required in the first interim period in which this Statement is initially applied. However, those disclosures need not be presented in periods prior to initial application of this Statement.

## **Benefits and Costs**

C111. The mission of the FASB is to establish and improve standards of financial accounting and reporting to provide information that is useful to users of financial statements (present and potential investors, creditors, donors, and other capital market participants) in making rational investment, credit, and similar resource allocation decisions. In fulfilling that mission, the Board endeavors to determine that a proposed standard will fill a significant need and that the costs imposed to meet that standard, as compared with other alternatives, are justified in relation to the overall benefits of the resulting information. Although the costs to implement a new standard may not be borne evenly, users of financial statements benefit from improvements in financial reporting, thereby facilitating the functioning of markets for capital and credit and the efficient allocation of resources in the economy.

C112. This Statement establishes a single definition of fair value and a framework for measuring fair value in GAAP. A single definition of fair value, together with a

framework for measuring fair value, should result in increased consistency in application and, with respect to the resulting fair value measurements, increased comparability. Concepts Statement 2 emphasizes that providing comparable information enables users of financial statements to identify similarities in and differences between two sets of economic events.

C113. This Statement also expands disclosures about fair value measurements, improving the quality of information provided to users of financial statements. Providing information that is useful to users of financial statements in making rational investment, credit, and similar decisions is the first objective of financial reporting in FASB Concepts Statement No. 1, *Objectives of Financial Reporting by Business Enterprises*. In developing the disclosure requirements of this Statement, the Board obtained input from users, preparers, and other interested parties to ensure that the disclosures would be provided within reasonable cost-benefit constraints. This Statement encourages entities to include the fair value information disclosed under this Statement together with the fair value information disclosed under other accounting pronouncements in one place, where practicable. The Board concluded that having that information available in one place would improve the quality of information provided to users of financial statements about fair value measurements, thereby enhancing users' understanding about fair value and the use of fair value in financial reporting.

C114. In addition, the amendments made by this Statement simplify and, where appropriate, codify the related guidance that currently exists for measuring fair value, eliminating differences that have added to the complexity in GAAP, consistent with the Board's related codification initiatives.

C115. Although the framework for measuring fair value builds on current practice and requirements, the Board acknowledges that for some entities, certain methods required by this Statement may result in a change to practice. Further, some entities will need to make systems and operational changes, thereby incurring incremental costs. Some entities also might incur incremental costs in applying the requirements of this Statement. However, the Board believes that the benefits resulting from increased consistency and comparability of fair value information and improved communication of that information to users of financial statements will be ongoing. On balance, the Board concluded that this Statement will result in improved financial reporting.

## **International Financial Reporting Standards**

C116. Many International Financial Reporting Standards require fair value measurements. Like the FASB, the IASB has previously addressed issues related to fair value largely in the context of financial instruments included in the scope of revised IAS 39. The IASB currently has on its agenda a fair value measurements project to consider fair value measurement broadly, focusing on the definition of fair value and the framework for measuring fair value. As part of that project, the IASB plans to issue this Statement in the form of a preliminary views document for public comment.



## Appendix D

### REFERENCES TO APB AND FASB PRONOUNCEMENTS

D1. This appendix lists APB and FASB pronouncements existing at the date of this Statement that refer to fair value. Those pronouncements that are amended by this Statement are indicated by an asterisk. (See Appendix E.)

<u>Pronouncement</u>	<u>Title</u>
Opinion 18	The Equity Method of Accounting for Investments in Common Stock
Opinion 21*	Interest on Receivables and Payables
Opinion 28*	Interim Financial Reporting
Opinion 29*	Accounting for Nonmonetary Transactions
Statement 13*	Accounting for Leases
Statement 15*	Accounting by Debtors and Creditors for Troubled Debt Restructurings
Statement 19*	Financial Accounting and Reporting by Oil and Gas Producing Companies
Statement 23	Inception of the Lease
Statement 28	Accounting for Sales with Leasebacks
Statement 35*	Accounting and Reporting by Defined Benefit Pension Plans
Statement 45	Accounting for Franchise Fee Revenue
Statement 60*	Accounting and Reporting by Insurance Enterprises
Statement 61	Accounting for Title Plant
Statement 63*	Financial Reporting by Broadcasters

<b><u>Pronouncement</u></b>	<b><u>Title</u></b>
Statement 65*	Accounting for Certain Mortgage Banking Activities
Statement 66	Accounting for Sales of Real Estate
Statement 67*	Accounting for Costs and Initial Rental Operations of Real Estate Projects
Statement 68	Research and Development Arrangements
Statement 84	Induced Conversions of Convertible Debt
Statement 87*	Employers' Accounting for Pensions
Statement 98	Accounting for Leases
Statement 106*	Employers' Accounting for Postretirement Benefits Other Than Pensions
Statement 107*	Disclosures about Fair Value of Financial Instruments
Statement 114	Accounting by Creditors for Impairment of a Loan
Statement 115*	Accounting for Certain Investments in Debt and Equity Securities
Statement 116*	Accounting for Contributions Received and Contributions Made
Statement 124*	Accounting for Certain Investments Held by Not-for-Profit Organizations
Statement 126	Exemption from Certain Required Disclosures about Financial Instruments for Certain Nonpublic Entities
Statement 133*	Accounting for Derivative Instruments and Hedging Activities
Statement 136*	Transfers of Assets to a Not-for-Profit Organization or Charitable Trust That Raises or Holds Contributions for Others

<b><u>Pronouncement</u></b>	<b><u>Title</u></b>
Statement 138	Accounting for Certain Derivative Instruments and Certain Hedging Activities
Statement 140*	Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities
Statement 141 *	Business Combinations
Statement 142*	Goodwill and Other Intangible Assets
Statement 143*	Accounting for Asset Retirement Obligations
Statement 144*	Accounting for the Impairment or Disposal of Long-Lived Assets
Statement 146*	Accounting for Costs Associated with Exit or Disposal Activities
Statement 149	Amendment of Statement 133 on Derivative Instruments and Hedging Activities
Statement 150*	Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity
Statement 153	Exchanges of Nonmonetary Assets
Statement 156*	Accounting for Servicing of Financial Assets
Interpretation 9	Applying APB Opinions No. 16 and 17 When a Savings and Loan Association or a Similar Institution Is Acquired in a Business Combination Accounted for by the Purchase Method
Interpretation 23	Leases of Certain Property Owned by a Governmental Unit or Authority
Interpretation 24	Leases Involving Only Part of a Building

<b><u>Pronouncement</u></b>	<b><u>Title</u></b>
Interpretation 45*	Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others
Interpretation 46 (revised December 2003)	Consolidation of Variable Interest Entities
Interpretation 47	Accounting for Conditional Asset Retirement Obligations
Technical Bulletin 84-1	Accounting for Stock Issued to Acquire the Results of a Research and Development Arrangement
Technical Bulletin 85-1	Accounting for the Receipt of Federal Home Loan Mortgage Corporation Participating Preferred Stock
Technical Bulletin 85-5	Issues Relating to Accounting for Business Combinations
Technical Bulletin 85-6	Accounting for a Purchase of Treasury Shares at a Price Significantly in Excess of the Current Market Price of the Shares and the Income Statement Classification of Costs Incurred in Defending against a Takeover Attempt
Technical Bulletin 86-2	Accounting for an Interest in the Residual Value of a Leased Asset
Technical Bulletin 88-1	Issues Relating to Accounting for Leases
FSP FAS 115-1 and 124-1	The Meaning of Other-Than-Temporary Impairment and Its Application to Certain Investments
FSP FAS 143-1	Accounting for Electronic Equipment Waste Obligations
FSP FAS 144-1	Determination of Cost Basis for Foreclosed Assets under FASB Statement No. 15 and the Measurement of Cumulative Losses Previously Recognized under Paragraph 37 of FASB Statement No. 144

<b><u>Pronouncement</u></b>	<b><u>Title</u></b>
FSP FAS 150-1	Issuer's Accounting for Freestanding Financial Instruments Composed of More Than One Option or Forward Contract Embodying Obligations under FASB Statement No. 150
FSP FAS 150-2	Accounting for Mandatorily Redeemable Shares Requiring Redemption by Payment of an Amount that Differs from the Book Value of Those Shares under FASB Statement No. 150
FSP FAS 150-3	Effective Date, Disclosures, and Transition for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Noncontrolling Interests under FASB Statement No. 150
FSP FAS 150-4	Issuers' Accounting for Employee Stock Ownership Plans under FASB Statement No. 150
FSP FIN 45-2	Whether FASB Interpretation No. 45 Provides Support for Subsequently Accounting for a Guarantor's Liability at Fair Value
FSP FIN 46(R)-2	Calculation of Expected Losses under FASB Interpretation No. 46(R)
FSP FIN 46(R)-3	Evaluating Whether as a Group the Holders of the Equity Investment at Risk Lack the Direct or Indirect Ability to Make Decisions about an Entity's Activities through Voting Rights or Similar Rights under FASB Interpretation No. 46(R)
FSP FIN 46(R)-5	Implicit Variable Interests under FASB Interpretation No. 46(R)
FSP FIN 46(R)-6	Determining the Variability to Be Considered in Applying FASB Interpretation No. 46(R)
FSP FTB 85-4-1	Accounting for Life Settlement Contracts by Third-Party Investors

**Pronouncement**

**Title**

FSP AAG  
INV-1 and SOP  
94-4-1

Reporting of Fully Benefit-Responsive Investment Contracts  
Held by Certain Investment Companies Subject to the AICPA  
Investment Company Guide and Defined-Contribution Health  
and Welfare and Pension Plans

## Appendix E

### AMENDMENTS TO APB AND FASB PRONOUNCEMENTS

E1. APB Opinion No. 21, *Interest on Receivables and Payables*, is amended as follows: [Added text is underlined and deleted text is ~~struck out~~.]

- a. Footnote 1 to paragraph 1:

*Present value* is the sum of the future payments discounted to the present date at an appropriate rate of interest. The Appendix contains a description of the valuation process.

- b. Paragraph 13:

*Determining an appropriate interest rate.* The variety of transactions encountered precludes any specific interest rate from being applicable in all circumstances. However, some general guides may be stated. The choice of a rate may be affected by the credit standing of the issuer, restrictive covenants, the collateral, payment and other terms pertaining to the debt, and, if appropriate, the tax consequences to the buyer and seller. The prevailing rates for similar instruments of issuers with similar credit ratings will normally help determine the appropriate interest rate for determining the present value of a specific note at its date of issuance. In any event, the rate used for valuation purposes ~~will normally be at least equal to~~should be the rate at which the debtor can obtain financing of a similar nature from other sources at the date of the transaction. For purposes of this Opinion, ~~The~~ objective is to approximate the rate which would have resulted if an independent borrower and an independent lender had negotiated a similar transaction under comparable terms and conditions with the option to pay the cash price upon purchase or to give a note for the amount of the purchase which bears the prevailing rate of interest to maturity.

- c. Paragraph 18:

*Present value concepts—discount rate adjustment technique.* Upon issuance of a note or bond, the issuer customarily records as a liability the face or principal amount of the obligation. Ordinarily, the recorded liability also represents the amount which is to be repaid upon maturity of the obligation. The value recorded in the liability account, however, may be different from

the proceeds received or the present value of the obligation at issuance if the market rate of interest differs from the coupon rate of interest. For example, consider the issuance of a \$1,000, 20-year bond which bears interest at 10% annually. If we assume that 10% is an appropriate market rate of interest for such a bond, the proceeds at issuance will be \$1,000. The bond payable would be recorded at \$1,000 which represents the amount repayable at maturity and also the present value at issuance which is equal to the proceeds. However, under similar circumstances, if the prevailing market rate were more (less) than 10%, a 20-year 10% bond with a face amount of \$1,000 would usually have a value at issuance and provide cash proceeds of less (more) than \$1,000. The significant point is that, upon issuance, a bond is valued at (1) the present value of the future coupon interest payments *plus* (2) the present value of the future principal payments (face amount). These two sets of future cash payments are discounted at the prevailing market rate of interest (for an equivalent security) at the date of issuance of the debt. As the 8% and 12% columns show, premium or discount arises when the prevailing market rate of interest differs from the coupon rate:

	<i>Assume prevailing market rate of</i>		
	<u>10%</u>	<u>8%</u>	<u>12%</u>
1. Present value of annual interest payments of \$100 (the coupon rate of 10% of \$1,000) for 20 years	\$ 851	\$ 982	\$747
2. Present value of payment of the face amount of \$1,000 at the end of year 20	<u>149</u>	<u>215</u>	<u>104</u>
Present value and proceeds at date of issuance	<u>\$1,000</u>	<u>\$1,197</u>	<u>\$851</u>

E2. APB Opinion No. 28, *Interim Financial Reporting*, is amended as follows:

a. Paragraph 30(1), as amended, is added as follows:

The information about the use of fair value to measure assets and liabilities recognized in the statement of financial position pursuant to paragraphs 32 and 33 of FASB Statement No. 157, *Fair Value Measurements*.

E3. APB Opinion No. 29, *Accounting for Nonmonetary Transactions*, is amended as follows:

a. Paragraph 18 and its related footnote 5:

The Board concludes that in general accounting for nonmonetary transactions should be based on the fair values<sup>5</sup> of the assets (or services) involved which is the same basis as that used in monetary transactions. Thus, the cost of a nonmonetary asset acquired in exchange for another nonmonetary asset is the fair value of the asset surrendered to obtain it, and a gain or loss should be recognized on the exchange. The fair value of the asset received should be used to measure the cost if it is more clearly evident than the fair value of the asset surrendered. Similarly, a nonmonetary asset received in a nonreciprocal transfer should be recorded at the fair value of the asset received. A transfer of a nonmonetary asset to a stockholder or to another entity in a nonreciprocal transfer should be recorded at the fair value of the asset transferred, and a gain or loss should be recognized on the disposition of the asset. The fair value of an entity's own stock reacquired may be a more clearly evident measure of the fair value of the asset distributed in a nonreciprocal transfer if the transaction involves distribution of a nonmonetary asset to eliminate a disproportionate part of owners' interests (that is, to acquire stock for the treasury or for retirement). If one of the parties in a nonmonetary transaction could have elected to receive cash instead of the nonmonetary asset, the amount of cash that could have been received may be evidence of the fair value of the nonmonetary assets exchanged.

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<sup>5</sup>See paragraph 25 for determination of fair value.

b. Paragraph 20(a), as amended:

*Fair Value Not Determinable.* The fair value of neither the asset(s) received nor the asset(s) relinquished is determinable within reasonable limits (paragraph 25).

c. Paragraph 25:

~~Fair value of a nonmonetary asset transferred to or from an enterprise in a nonmonetary transaction should be determined by referring to estimated realizable values in cash transactions of the same or similar assets, quoted market prices, independent appraisals, estimated fair values of assets or~~

services received in exchange, and other available evidence. If one of the parties in a nonmonetary transaction could have elected to receive cash instead of the nonmonetary asset, the amount of cash that could have been received may be evidence of the fair value of the nonmonetary assets exchanged.

E4. FASB Statement No. 13, *Accounting for Leases*, is amended as follows:

a. Paragraph 5(c):

*Fair value of the leased property.* ~~The price for which the property could be sold in an arm's length transaction between unrelated parties. The price that would be received to sell the property in an orderly transaction between market participants at the measurement date. Market participants are buyers and sellers that are independent of the reporting entity, that is, they are not related parties at the measurement date.~~ (See definition of related parties in leasing transactions in paragraph 5(a).) The following are examples of the determination of fair value:

**[For ease of use, the remainder of this subparagraph, which is unaffected by this Statement, has been omitted.]**

E5. FASB Statement No. 15, *Accounting by Debtors and Creditors for Troubled Debt Restructurings*, is amended as follows:

a. Footnote 2 to paragraph 7:

~~Defined in paragraph 13.~~

b. Paragraph 13 and its related footnote 6, as amended, and footnote 5a, as added previously:

A debtor that transfers its receivables from third parties, real estate, or other assets to a creditor to settle fully a payable shall recognize a gain on restructuring of payables. The gain shall be measured by the excess of (i) the carrying amount of the payable settled (the face amount increased or decreased by applicable accrued interest and applicable unamortized premium, discount, finance charges, or issue costs) over (ii) the fair value of the assets transferred to the creditor.<sup>5</sup> ~~The fair value of the assets transferred is the amount that the debtor could reasonably expect to receive for them in a current sale between a willing buyer and a willing seller, that is, other than in~~

a forced or liquidation sale. Fair value of assets shall be measured by their market value if an active market for them exists. If no active market exists for the assets transferred but exists for similar assets, the selling prices in that market may be helpful in estimating the fair value of the assets transferred. If no market price is available, a forecast of expected cash flows<sup>5a</sup> may aid in estimating the fair value of assets transferred, provided the expected cash flows are discounted at a rate commensurate with the risk involved.<sup>6</sup>

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<sup>5</sup>Paragraphs 13, 15, and 19 indicate that the fair value of assets transferred or the fair value of an equity interest granted shall be used in accounting for a settlement of a payable in a troubled debt restructuring. That guidance is not intended to preclude using the fair value of the payable settled if more clearly evident than the fair value of the assets transferred or of the equity interest granted in a full settlement of a payable (paragraphs 13 and 15). (See paragraph 6 of FASB Statement No. 141, *Business Combinations*.) However, in a partial settlement of a payable (paragraph 19), the fair value of the assets transferred or of the equity interest granted shall be used in all cases to avoid the need to allocate the fair value of the payable between the part settled and the part still outstanding.

<sup>5a</sup>This pronouncement was issued prior to FASB Concepts Statement No. 7, *Using Cash Flow Information and Present Value in Accounting Measurements*, and therefore the term *expected cash flows* does not necessarily have the same meaning as that term in Concepts Statement 7.

<sup>6</sup>Some factors that may be relevant in estimating the fair value of various kinds of assets are described in paragraphs 37 and 38 of Statement 141, paragraphs 12–14 of *APB Opinion No. 21*, “Interest on Receivables and Payables,” and paragraph 25 of *APB Opinion No. 29*, “Accounting for Nonmonetary Transactions.”

c. Paragraph 28, as amended:

A creditor that receives from a debtor in full satisfaction of a receivable either (i) receivables from third parties, real estate, or other assets or (ii) shares of stock or other evidence of an equity interest in the debtor, or both, shall account for those assets (including an equity interest) at their fair value at the time of the restructuring (see paragraph 13 for how to measure fair value).<sup>16</sup> A creditor that receives long-lived assets that will be sold from a debtor in full satisfaction of a receivable shall account for those assets at their fair value less cost to sell, as that term is used in paragraph 34 of FASB Statement No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*. The excess of (i) the recorded investment in the receivable<sup>17</sup> satisfied over (ii) the fair value of assets received (less cost to sell, if required above) is a loss to be recognized. For purposes of this paragraph, losses, to the extent they are not offset against allowances for uncollectible amounts or other valuation accounts, shall be included in measuring net income for the period.

E6. FASB Statement No. 19, *Financial Accounting and Reporting by Oil and Gas Producing Companies*, is amended as follows:

- a. Paragraph 47(1)(i), as effectively amended:

*If satisfaction of the retained production payment is reasonably assured. The seller of the property, who retained the production payment, shall record the transaction as a sale, with recognition of any resulting gain or loss. The retained production payment shall be recorded as a receivable, with interest accounted for in accordance with the provisions of APB Opinion No. 21, "Interest on Receivables and Payables." The purchaser shall record as the cost of the assets acquired the cash consideration paid plus the present value (determined in accordance with APB Opinion No. 21) of the retained production payment, which shall be recorded as a payable. The oil and gas reserve estimates and production data, including those applicable to liquidation of the retained production payment, shall be reported by the purchaser of the property (paragraphs 59E–59L).*

E7. FASB Statement No. 35, *Accounting and Reporting by Defined Benefit Pension Plans*, is amended as follows:

- a. Paragraph 11, as amended, and its related footnotes 4a, as added previously, and 5:

Plan investments, whether equity or debt securities, real estate, or other (excluding insurance contracts) shall be presented at their fair value at the reporting date. ~~The fair value of an investment is the amount that the plan could reasonably expect to receive for it in a current sale between a willing buyer and a willing seller, that is, other than in a forced or liquidation sale. Fair value shall be measured by the market price if there is an active market for the investment. If there is not an active market for an investment but there is such a market for similar investments, selling prices in that market may be helpful in estimating fair value. If a market price is not available, a forecast of expected cash flows<sup>4a</sup> may aid in estimating fair value, provided the expected cash flows are discounted at a rate commensurate with the risk involved.<sup>5</sup>~~

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<sup>4a</sup>This pronouncement was issued prior to FASB Concepts Statement No. 7, *Using Cash Flow Information and Present Value in Accounting Measurements*, and therefore the term *expected cash flows* does not necessarily have the same meaning as that term in Concepts Statement 7.

<sup>5</sup>For an indication of factors to be considered in determining the discount rate, see paragraphs 13 and 14 of APB Opinion No. 21, *Interest on Receivables and Payables*. If significant,

~~†The fair value of an investment shall be reduced by reflect the~~ brokerage commissions and other costs normally incurred in a sale if those costs are significant (similar to fair value less cost to sell).

E8. FASB Statement No. 60, *Accounting and Reporting by Insurance Enterprises*, is amended as follows:

- a. Paragraph 19 and its related footnote 4a, as added previously:

Real estate acquired in settling mortgage guaranty and title insurance claims shall be reported at fair value. ~~, that is, the amount that reasonably could be expected to be received in a current sale between a willing buyer and a willing seller. If no market price is available, the expected cash flows<sup>4a</sup> (anticipated sales price less maintenance and selling costs of the real estate) may aid in estimating fair value provided the cash flows are discounted at a rate commensurate with the risk involved.~~ Real estate acquired in settling claims shall be separately reported in the balance sheet and shall not be classified as an investment. Subsequent reductions in the reported amount and realized gains and losses on the sale of real estate acquired in settling claims shall be recognized as an adjustment to claim costs incurred.

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<sup>4a</sup>~~This pronouncement was issued prior to FASB Concepts Statement No. 7, *Using Cash Flow Information and Present Value in Accounting Measurements*, and therefore the term *expected cash flows* does not necessarily have the same meaning as that term in Concepts Statement 7.~~

E9. FASB Statement No. 63, *Financial Reporting by Broadcasters*, is amended as follows:

- a. Paragraph 4:

A licensee shall report the asset and liability for a broadcast license agreement either (a) at the ~~present value of the liability calculated in accordance with the provisions of APB Opinion No. 21, *Interest on Receivables and Payables*, fair value of the liability~~ or (b) at the gross amount of the liability. ~~If the present value approach is used~~ If a present value technique is used to measure fair value, the difference between the gross and net liability shall be accounted for as interest in accordance with ~~Opinion 21~~ APB Opinion No. 21, *Interest on Receivables and Payables*.

b. Paragraph 8:

Broadcasters may **barter** unsold advertising time for products or services. All barter transactions except those involving the exchange of advertising time for network programming<sup>3</sup> shall be reported at the estimated fair value of the product or service received, ~~in accordance with the provisions of paragraph 25 of APB Opinion No. 29, *Accounting for Nonmonetary Transactions*.~~ Barter revenue shall be reported when commercials are broadcast, and merchandise or services received shall be reported when received or used. If merchandise or services are received prior to the broadcast of the commercial, a liability shall be reported. Likewise, if the commercial is broadcast first, a receivable shall be reported.

c. Paragraph 38:

For purposes of imputing interest ~~in accordance with Opinion 21~~, it is assumed that the \$1,000,000 payment on July 31, 19X1 and the \$6,000,000 payments on January 1, 19X2 and 19X3 relate to films A and B and the \$6,000,000 payment on January 1, 19X4 relates to films C and D. Other simplifying assumptions or methods of assigning the payments to the films could be made.

**[For ease of use, the remainder of this paragraph, which is unaffected by this Statement, has been omitted.]**

d. Paragraph 39:

Asset and Liability Recognition (~~Present Value Approach~~Fair Value Approach)

**[For ease of use, the remainder of this paragraph, which is unaffected by this Statement, has been omitted.]**

e. Paragraph 40:

Expense Recognition (~~Present Value Approach~~Fair Value Approach)

**[For ease of use, the remainder of this paragraph, which is unaffected by this Statement, has been omitted.]**

E10. FASB Statement No. 65, *Accounting for Certain Mortgage Banking Activities*, is amended as follows:

a. Paragraph 4, as amended:

Mortgage loans held for sale shall be reported at the lower of cost or market fair value, determined as of the balance sheet date. If a mortgage loan has been the hedged item in a fair value hedge, the loan's "cost" basis used in lower-of-cost-or-~~market fair~~ value accounting shall reflect the effect of the adjustments of its carrying amount made pursuant to paragraph 22(b) of Statement 133. The amount by which cost exceeds market fair value shall be accounted for as a valuation allowance. Changes in the valuation allowances shall be included in the determination of net income of the period in which the change occurs. **Mortgage-backed securities** held by not-for-profit organizations shall be reported at fair value in accordance with the provisions of FASB Statement No. 124, *Accounting for Certain Investments Held by Not-for-Profit Organizations*.

b. Paragraph 6, as amended:

A mortgage loan transferred to a long-term-investment classification shall be transferred at the lower of cost or market fair value on the transfer date. Any difference between the carrying amount of the loan and its outstanding principal balance shall be recognized as an adjustment to yield by the interest method.<sup>2</sup> A mortgage loan shall not be classified as a long-term investment unless the mortgage banking enterprise has both the ability and the intent to hold the loan for the foreseeable future or until maturity. After the securitization of a mortgage loan held for sale, any retained mortgage-backed securities shall be classified in accordance with the provisions of FASB Statement No. 115, *Accounting for Certain Investments in Debt and Equity Securities*. However, a mortgage banking enterprise must classify as trading any retained mortgage-backed securities that it commits to sell before or during the securitization process.

c. Paragraph 9, as amended:

The market fair value of mortgage loans and mortgage-backed securities held for sale shall be determined by type of loan. At a minimum, separate determinations of market fair value for residential (one- to four-family dwellings) and commercial mortgage loans shall be made. Either the aggregate or individual loan basis may be used in determining the lower of

cost or marketfair value for each type of loan. MarketFair value for loans subject to investor purchase commitments (committed loans) and loans held on a speculative basis (uncommitted loans)<sup>3</sup> shall be determined separately as follows:

- a. *Committed Loans.* ~~Market value for m~~Mortgage loans covered by investor commitments shall be based on ~~fair values~~the fair values of the loans.
- b. *Uncommitted Loans.* MarketFair value for uncommitted loans shall be based on the market in which the mortgage banking enterprise normally operates. That determination would include consideration of the following:
  - (1) [This subparagraph has been deleted. See Status page.]
  - (2) Market prices and yields sought by the mortgage banking enterprise's normal market outlets
  - (3) Quoted **Government National Mortgage Association (GNMA)** security prices or other public market quotations for long-term mortgage loan rates
  - (4) **Federal Home Loan Mortgage Corporation (FHLMC)** and **Federal National Mortgage Association (FNMA)** current delivery prices
- c. *Uncommitted Mortgage-Backed Securities.* Fair value for uncommitted mortgage-backed securities that are collateralized by a mortgage banking enterprise's own loans ordinarily shall be based on the marketfair value of the securities. If the trust holding the loans may be readily terminated and the loans sold directly, fair value for the securities shall be based on the marketfair value of the loans or the securities, depending on the mortgage banking enterprise's sales intent. Fair value for other uncommitted mortgage-backed securities shall be based on published mortgage-backed securities yields.

d. Paragraph 10, as amended:

Capitalized costs of acquiring rights to service mortgage loans, associated with the purchase or origination of mortgage loans (paragraph 13 of FASB Statement No. 140, *Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities*), shall be excluded from the cost of mortgage loans for the purpose of determining the lower of cost or marketfair value.

e. Paragraph 12, as amended:

The carrying amount of mortgage loans to be sold to an **affiliated enterprise** shall be adjusted to the lower of cost or marketfair value of the loans as of

the date management decides that a sale to an affiliated enterprise will occur. The date shall be determined based on, at a minimum, formal approval by an authorized representative of the purchaser, issuance of a commitment to purchase the loans, and acceptance of the commitment by the selling enterprise. The amount of any adjustment shall be charged to income.

f. Paragraph 29, as amended:

The method used in determining the lower of cost or ~~market~~fair value of mortgage loans (that is, aggregate or individual loan basis) shall be disclosed.

E11. FASB Statement No. 67, *Accounting for Costs and Initial Rental Operations of Real Estate Projects*, is amended as follows:

a. Paragraph 8 and its related footnote 6:

Accounting for costs of amenities shall be based on management's plans for the amenities in accordance with the following:

- a. If an amenity is to be sold or transferred in connection with the sale of individual units, costs in excess of anticipated proceeds shall be allocated as **common costs** because the amenity is clearly associated with the development and sale of the project. The common costs include expected future operating costs to be borne by the developer until they are assumed by buyers of units in a project.
- b. If an amenity is to be sold separately or retained by the developer, capitalizable costs of the amenity in excess of its estimated fair value as of the expected date of its substantial physical completion shall be allocated as common costs. For the purpose of determining the amount to be capitalized as common costs, the amount of cost previously allocated to the amenity shall not be revised after the amenity is substantially completed and available for use. A later sale of the amenity at more or less than its estimated fair value as of the date of substantial physical completion, less any accumulated depreciation, results in a gain or loss that shall be included in net income in the period in which the sale occurs.

Costs of amenities shall be allocated among land parcels<sup>6</sup> benefited and for which development is probable. A land parcel may be considered to be an individual lot or unit, an amenity, or a **phase**. The fair value of a parcel is affected by its physical characteristics, its highest and best use, and the time

and cost required for the buyer to make such use of the property considering access, development plans, zoning restrictions, and market absorption factors.

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~~<sup>6</sup>A land parcel may be considered to be an individual lot or unit, an amenity, or a phase.~~

- b. Paragraph 28 (glossary):

**Fair Value**

~~The amount in cash or cash equivalent value of other consideration that a real estate parcel would yield in a current sale between a willing buyer and a willing seller (i.e., selling price), that is, other than in a forced or liquidation sale. The fair value of a parcel is affected by its physical characteristics, its probable ultimate use, and the time required for the buyer to make such use of the property considering access, development plans, zoning restrictions, and market absorption factors.~~

E12. FASB Statement No. 87, *Employers' Accounting for Pensions*, is amended as follows:

- a. Paragraph 49, as amended, and its related footnotes 11a, as added previously, and 12:

For purposes of measuring the minimum liability required by the provisions of paragraph 36 and for purposes of the disclosures required by paragraphs 5 and 8 of FASB Statement No. 132 (revised 2003), *Employers' Disclosures about Pensions and Other Postretirement Benefits*, plan investments, whether equity or debt securities, real estate, or other, shall be measured at their fair value as of the **measurement date**. The fair value of an investment is the amount that the plan could reasonably expect to receive for it in a current sale between a willing buyer and a willing seller, that is, other than in a forced or liquidation sale. Fair value shall be measured by the market price if an active market exists for the investment. If no active market exists for an investment but such a market exists for similar investments, selling prices in that market may be helpful in estimating fair value. If a market price is not available, a forecast of expected cash flows<sup>11a</sup> may aid in estimating fair value, provided the expected cash flows are discounted at a current rate commensurate with the risk involved.<sup>12</sup>

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<sup>11a</sup>This pronouncement was issued prior to FASB Concepts Statement No. 7, *Using Cash Flow Information and Present Value in Accounting Measurements*, and therefore the term

*expected cash flows* does not necessarily have the same meaning as that term in Concepts Statement 7.

<sup>12</sup>For an indication of factors to be considered in determining the discount rate, refer to paragraphs 13 and 14 of APB Opinion No. 21, *Interest on Receivables and Payables*. If significant, ~~the fair value of an investment shall be reduced by~~ reflect the brokerage commissions and other costs normally incurred in a sale if those costs are significant (similar to fair value less cost to sell).

- b. Paragraph 264 (glossary):

**Fair value**

The amount that a pension plan could reasonably expect to receive for an investment in a current sale between a willing buyer and a willing seller, that is, other than in a forced or liquidation sale.

E13. FASB Statement No. 106, *Employers' Accounting for Postretirement Benefits Other Than Pensions*, is amended as follows:

- a. Paragraph 65, as amended, and its related footnotes 20a, as added previously, and 21:

For purposes of the disclosures required by paragraphs 5 and 8 of FASB Statement No. 132 (revised 2003), *Employers' Disclosures about Pensions and Other Postretirement Benefits*, plan investments, whether equity or debt securities, real estate, or other, shall be measured at their fair value as of the measurement date. ~~The fair value of an investment is the amount that the plan could reasonably expect to receive for it in a current sale between a willing buyer and a willing seller, that is, other than in a forced or liquidation sale. Fair value shall be measured by the market price if an active market exists for the investment. If no active market exists for an investment but an active market exists for similar investments, selling prices in that market may be helpful in estimating fair value. If a market price is not available, a forecast of expected cash flows<sup>20a</sup> may aid in estimating fair value, provided the expected cash flows are discounted at a current rate commensurate with the risk involved.~~<sup>21</sup> (Refer to paragraph 71.)

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<sup>20a</sup>This pronouncement was issued prior to FASB Concepts Statement No. 7, *Using Cash Flow Information and Present Value in Accounting Measurements*, and therefore the term *expected cash flows* does not necessarily have the same meaning as that term in Concepts Statement 7.

<sup>21</sup>For an indication of factors to be considered in determining the discount rate, refer to paragraphs 13 and 14 of APB Opinion No. 21, *Interest on Receivables and Payables*. If

~~significant.~~ The fair value of an investment shall be reduced by reflect the brokerage commissions and other costs normally incurred in a sale if those costs are significant (similar to fair value less cost to sell).

- b. Paragraph 518 (glossary):

**Fair value**

~~The amount that a plan could reasonably expect to receive for an investment in a current sale between a willing buyer and a willing seller, that is, other than a forced or liquidation sale.~~

E14. FASB Statement No. 107, *Disclosures about Fair Value of Financial Instruments*, is amended as follows:

- a. Paragraph 5:

~~For purposes of this Statement, the fair value of a financial instrument is the amount at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced or liquidation sale. If a quoted market price is available for an instrument, the fair value to be disclosed for that instrument is the product of the number of trading units of the instrument times that market price.~~

- b. Paragraph 6:

~~Under the definition of fair value in paragraph 5, the quoted price for a single trading unit in the most active market is the basis for determining market price and reporting fair value. This is the case even if placing orders to sell all of an entity's holdings of an asset or to buy back all of a liability might affect the price, or if a market's normal volume for one day might not be sufficient to absorb the quantity held or owed by an entity.~~

- c. Paragraph 9:

~~Generally accepted accounting principles already require disclosure of or subsequent measurement at fair value for many classes of financial instruments. Although the definitions or the methods of estimation of fair value vary to some extent, and various terms such as market value, current value, or mark-to-market are used, the amounts computed under those requirements~~

~~satisfy the requirements of this Statement and~~ Those requirements are not superseded or modified by this Statement.

d. Paragraph 10, as amended:

An entity shall disclose, either in the body of the financial statements or in the accompanying notes,<sup>3a</sup> the fair value of financial instruments for which it is practicable to estimate that value. Fair value disclosed in the notes shall be presented together with the related carrying amount in a form that makes it clear whether the fair value and carrying amount represent assets or liabilities and how the carrying amounts relate to what is reported in the statement of financial position. An entity also shall disclose the method(s) and significant assumptions used to estimate the fair value of financial instruments.<sup>3aa</sup>

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<sup>3a</sup>If disclosed in more than a single note, one of the notes shall include a summary table. The summary table shall contain the fair value and related carrying amounts and cross-references to the location(s) of the remaining disclosures required by this Statement, as amended.

<sup>3aa</sup>For financial instruments recognized at fair value in the statement of financial position, the disclosure requirements of FASB Statement No. 157, *Fair Value Measurements*, also apply.

e. Paragraph 11:

~~Quoted market prices, if available, are the best evidence of the fair value of financial instruments. If quoted market prices are not available, management's best estimate of fair value may be based on the quoted market price of a financial instrument with similar characteristics or on valuation techniques (for example, the present value of estimated future cash flows using a discount rate commensurate with the risks involved, option pricing models, or matrix pricing models). Appendix A of this Statement contains examples of procedures for estimating fair value.~~

f. Paragraphs 18–29 (Appendix A) are deleted. This appendix provided examples of procedures for estimating the fair value of financial instruments.

g. Paragraph 30:

The examples that follow are guides to implementation of the disclosure requirements of this Statement. Entities are not required to display the information contained herein in the specific manner illustrated. Alternative ways of disclosing the information are permissible as long as they satisfy the disclosure requirements of this Statement. ~~Paragraphs 12 and 21 of this~~

~~Statement describe possible additional voluntary disclosures that may be appropriate in certain circumstances. In some cases, an entity's management may decide to provide further information about the fair value of a financial instrument. For example, an entity may want to explain that although the fair value of its long-term debt is less than the carrying amount, settlement at the reported fair value may not be possible or may not be a prudent management decision for other reasons, or the entity may want to state that potential taxes and other expenses that would be incurred in an actual sale or settlement are not taken into consideration.~~

- h. Paragraph 31, section titled “Commitments to extend credit, standby letters of credit, and financial guarantees written” of Note V:

~~*Commitments to extend credit, standby letters of credit, and financial guarantees written*~~

~~The fair value of commitments is estimated using the fees currently charged to enter into similar agreements, taking into account the remaining terms of the agreements and the present creditworthiness of the counterparties. For fixed-rate loan commitments, fair value also considers the difference between current levels of interest rates and the committed rates. The fair value of guarantees and letters of credit is based on fees currently charged for similar agreements or on the estimated cost to terminate them or otherwise settle the obligations with the counterparties at the reporting date.~~

E15. FASB Statement No. 115, *Accounting for Certain Investments in Debt and Equity Securities*, is amended as follows:

- a. Paragraph 3(a) and its related footnote 2:

The fair value of an equity security is readily determinable if sales prices or bid-and-asked quotations are currently available on a securities exchange registered with the Securities and Exchange Commission (SEC) or in the over-the-counter market, provided that those prices or quotations for the over-the-counter market are publicly reported by the National Association of Securities Dealers Automated Quotations systems or by ~~the National Quotation Bureau~~ Pink Sheets LLC. Restricted stock<sup>2</sup> ~~does not meet that definition~~ meets that definition if the restriction terminates within one year.

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<sup>2</sup>The fair value of restricted stock shall be measured based on the quoted price of an otherwise identical unrestricted security of the same issuer, adjusted for the effect of the restriction, in

accordance with the provisions of FASB Statement No. 157, *Fair Value Measurements*. *Restricted stock*, for the purpose of this Statement, means equity securities for which sale is restricted by governmental or contractual requirement (other than in connection with being pledged as collateral) except if that requirement terminates within one year or if the holder has the power by contract or otherwise to cause the requirement to be met within one year. Any portion of the security that can be reasonably expected to qualify for sale within one year, such as may be the case under Rule 144 or similar rules of the SEC, is not considered restricted.

- b. Paragraph 137 (glossary), as amended:

**Fair value**

~~The amount at which an asset could be bought or sold in a current transaction between willing parties, that is, other than in a forced or liquidation sale. Quoted market prices in active markets are the best evidence of fair value and should be used as the basis for the measurement, if available. If a quoted market price is available, the fair value is the product of the number of trading units times that market price. If a quoted market price is not available, the estimate of fair value should be based on the best information available in the circumstances. The estimate of fair value should consider prices for similar assets and the results of valuation techniques to the extent available in the circumstances. Examples of valuation techniques include the present value of estimated expected future cash flows using a discount rate commensurate with the risks involved, option-pricing models, matrix pricing, option-adjusted spread models, and fundamental analysis. Valuation techniques for measuring assets should be consistent with the objective of measuring fair value. Those techniques should incorporate assumptions that market participants would use in their estimates of values, including assumptions about interest rates, default, prepayment, and volatility.~~

E16. FASB Statement No. 116, *Accounting for Contributions Received and Contributions Made*, is amended as follows:

- a. Paragraph 19:

~~Quoted market prices, if available, are the best evidence of the fair value of monetary and nonmonetary assets, including services. If quoted market prices are not available, fair value may be estimated based on quoted market prices for similar assets, independent appraisals, or valuation techniques, such as the present value of estimated future cash flows. Contributions of services that create or enhance nonfinancial assets may be measured by referring to either~~

the fair value of the services received or the fair value of the asset or of the asset enhancement resulting from the services. A major uncertainty about the existence of value may indicate that an item received or given should not be recognized.<sup>7</sup>

b. Paragraph 20:

~~The present value of estimated future cash flows using a discount rate commensurate with the risks involved is an appropriate measure of fair value of unconditional promises to give cash.~~<sup>8</sup> If a present value technique is used to measure the fair value of unconditional promises to give cash, subsequent accruals of the interest element shall be accounted for as contribution income by donees and contribution expense by donors. Not-for-profit organizations shall report the contribution income as an increase in either temporarily or permanently restricted net assets if the underlying promise to give is donor restricted.

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<sup>8</sup>An entity may estimate the future cash flows of a portfolio of short-term promises resulting from a mass fund-raising appeal by using experience it gained from similar appeals.

c. Paragraph 184:

Mission G would recognize the contributed property as an asset and as support and measure that property at its fair value (paragraph 8). Information necessary to estimate the fair value of that property could be obtained from various sources, including ~~(a) amounts recently paid for similar properties in the locality, (b) estimates of the market value of the property by local appraisers or real estate brokers, (c) an estimate of the fair value of the property by the local tax assessor's office, or (d) estimates of its replacement cost and estimates of its replacement cost adjusted to reflect the price that would be received for the contributed property~~ (paragraph 19). This contribution is unrestricted support because the donated assets may be used for any purpose and Mission G does not have a policy of implying time restrictions on gifts of long-lived assets (paragraph 16). If Mission G's policy is to imply a time restriction, the contribution is temporarily restricted support and the restriction expires over the useful life of the building.

d. Paragraph 186:

If Museum H capitalizes its collections, Museum H would recognize the fair value of the contributed work of art received as revenue and capitalize it as an asset at its fair value (paragraphs 13 ~~and 19~~). ~~The staff of Museum H is~~

qualified to estimate the fair value of the contributed painting and evidence of its fair value exists. If Museum H does not capitalize its collections, Museum H is precluded from recognizing the contribution (paragraph 13) and would provide the information required by paragraphs 26 and 27.

e. Paragraph 208:

The 19X0 communication between Individual R and Church S specified an intention to give. The ability to modify a will at any time prior to death is well established; thus in 19X0 Church S did not receive a promise to give and did not recognize a contribution received. When the probate court declares the will valid, Church S would recognize a receivable and revenue for an unconditional promise to give at the fair value of its interest in the estate (paragraphs 8, 20, and 19–21). If the promise to give contained in the valid will was instead conditioned on a future and uncertain event, Church S would recognize the contribution when the condition was substantially met. A conditional promise in a valid will would be disclosed in notes to financial statements (paragraph 25).

E17. FASB Statement No. 124, *Accounting for Certain Investments Held by Not-for-Profit Organizations*, is amended as follows:

a. Paragraph 3(a) and its related footnote 3:

Sales prices or bid-and-asked quotations for the security are currently available on a securities exchange registered with the Securities and Exchange Commission (SEC) or in the over-the-counter market, provided that those prices or quotations for the over-the-counter market are publicly reported by the National Association of Securities Dealers Automated Quotations systems or by Pink Sheets LLCthe National Quotation Bureau. Restricted stock<sup>3</sup> ~~does not meet that definition~~ meets that definition if the restriction terminates within one year.

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<sup>3</sup>The fair value of restricted stock shall be measured based on the quoted price of an otherwise identical unrestricted security of the same issuer, adjusted for the effect of the restriction, in accordance with the provisions of FASB Statement No. 157, *Fair Value Measurements*. For the purpose of this Statement, *restricted stock* means equity securities for which sale is restricted at acquisition by governmental or contractual requirement (other than in connection with being pledged as collateral) except if that requirement terminates within one year or if the holder has the power by contract or otherwise to cause the requirement to be met within one year. Any portion of the security that can be reasonably expected to qualify for sale within one year, such as may be the case under Rule 144 or similar rules of the SEC, is not considered restricted.

- b. Paragraph 112 (glossary), as amended:

**Fair value**

The amount at which an asset could be bought or sold in a current transaction between willing parties, that is, other than in a forced or liquidation sale. Quoted market prices in active markets are the best evidence of fair value and should be used as the basis for the measurement, if available. If a quoted market price is available, the fair value is the product of the number of trading units times that market price. If a quoted market price is not available, the estimate of fair value should be based on the best information available in the circumstances. The estimate of fair value should consider prices for similar assets and the results of valuation techniques to the extent available in the circumstances. Examples of valuation techniques include the present value of estimated expected future cash flows using a discount rate commensurate with the risks involved, option-pricing models, matrix pricing, option-adjusted spread models, and fundamental analysis. Valuation techniques for measuring assets should be consistent with the objective of measuring fair value. Those techniques should incorporate assumptions that market participants would use in their estimates of values, including assumptions about interest rates, default, prepayment, and volatility.

E18. FASB Statement No. 133, *Accounting for Derivative Instruments and Hedging Activities*, is amended as follows:

- a. Paragraph 16A, as added previously:

Any difference between a transaction price and the estimated fair value at the inception of a hybrid financial instrument for which the fair value election is applied shall not be recognized in earnings unless that estimated fair value is (a) obtained from a quoted market price in an active market, or (b) is evidenced by comparison to other observable current market transactions, or (c) is based on a valuation technique incorporating observable market data.

- b. Paragraph 17, as amended, and its related footnote 6c, as added previously:

An entity shall recognize all of its derivative instruments in its statement of financial position as either assets or liabilities depending on the rights or obligations under the contracts. All derivative instruments shall be measured at fair value. ~~The guidance in FASB Statement No. 107, *Disclosures about*~~

*Fair Value of Financial Instruments*, as amended, shall apply in determining the fair value of a financial instrument (derivative or hedged item). If expected future cash flows are used to estimate fair value, those expected cash flows<sup>6c</sup> shall be the best estimate based on reasonable and supportable assumptions and projections. All available evidence shall be considered in developing estimates of expected future cash flows. The weight given to the evidence shall be commensurate with the extent to which the evidence can be verified objectively. If a range is estimated for either the amount or the timing of possible cash flows, the likelihood of possible outcomes shall be considered in determining the best estimate of future cash flows.

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<sup>6c</sup>This Statement was issued prior to FASB Concepts Statement No. 7, *Using Cash Flow Information and Present Value in Accounting Measurements*, and therefore the term *expected cash flows* does not necessarily have the same meaning as that term does in Concepts Statement 7.

- c. Paragraph 540 (glossary):

### **Fair value**

The amount at which an asset (liability) could be bought (incurred) or sold (settled) in a current transaction between willing parties, that is, other than in a forced or liquidation sale. Quoted market prices in active markets are the best evidence of fair value and should be used as the basis for the measurement, if available. If a quoted market price is available, the fair value is the product of the number of trading units times that market price. If a quoted market price is not available, the estimate of fair value should be based on the best information available in the circumstances. The estimate of fair value should consider prices for similar assets or similar liabilities and the results of valuation techniques to the extent available in the circumstances. Examples of valuation techniques include the present value of estimated expected future cash flows using discount rates commensurate with the risks involved, option-pricing models, matrix pricing, option-adjusted spread models, and fundamental analysis. Valuation techniques for measuring assets and liabilities should be consistent with the objective of measuring fair value. Those techniques should incorporate assumptions that market participants would use in their estimates of values, future revenues, and future expenses, including assumptions about interest rates, default, prepayment, and volatility. In measuring forward contracts, such as foreign currency forward contracts, at fair value by discounting estimated future cash flows, an entity should

base the estimate of future cash flows on the changes in the forward rate (rather than the spot rate). In measuring financial liabilities and nonfinancial derivatives that are liabilities at fair value by discounting estimated future cash flows (or equivalent outflows of other assets), an objective is to use discount rates at which those liabilities could be settled in an arm's-length transaction.

E19. FASB Statement No. 136, *Transfers of Assets to a Not-for-Profit Organization or Charitable Trust That Raises or Holds Contributions for Others*, is amended as follows:

a. Summary:

This Statement requires that a specified beneficiary recognize its rights to the assets held by a recipient organization as an asset unless the donor has explicitly granted the recipient organization variance power. Those rights are either an interest in the net assets of the recipient organization, a beneficial interest, or a receivable. If the beneficiary and the recipient organization are financially interrelated organizations, the beneficiary is required to recognize its interest in the net assets of the recipient organization and adjust that interest for its share of the change in net assets of the recipient organization. If the beneficiary has an unconditional right to receive all or a portion of the specified cash flows from a charitable trust or other identifiable pool of assets, the beneficiary is required to recognize that beneficial interest, measuring and subsequently remeasuring it at fair value, ~~using a valuation technique such as the present value of the estimated expected future cash flows.~~ If the recipient organization is explicitly granted variance power, the specified beneficiary does not recognize its potential for future distributions from the assets held by the recipient organization. In all other cases, a beneficiary recognizes its rights as a receivable.

b. Paragraph 15:

A specified beneficiary shall recognize its rights to the assets (financial or nonfinancial) held by a recipient organization as an asset unless the recipient organization is explicitly granted variance power. Those rights are either an interest in the net assets of the recipient organization, a beneficial interest, or a receivable. If the beneficiary and the recipient organization are financially interrelated organizations, the beneficiary shall recognize its interest in the net assets of the recipient organization and adjust that interest for its share of the change in net assets of the recipient organization.<sup>6</sup> If the beneficiary has an unconditional right to receive all or a portion of the specified cash flows from

a charitable trust or other identifiable pool of assets, the beneficiary shall recognize that beneficial interest, measuring and subsequently remeasuring it at fair value, ~~using a valuation technique such as the present value of the estimated expected future cash flows.~~ In all other cases, a beneficiary shall recognize its rights to the assets held by a recipient organization as a receivable and contribution revenue in accordance with the provisions of Statement 116 for unconditional promises to give.<sup>7</sup>

c. Paragraph 36:

This Statement does not establish standards for the trustee, National Bank (paragraph 9). Because Museum is unable to influence the operating or financial decisions of the trustee, Museum and National Bank are not financially interrelated organizations (paragraph 13(a)). Therefore, Museum would recognize its asset (a beneficial interest in the trust) and contribution revenue that increases temporarily restricted net assets (paragraph 15). Museum would measure its beneficial interest at fair value, ~~using a valuation technique such as the present value of the estimated expected future cash receipts from the trust's assets (paragraph 15).~~ That value generally can be measured by the fair value of the assets contributed to the trust.

E20. FASB Statement No. 140, *Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities*, is amended as follows:

a. Paragraph 11(c):

Initially measure at fair value assets obtained and liabilities incurred in a sale ~~(paragraphs 68–70)~~ or, if it is not practicable to estimate the fair value of an asset or a liability, apply alternative measures (paragraphs 71 and 72)

b. Paragraph 17(h), as amended:

If the entity has securitized financial assets during any period presented and accounts for that transfer as a sale, for each major asset type (for example, mortgage loans, credit card receivables, and automobile loans):

- (1) Its accounting policies for initially measuring the interests that continue to be held by the transferor, if any, and servicing assets or servicing liabilities, if any, including the methodology (whether quoted market price, prices based on sales of similar assets and liabilities, or prices

based on valuation techniques) used in determining their fair value  
(~~paragraphs 68–70~~)

**[For ease of use, the remainder of this subparagraph, which is unaffected by this Statement, has been omitted.]**

c. Paragraph 17(i), as amended:

If the entity has interests that continue to be held by the transferor in financial assets that it has securitized or servicing assets or liabilities relating to assets that it has securitized, at the date of the latest statement of financial position presented, for each major asset type (for example, mortgage loans, credit card receivables, and automobile loans):

- (1) Its accounting policies for subsequently measuring those retained interests, including the methodology (whether quoted market price, prices based on sales of similar assets and liabilities, or prices based on valuation techniques) used in determining their fair value (~~paragraphs 68–70~~)
- (2) The key assumptions used in subsequently measuring the fair value of those interests (including, at a minimum, quantitative information about discount rates, expected prepayments including the expected weighted-average life of prepayable financial assets, and anticipated credit losses, including expected static pool losses,<sup>9</sup> if applicable)<sup>9a</sup>

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<sup>9</sup>Expected static pool losses can be calculated by summing the actual and projected future credit losses and dividing the sum by the original balance of the pool of assets.

<sup>9a</sup>The timing and amount of future cash flows for retained interests in securitizations are commonly uncertain, especially if those interests are subordinate to more senior beneficial interests. Thus, estimates of future cash flows used for a fair value measurement depend heavily on assumptions about default and prepayment of all the assets securitized, because of the implicit credit or prepayment risk enhancement arising from the subordination.

**[For ease of use, the remainder of this subparagraph, which is unaffected by this Statement, has been omitted.]**

d. Paragraph 63(b):

Initially measure servicing assets and servicing liabilities at fair value, if practicable (paragraphs 10, 11(b), 11(c), 71, and ~~68–72~~).

- e. Paragraphs 68–70 and the heading preceding paragraph 68 and footnotes 20 and 21 to paragraph 69, as amended:

### **Fair Value**

68. The fair value of an asset (or liability) is the amount at which that asset (or liability) could be bought (or incurred) or sold (or settled) in a current transaction between willing parties, that is, other than in a forced or liquidation sale. Quoted market prices in active markets are the best evidence of fair value and shall be used as the basis for the measurement, if available. If a quoted market price is available, the fair value is the product of the number of trading units times that market price.

69. If quoted market prices are not available, the estimate of fair value shall be based on the best information available in the circumstances. The estimate of fair value shall consider prices for similar assets and liabilities and the results of valuation techniques to the extent available in the circumstances. Examples of valuation techniques include the present value of estimated future cash flows,<sup>20</sup> option-pricing models, matrix pricing, option-adjusted spread models, and fundamental analysis. Valuation techniques for measuring financial assets and liabilities and servicing assets and liabilities shall be consistent with the objective of measuring fair value. Those techniques shall incorporate assumptions that market participants would use in their estimates of values, future revenues, and future expenses, including assumptions about interest rates, default, prepayment, and volatility.<sup>21</sup> In measuring **financial liabilities** and servicing liabilities at fair value, the objective is to estimate the value of the assets required currently to (a) settle the liability with the holder or (b) transfer a liability to an entity of comparable credit standing.

70. Estimates of expected future cash flows, if used to estimate fair value, shall be based on reasonable and supportable assumptions and projections. All available evidence shall be considered in developing estimates of expected future cash flows. The weight given to the evidence shall be commensurate with the extent to which the evidence can be verified objectively. If a range is estimated for either the amount or timing of possible cash flows, the likelihood of possible outcomes shall be considered either directly, if applying an expected cash flow approach, or indirectly through the risk-adjusted discount rate, if determining the best estimate of future cash flows.

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<sup>20</sup>FASB Concepts Statement No. 7, *Using Cash Flow Information and Present Value in Accounting Measurements*, discusses the use of present value techniques in measuring the fair

value of an asset (or liability) in paragraphs 42–54 and 75–88. The Board believes that an expected present value technique is superior to traditional “best estimate” techniques, especially in situations in which the timing or amount of estimated cash flows is uncertain, as is often the case for interests that continue to be held by a transferor in transferred financial assets. Concepts Statement 7 also discusses in paragraph 44 the steps needed to complete a proper search for the “rate commensurate with the risk” in applying the traditional technique.

<sup>24</sup>The timing and amount of future cash flows for interests in securitizations that continue to be held by a transferor are commonly uncertain, especially if those interests are subordinate to more senior beneficial interests. Applying the present value approach depends heavily on assumptions about default and prepayment of all the assets securitized, because of the implicit credit or prepayment risk enhancement arising from the subordination.

- f. Paragraph 364 (glossary):

**Fair value**

Refer to paragraphs 68–70.

- E21. FASB Statement No. 141, *Business Combinations*, is amended as follows:

- a. Paragraph F1 (glossary):

**Fair value**

The amount at which an asset (or liability) could be bought (or incurred) or sold (or settled) in a current transaction between willing parties, that is, other than in a forced or liquidation sale.

- E22. FASB Statement No. 142, *Goodwill and Other Intangible Assets*, is amended as follows:

- a. Paragraph 3:

Appendix A to this Statement provides implementation guidance on how intangible assets should be accounted for in accordance with this Statement. Appendix A is an integral part of the standards provided in this Statement. Appendix B provides background information and the basis for the Board’s conclusions. Appendix C provides illustrations of some of the financial statement disclosures that this Statement requires. Appendix D lists other accounting pronouncements superseded or amended by this Statement. Appendix E includes relevant excerpts from FASB Concepts Statement No. 7;

*Using Cash Flow Information and Present Value in Accounting Measurements:* Appendix F provides a glossary of terms used in this Statement.

b. Footnote 12 to paragraph 17:

The fair value of an intangible asset shall be estimated using the guidance in paragraphs 23–25 (except the guidance specific to estimating the fair value of a **reporting unit**).

c. Paragraph 19:

The first step of the goodwill impairment test, used to identify potential impairment, compares the fair value of a reporting unit with its carrying amount, including goodwill. ~~The guidance in paragraphs 23–25 shall be used to determine~~ The guidance in paragraphs 23 and 25 shall be considered in determining the fair value of a reporting unit. If the fair value of a reporting unit exceeds its carrying amount, goodwill of the reporting unit is considered not impaired, thus the second step of the impairment test is unnecessary. If the carrying amount of a reporting unit exceeds its fair value, the second step of the goodwill impairment test shall be performed to measure the amount of impairment loss, if any.

d. Paragraph 23 and its related footnote 16:

~~The fair value of an asset (or liability) is the amount at which that asset (or liability) could be bought (or incurred) or sold (or settled) in a current transaction between willing parties, that is, other than in a forced or liquidation sale. Thus, the fair value of a reporting unit refers to the amount at which the unit as a whole could be bought or sold in a current transaction between willing parties. The fair value of a reporting unit refers to the price that would be received to sell the unit as a whole in an orderly transaction between market participants at the measurement date. Quoted market prices in active markets are the best evidence of fair value and shall be used as the basis for the measurement, if available. However, the market price of an individual equity security (and thus the market capitalization of a reporting unit with publicly traded equity securities) may not be representative of the fair value of the reporting unit as a whole.<sup>46</sup> Substantial value may arise from the ability to take advantage of synergies and other benefits that flow from control over another entity. Consequently, measuring the fair value of a collection of assets and liabilities that operate together in a controlled entity is different from measuring the fair value of that entity's individual equity~~

securities. An acquiring entity often is willing to pay more for equity securities that give it a controlling interest than an investor would pay for a number of equity securities representing less than a controlling interest. That control premium may cause the fair value of a reporting unit to exceed its market capitalization. The quoted market price of an individual equity security, therefore, need not be the sole measurement basis of the fair value of a reporting unit.

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<sup>46</sup>~~Substantial value may arise from the ability to take advantage of synergies and other benefits that flow from control over another entity. Consequently, measuring the fair value of a collection of assets and liabilities that operate together in a controlled entity is different from measuring the fair value of that entity's individual equity securities. An acquiring entity often is willing to pay more for equity securities that give it a controlling interest than an investor would pay for a number of equity securities representing less than a controlling interest. That control premium may cause the fair value of a reporting unit to exceed its market capitalization.~~

e. Paragraph 24:

~~If quoted market prices are not available, the estimate of fair value shall be based on the best information available, including prices for similar assets and liabilities and the results of using other valuation techniques. A present value technique is often the best available technique with which to estimate the fair value of a group of net assets (such as a reporting unit). If a present value technique is used to measure fair value, estimates of future cash flows used in that technique shall be consistent with the objective of measuring fair value. Those cash flow estimates shall incorporate assumptions that marketplace participants would use in their estimates of fair value. If that information is not available without undue cost and effort, an entity may use its own assumptions. Those cash flow estimates shall be based on reasonable and supportable assumptions and shall consider all available evidence. The weight given to the evidence shall be commensurate with the extent to which the evidence can be verified objectively. If a range is estimated for the amounts or timing of possible cash flows, the likelihood of possible outcomes shall be considered. Concepts Statement 7 discusses the essential elements of a present value measurement (paragraph 23), provides examples of circumstances in which an entity's cash flows might differ from the market cash flows (paragraph 32), and discusses the use of present value techniques in measuring the fair value of an asset or a liability (paragraphs 39–54 and 75–88). Appendix E of this Statement incorporates those paragraphs of Concepts Statement 7.~~

- f. Appendix E is deleted. This appendix provided excerpts from FASB Concepts Statement No. 7, *Using Cash Flow Information and Present Value in Accounting Measurements*.
- g. Paragraph F1 (glossary):

**Fair value**

The amount at which an asset (or liability) could be bought (or incurred) or sold (or settled) in a current transaction between willing parties, that is, other than in a forced or liquidation sale.

E23. FASB Statement No. 143, *Accounting for Asset Retirement Obligations*, is amended as follows:

- a. Paragraphs 6 and 7 and footnote 5 to paragraph 6:

~~6. Statement 5 and FASB Concepts Statement No. 7, *Using Cash Flow Information and Present Value in Accounting Measurements*, deal with uncertainty in different ways. Statement 5 deals with uncertainty about whether a loss has been incurred by setting forth criteria to determine when to *recognize* a loss contingency. Concepts Statement 7 addresses measurement of liabilities and provides a *measurement* technique to deal with uncertainties about the amount and timing of the future cash flows necessary to settle the liability. Paragraphs 55–61 of Concepts Statement 7<sup>5</sup> discuss, in detail, the relationship between the fair value measurement objective and expected cash flow approach that is articulated in Concepts Statement 7 and accounting for contingencies under Statement 5. The guidance in Statement 5 and FASB Interpretation No. 14, *Reasonable Estimation of the Amount of a Loss*, are not applicable to a liability for which the objective is to measure that liability at fair value. That is because in Statement 5 uncertainty is used to decide whether to recognize a liability, whereas in Concepts Statement 7 uncertainties in the amount and timing of settlement are incorporated into the fair value measurement of the recognized liability. This Statement requires that all asset retirement obligations within the scope of this Statement be recognized when a reasonable estimate of fair value can be made.~~

~~7. The fair value of a liability for an asset retirement obligation is the amount at which that liability could be settled in a current transaction between willing parties, that is, other than in a forced or liquidation transaction. Quoted market prices in active markets are the best evidence of fair value and shall be used~~

as the basis for the measurement, if available. If quoted market prices are not available, the estimate of fair value shall be based on the best information available in the circumstances, including prices for similar liabilities and the results of present value (or other valuation) techniques.

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<sup>5</sup>Appendix F incorporates those paragraphs.

b. Paragraph 8 and its related footnotes 6 and 7:

An expected present value technique<sup>6</sup> will usually be the only appropriate is often the best available technique with which to estimate the fair value of a liability for an asset retirement obligation.<sup>6a</sup> An entity, when using that technique, shall discount the expected cash flows using a credit-adjusted risk-free rate. Thus, the effect of an entity's credit standing is reflected in the discount rate rather than in the expected cash flows. If a present value technique is used to estimate fair value, estimates of future cash flows used in that technique shall be consistent with the objective of measuring fair value.<sup>7</sup> Concepts Statement 7 discusses two present value techniques: a traditional approach, in which a single set of estimated cash flows and a single interest rate (a rate commensurate with the risk) are used to estimate fair value, and an expected cash flow approach, in which multiple cash flow scenarios that reflect the range of possible outcomes and a credit-adjusted risk-free rate are used to estimate fair value. Although either present value technique could theoretically be used for a fair value measurement, the expected cash flow approach will usually be the only appropriate technique for an asset retirement obligation. As discussed in paragraph 44 of Concepts Statement 7, proper application of a traditional approach entails analysis of at least two liabilities—one that exists in the marketplace and has an observable interest rate and the liability being measured. The appropriate rate of interest for the cash flows being measured must be inferred from the observable rate of interest of some other liability, and to draw that inference the characteristics of the cash flows must be similar to those of the liability being measured. It would be rare, if ever, that there would be an observable rate of interest for a liability that has cash flows similar to an asset retirement obligation being measured. In addition, an asset retirement obligation will usually have uncertainties in both timing and amount. In that circumstance, employing a traditional present value technique, where uncertainty is incorporated into the rate, will be difficult, if not impossible.

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<sup>6</sup>Appendix F incorporates paragraphs 39–54 and 75–88 of Concepts Statement 7 that discuss present value techniques:

<sup>6a</sup>Proper application of a discount rate adjustment technique entails analysis of at least two liabilities—the liability that exists in the marketplace and has an observable interest rate and the liability being measured. The appropriate rate of interest for the cash flows being measured must be inferred from the observable rate of interest of some other liability, and to draw that inference the characteristics of the cash flows must be similar to those of the liability being measured. Rarely, if ever, would there be an observable rate of interest for a liability that has cash flows similar to an asset retirement obligation being measured. In addition, an asset retirement obligation usually will have uncertainties in both timing and amount. In that circumstance, employing a discount rate adjustment technique, where uncertainty is incorporated into the rate, will be difficult, if not impossible.

<sup>7</sup>Appendix F incorporates paragraph 23 of Concepts Statement 7 that discusses the essential elements of a fair value measurement.

c. Paragraph 9 and its related footnote 8:

The cash flows used in estimates of fair value shall incorporate assumptions that marketplace participants would use in their estimates of fair value whenever that information is available without undue cost and effort. Otherwise, an entity may use its own assumptions.<sup>8</sup> Those estimates shall be based on reasonable and supportable assumptions and shall consider all available evidence. The weight given to the evidence shall be commensurate with the extent to which the evidence can be verified objectively. If a range is estimated for the timing or the amount of possible cash flows, the likelihood of possible outcomes shall be considered. An entity, when using the expected cash flow technique, shall discount the estimated cash flows using a credit-adjusted risk-free rate. Thus, the effect of the entity's credit standing is reflected in the discount rate rather than in the estimated cash flows.

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<sup>8</sup>Paragraph 32 of Concepts Statement 7 (included in Appendix F) provides reasons why an entity's assumptions may differ from those expected by others in the marketplace:

d. Footnote 12 to paragraph 14:

The subsequent measurement provisions require an entity to identify undiscounted estimated cash flows associated with the initial measurement of a liability. Therefore, an entity that obtains an initial measurement of fair value from a market price or from a technique other than the expected cash flow approach described in Concepts Statement 7 an expected present value technique must determine the undiscounted cash flows and estimated timing

of those cash flows that are embodied in that fair value amount for purposes of applying the subsequent measurement provisions. Appendix E includes an example of the subsequent measurement of a liability that is initially obtained from a market price.

e. Paragraph A19:

~~The objective of the initial measurement of a liability for an asset retirement obligation shall be fair value. Quoted market prices are the best representation of fair value. When market prices are not available, the amount of the liability must be estimated using some other measurement technique. The use of an expected present value technique in measuring the fair value of a liability is discussed in Concepts Statement 7.~~

f. Paragraph A20 and its related footnote 17:

In estimating the fair value of a liability for an asset retirement obligation using an expected present value technique, an entity shall begin by estimating the expected cash flows that reflect, to the extent possible, a marketplace assessment of the cost and timing of performing the required retirement activities. ~~The measurement objective is to determine the amount a third party<sup>17</sup> would demand to assume the obligation.~~ Considerations in estimating those expected cash flows include developing and incorporating explicit assumptions, to the extent possible, about all of the following:

- a. The costs that a third party would incur in performing the tasks necessary to retire the asset
- b. Other amounts that a third party would include in determining the price of ~~settlement~~the transfer, including, for example, inflation, overhead, equipment charges, profit margin, and advances in technology
- c. The extent to which the amount of a third party's costs or the timing of its costs would vary under different future scenarios and the relative probabilities of those scenarios
- d. The price that a third party would demand and could expect to receive for bearing the uncertainties and unforeseeable circumstances inherent in the obligation, sometimes referred to as a market-risk premium.

It is expected that uncertainties about the amount and timing of future cash flows can be accommodated by using the expected ~~cash flow~~present value

technique and therefore will not prevent the determination of a reasonable estimate of fair value.

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<sup>17</sup>In this context, a third party is meant to encompass participants (or hypothetical participants) that provide settlement of asset retirement obligations in a market.

g. Paragraph A21 and its related footnotes 18 and 19:

An entity shall discount ~~estimates of future~~expected cash flows using an interest rate that equates to a risk-free interest rate adjusted for the effect of its credit standing (a credit-adjusted risk-free rate).<sup>18</sup> ~~The risk-free interest rate is the interest rate on monetary assets that are essentially risk free and that have maturity dates that coincide with the expected timing of the estimated cash flows required to satisfy the asset retirement obligation.~~<sup>19</sup> ~~Concepts Statement 7 illustrates an adjustment to the risk-free interest rate to reflect the credit standing of the entity, but acknowledges that a~~Adjustments for default risk can be reflected in either the discount rate or the ~~estimated~~expected cash flows. The Board believes that in most situations, an entity will know the adjustment required to the risk-free interest rate to reflect its credit standing. Consequently, it would be easier and less complex to reflect that adjustment in the discount rate. In addition, because of the requirements in paragraph 15 relating to upward and downward adjustments in expected cash flow~~seash flow estimates~~, it is essential to the operability of this Statement that the credit standing of the entity be reflected in the interest~~discount~~ rate. For those reasons, the Board chose to require that the risk-free rate be adjusted for the credit standing of the entity to determine the discount rate.

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<sup>18</sup>In determining the adjustment for the effect of its credit standing, an entity should consider the effects of all terms, collateral, and existing guarantees ~~that would affect the amount required to settle on the fair value of the liability.~~

<sup>19</sup>In the United States, the risk-free rate is the rate for zero-coupon U.S. Treasury instruments.

h. Paragraph A26:

Revisions to a previously recorded asset retirement obligation will result from changes in the assumptions used to estimate the expected cash flows required to settle the asset retirement obligation, including changes in estimated probabilities, amounts, and timing of the settlement of the asset retirement obligation, as well as changes in the legal requirements of an obligation. Any changes that result in upward revisions to the ~~undiscounted estimated~~expected cash flows shall be treated as a new liability and discounted at the

current rate. Any downward revisions to the ~~undiscounted estimated~~expected cash flows will result in a reduction of the asset retirement obligation. For downward revisions, the amount of the liability to be removed from the existing accrual shall be discounted at the credit-adjusted risk-free rate that was used at the time the obligation to which the downward revision relates was originally recorded (or the historical weighted-average rate if the year(s) to which the downward revision applies cannot be determined).

i. Paragraph C1:

This appendix includes four examples that illustrate the recognition and measurement provisions of this Statement. Example 1 illustrates (a) initial measurement of a liability for an asset retirement obligation using an expected present value technique, (b) subsequent measurement assuming that there are no changes in ~~estimated~~expected cash flows, and (c) settlement of the asset retirement obligation liability (ARO liability) at the end of its term. Example 2 is similar to Example 1. However, Example 2 illustrates subsequent measurement of an ARO liability after a change in ~~estimated~~expected cash flows. Example 3 highlights the recognition and measurement provisions of this Statement for an ARO liability that is incurred over more than one reporting period. Example 4 illustrates accounting for asset retirement obligations that are conditional and that have a low likelihood of enforcement.

j. Paragraph C3(d):

A contractor would typically demand and receive a premium (market risk premium) for bearing the uncertainty and unforeseeable circumstances inherent in “locking in” today’s price for a project that will not occur for 10 years. The entity estimates the amount of that premium to be 5 percent of the ~~estimated inflation-adjusted cash flows~~expected cash flows adjusted for inflation.

k. Paragraph C4:

On December 31, 2012, the entity settles its asset retirement obligation by using its internal workforce at a cost of \$351,000. Assuming no changes

during the 10-year period in the expected cash flows used to estimate the obligation, the entity would recognize a gain of \$89,619 on settlement of the obligation:

Labor	\$195,000
Allocated overhead and equipment charges (80 percent of labor)	<u>156,000</u>
Total costs incurred	351,000
ARO liability	<u>440,619</u>
Gain on settlement of obligation	<u>\$ 89,619</u>

#### Initial Measurement of the ARO Liability at January 1, 2003

	<u>Expected Cash Flows 1/1/03</u>
Expected labor costs	\$131,250
Allocated overhead and equipment charges (.80 × \$131,250)	105,000
Contractor's markup [.20 × (\$131,250 + \$105,000)]	<u>47,250</u>
Expected cash flows before inflation adjustment	283,500
Inflation factor assuming 4 percent rate for 10 years	<u>1.4802</u>
Expected cash flows adjusted for inflation	419,637
Market-risk premium (.05 × \$419,637)	<u>20,982</u>
Expected cash flows adjusted for market risk	<u>\$440,619</u>
<u>Expected Present value using credit-adjusted risk-free rate of 8.5 percent for 10 years</u>	<u>\$194,879</u>

**[For ease of use, the rest of this example, which is unaffected by this Statement, has been omitted.]**

#### 1. Paragraph C6:

On December 31, 2004, the entity revises its estimate of labor costs to reflect an increase of 10 percent in the marketplace. In addition, it revises the probability assessments related to those labor costs. The change in labor costs results in an upward revision to the ~~undiscounted~~expected cash flows; consequently, the incremental expected cash flows are discounted at the

current credit-adjusted risk-free rate of 8 percent. All other assumptions remain unchanged. The revised estimate of expected cash flows for labor costs is as follows:

<u>Cash Flow Estimate</u>	<u>Probability Assessment</u>	<u>Expected Cash Flows</u>
\$110,000	30%	\$ 33,000
137,500	45	61,875
192,500	25	48,125
		<u>\$143,000</u>

m. Paragraph C7:

**[For ease of use, only the portion of this example affected by this Statement has been reproduced.]**

**Subsequent Measurement of the ARO Liability Reflecting a Change in Labor Cost Estimate as of December 31, 2004**

	<u>Revised Incremental Expected Cash Flows 12/31/04</u>
Incremental expected labor costs (\$143,000 – \$131,250)	\$11,750
Allocated overhead and equipment charges (.80 × \$11,750)	9,400
Contractor's markup [.20 × (\$11,750 + \$9,400)]	4,230
Expected cash flows before inflation adjustment	25,380
Inflation factor assuming 4 percent rate for 8 years	<u>1.3686</u>
Expected cash flows adjusted for inflation	34,735
Market-risk premium (.05 × \$34,735)	<u>1,737</u>
Expected cash flows adjusted for market risk	<u>\$36,472</u>
<u>Expected Present value of incremental liability using credit-adjusted risk-free rate of 8 percent for 8 years</u>	<u>\$19,704</u>

n. Paragraph C8:

Example 3 depicts an entity that places a nuclear utility plant into service on December 31, 2003. The entity is legally required to decommission the plant at the end of its useful life, which is estimated to be 20 years. Based on the requirements of this Statement, the entity recognizes a liability for an asset retirement obligation and capitalizes an amount for an asset retirement cost over the life of the plant as contamination occurs. The following schedule reflects the ~~undiscounted~~ expected cash flows and respective credit-adjusted risk-free rates used to measure each portion of the liability through December 31, 2005, at which time the plant is 90 percent contaminated.

<u>Date</u>	<u>Undiscounted Expected Cash Flows</u>	<u>Credit-Adjusted Risk-Free Rate</u>
12/31/03	\$23,000	9.0%
12/31/04	1,150	8.5
12/31/05	1,900	9.2

o. Paragraph C9:

On December 31, 2005, the entity increases by 10 percent its estimate of ~~undiscounted~~ expected cash flows that were used to measure those portions of the liability recognized on December 31, 2003, and December 31, 2004. Because the change results in an upward revision to the undiscounted estimated cash flows, the incremental estimated cash flow is discounted at the current credit-adjusted risk-free rate of 9.2 percent. As a result, \$2,300 (10 percent of \$23,000) plus \$115 (10 percent of \$1,150) plus \$1,900 (resulting from contamination in 2005), which totals \$4,315 of incremental ~~undiscounted~~ cash flows are discounted at the then current credit-adjusted risk-free rate of 9.2 percent and recorded as a liability on December 31, 2005, which results in an upward revision to the expected cash flows. Accordingly, the incremental expected cash flows of \$2,415 [\$2,300 (10 percent of \$23,000) plus \$115 (10 percent of \$1,150)] are discounted at the then current credit-adjusted risk-free rate of 9.2 percent and recorded as a liability on December 31, 2005.

[For ease of use, only the portion of this example affected by this Statement has been reproduced.]

	<u>Date Incurred</u>		
	<u>12/31/03</u>	<u>12/31/04</u>	<u>12/31/05</u>
<b>Initial measurement of the ARO liability:</b>			
Expected cash flows adjusted for market risk	\$23,000	\$1,150	\$1,900
Credit-adjusted risk-free rate	9.00%	8.50%	9.20%
Discount period in years	20	19	18
Expected present value	\$4,104	\$244	\$390
<b>Measurement of incremental revision in expected cash flows occurring on December 31, 2005:</b>			
Incremental revision in expected cash flows (increase of 10 percent) $\{(\$23,000 \times 10\%) + (\$1,150 \times 10\%)\}$			\$2,415
Credit-adjusted risk-free rate <u>at December 31, 2005</u>			9.20%
Discount period remaining in years			18
Expected present value			\$495

**Carrying Amount of Liability Incurred in 2005  
Plus Effect of Change in Estimated Expected Cash Flows**

<u>Year</u>	<u>Liability Balance 1/1</u>	<u>Accretion (9.2%)</u>	<u>Change in Cash-Flow Estimate</u>	<u>New Liability</u>	<u>Liability Balance 12/31</u>
2005			\$495	\$390	\$885

**Carrying Amount of Total Liability**

<u>Year</u>	<u>Liability Balance 1/1</u>	<u>Accretion</u>	<u>Change in Cash-Flow Estimate</u>	<u>New Liability</u>	<u>Total Carrying Amount 12/31</u>
2003				\$4,104	\$4,104
2004	\$4,104	\$369		244	4,717
2005	4,717	424	\$495	390	6,026

p. Paragraph C11:

At the end of the first year, 20 percent of the timber has been harvested. The lessee estimates that the ~~fair value of possible cash flows~~ associated with performing reforestation activities in 4 years for the portion of the land that has been harvested will be \$300,000. When estimating the fair value of the ARO liability to be recorded (using an expected present value technique), the lessee incorporates the probability that the restoration provisions will not be enforced:

<u>Possible Cash Flows Estimate</u>	<u>Probability Assessment</u>	<u>Expected Cash Flows</u>
\$300,000	10%	\$30,000
0	90	<u>0</u>
		<u>\$30,000</u>
<u>Expected Present value using credit- adjusted risk-free rate of 8.5 percent for 4 years</u>		<u>\$21,647</u>

q. Paragraph C12:

During the term of the lease, the lessee should reassess the likelihood that the lessor will require reforestation. For example, if the lessee subsequently determines that the likelihood of the lessor electing the reforestation option has increased, that change will result in a change in the ~~estimate of future expected cash flows~~ and be accounted for as illustrated in Example 2.

r. Appendix F is deleted. This appendix provided excerpts from Concepts Statement 7.

E24. FASB Statement No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*, is amended as follows:

a. Paragraph 22 and its related footnote 12:

~~The fair value of an asset (liability) is the amount at which that asset (liability) could be bought (incurred) or sold (settled) in a current transaction between willing parties, that is, other than in a forced or liquidation sale.~~<sup>12</sup> Quoted

market prices in active markets are the best evidence of fair value and shall be used as the basis for the measurement, if available. However, in many instances, quoted market prices in active markets will not be available for the long-lived assets (asset groups) covered by this Statement. In those instances, the estimate of fair value shall be based on the best information available, including prices for similar assets (groups) and the results of using other valuation techniques.

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<sup>12</sup>The fair value of an asset or a disposal group refers to the amount at which the group as a whole could be bought or sold in a current single transaction. Therefore, the fair value of the group would not necessarily equate to the sum of the fair values of the individual assets and liabilities of the group.

b. Paragraph 23 and its related footnote 13:

A present value technique is often the best available valuation technique with which to estimate the fair value of a long-lived asset (asset group). Paragraphs 39–54 of FASB Concepts Statement No. 7, *Using Cash Flow Information and Present Value in Accounting Measurements*, discuss the use of two present value techniques to measure the fair value of an asset (liability).<sup>13</sup> The first is expected present value, in which multiple cash flow scenarios that reflect the range of possible outcomes and a risk-free rate are used to estimate fair value. The second is traditional present value, in which a single set of estimated cash flows and a single interest rate (a rate commensurate with the risk) are used to estimate fair value. Either present value technique can be used for a fair value measurement. However, for long-lived assets (asset groups) that have uncertainties both in timing and amount, an expected present value technique will often be the appropriate technique with which to estimate fair value. (Example 4 of Appendix A illustrates the use of that technique.)

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<sup>13</sup>Appendix E incorporates those paragraphs of Concepts Statement 7.

c. Paragraph 24 and its related footnote 14:

If a present value technique is used, estimates of future cash flows shall be consistent with the objective of measuring fair value. Assumptions that marketplace participants would use in their estimates of fair value shall be incorporated whenever that information is available without undue cost and effort.<sup>14</sup> Otherwise, the entity may use its own assumptions.

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<sup>14</sup>Concepts Statement 7 discusses the essential elements of a present value measurement (paragraph 23) and provides reasons why an entity's estimates of cash flows might differ from those used by marketplace participants (paragraph 32). Appendix E incorporates those paragraphs.

d. Paragraph A6:

At December 31, 20X2, a manufacturing facility with a carrying amount of \$48 million is tested for recoverability. At that date, 2 courses of action to recover the carrying amount of the facility are under consideration—sell in 2 years or sell in 10 years (at the end of its remaining useful life). The facility has identifiable cash flows that are largely independent of the cash flows of other assets.

e. Paragraph A7:

As indicated in the following table, the possible cash flows associated with each of those courses of action are \$41 million and \$48.7 million, respectively. They are developed based on entity-specific assumptions about future sales (volume and price) and costs in varying scenarios that consider the likelihood that existing customer relationships will continue, changes in economic (market) conditions, and other relevant factors. The following table shows the range and probability of possible estimated cash flows expected to result from the use and eventual disposition of the facility assuming that (a) it is sold at the end of 2 years or (b) it is sold at the end of 10 years. Among other things, the range of possible estimated cash flows considers future sales levels (volume and price) and associated manufacturing costs in varying scenarios that consider (a) the likelihood that existing customer relationships will continue and (b) future economic (market) conditions. The probability assessments consider all information available without undue cost and effort. Such assessments are by their nature subjective and, in many situations, may be limited to management's best judgment about the probabilities of the best, worst, and most-likely scenarios.

<u>Course of Action</u>	<u>Cash Flows Estimate (Use)</u>	<u>Cash Flows Estimate (Disposition)</u>	<u>Cash Flows Estimate (Total)</u>	<u>Probability Assessment</u>	<u>Possible Cash Flows (Probability-Weighted) Cash Flows</u>
	(in \$ millions)				
Sell in 2 years	\$ 8	\$30	\$38	20%	\$ 7.6
	11	30	41	50	20.5
	13	30	43	30	12.9
					<u>\$41.0</u>
Sell in 10 years	36	1	37	20	\$ 7.4
	48	1	49	50	24.5
	55	1	56	30	16.8
					<u>\$48.7</u>

f. Paragraph A8:

In computing the future cash flows used to test the facility for recoverability, the entity concludes that there is (a) a 60 percent probability that the facility will be sold at the end of 2 years and (b) a 40 percent probability that the facility will continue to be used for its remaining estimated useful life of 10 years. As further indicated in the following table, there is a 60 percent probability that the facility will be sold in 2 years and a 40 percent probability that the facility will be sold in 10 years. The following table shows the computation of future cash flows based on the probability of those alternative courses of action.<sup>27</sup> As shown, those future the expected cash flows are \$44.1 million (undiscounted). Therefore, the carrying amount of the facility of \$48 million would not be recoverable.

<u>Course of Action</u>	<u>Possible Cash Flows (Probability-Weighted) Cash Flows</u>	<u>Probability Assessment (Course of Action)</u>	<u>Expected Cash Flows (Undiscounted)</u>
	(in \$ millions)		
Sell in 2 years	\$41.0	60%	\$24.6
Sell in 10 years	48.7	40	19.5
			<u>\$44.1</u>

g. Paragraph A11 and its related footnote 28:

This example illustrates the application of an expected present value technique to estimate the fair value of a long-lived asset in an impairment situation, the absence of an observable market price (paragraph 23).<sup>28</sup> It is based on the facts provided for the manufacturing facility in Example 2.

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<sup>28</sup>Present value is the current measure of an estimated future cash inflow, discounted at an interest rate for the number of periods between today and the date of the estimated cash flow. The present value of  $\$X$  in  $n$  periods in the future and discounted at interest of  $i$  per period is computed using the formula  $X / (1 + i)^n$ . Because all of the risks are considered in the estimates of cash flows, the entity discounts the expected cash flows for each year using the risk-free rate of interest. The risk-free rate of interest is the interest rate on monetary assets that are essentially risk free and that have maturity dates that coincide with the expected timing of the cash flow. In the United States, the risk-free rate is the rate for zero-coupon U.S. Treasury instruments. A yield curve for U.S. Treasury instruments may be used to determine the appropriate risk-free rates of interest.

h. Paragraph A12 and its related footnote 29:

Consistent with an objective of measuring fair value, the entity's estimates of future cash flows used to test the manufacturing facility for recoverability in Example 2 are adjusted to incorporate assumptions that, based on available information, marketplace participants would use in their estimates of the fair value of the asset. The net effect of those adjustments is to increase the entity's estimates of future cash flows (on an undiscounted basis) by approximately 15 percent.<sup>29</sup>

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<sup>29</sup>In this example, a reliable estimate of the market risk premium is not available. Paragraph 62 of FASB Concepts Statement No. 7, *Using Cash Flow Information and Present Value in Accounting Measurements*, explains:

An estimate of fair value should include the price that marketplace participants are able to receive for bearing the uncertainties in cash flows—the adjustment for risk—if the amount is identifiable, measurable, and significant. An arbitrary adjustment for risk, or one that cannot be evaluated by comparison to marketplace information, introduces an unjustified bias into the measurement. On the other hand, excluding a risk adjustment (if it is apparent that marketplace participants include one) would not produce a measurement that faithfully represents fair value. There are many techniques for estimating a risk adjustment, including matrix pricing, option-adjusted spread models, and fundamental analysis. However, in many cases a reliable estimate of the market risk premium may not be obtainable or the amount may be small relative to potential measurement error in the estimated cash flows. In such situations, the present value of expected cash flows, discounted at a risk-free rate of interest, may be the best available estimate of fair value in the circumstances.

i. Paragraph A13:

The following table shows by year the computation of the expected cash flows used in the measurement. They reflect the possible cash flows (probability-weighted) used to test the manufacturing facility for recoverability in Example 2, adjusted for relevant marketplace assumptions, which increases the possible cash flows in total by approximately 15 percent. ~~range and probability of possible cash flows expected to result from the use and eventual disposition of the facility over its remaining useful life of 10 years (Example 2), adjusted for market assumptions. It also shows by year the computation of expected cash flows.~~

<u>Year</u>	<u>Total Possible Cash Flows Estimate (Market)</u>	<u>Probability Assessment</u>	<u>Expected Cash Flows (Undiscounted)</u>
	(in \$ millions)		
1	\$4.6	20%	\$ .9
	6.3	50	3.2
	7.5	30	<u>2.3</u>
			\$6.4
2	\$4.6	20%	\$ .9
	6.3	50	3.2
	7.5	30	<u>2.3</u>
			\$6.4
3	\$4.3	20%	\$ .9
	5.8	50	2.9
	6.7	30	<u>2.0</u>
			\$5.8
4	\$4.3	20%	\$ .9
	5.8	50	2.9
	6.7	30	<u>2.0</u>
			\$5.8
5	\$4.0	20%	\$ .8
	5.4	50	2.7
	6.4	30	<u>1.9</u>
			\$5.4

<u>Year</u>	<u>Total Possible Cash Flows Estimate (Market)</u>	<u>Probability Assessment</u>	<u>Expected Cash Flows (Undiscounted)</u>
	(in \$ millions)		
6	\$4.0	20%	\$ .8
	5.4	50	2.7
	6.4	30	<u>1.9</u>
			\$5.4
7	\$3.9	20%	\$ .8
	5.1	50	2.6
	5.6	30	<u>1.7</u>
			\$5.1
8	\$3.9	20%	\$ .8
	5.1	50	2.6
	5.6	30	<u>1.7</u>
			\$5.1
9	\$3.9	20%	\$ .8
	5.0	50	2.5
	5.5	30	<u>1.7</u>
			\$5.0
10	\$4.9	20%	\$1.0
	6.0	50	3.0
	6.5	30	<u>2.0</u>
			\$6.0

j. Paragraph A14:

The following table shows the computation of the expected present value; that is, the sum of the present values of the expected cash flows by year, each discounted at a risk-free interest rate determined from the yield curve for U.S. Treasury instruments.<sup>29a</sup> The following table shows the computation of the present value of the expected cash flows; that is, the sum of the present values of the expected cash flows by year, which are calculated by discounting those cash flows at a risk-free rate. As shown, the expected present value is \$42.3 million, which is less than the carrying amount of \$48 million. In

accordance with paragraph 7, the entity would recognize an impairment loss of \$5.7 million (~~\$48 million less \$42.3 million~~).

<sup>29a</sup>In this example, a market risk premium is included in the expected cash flows; that is, the cash flows are certainty equivalent cash flows.

<u>Year</u>	<u>Expected Cash Flows (Undiscounted)</u>	<u>Risk-Free Rate of Interest</u>	<u>Expected Present Value</u>	<u>Expected Present Value</u>
		(in \$ millions)		
1	\$ 6.4	5.0%	\$ 6.1	
2	6.4	5.1	5.8	
3	5.8	5.2	5.0	
4	5.8	5.4	4.7	
5	5.4	5.6	4.1	
6	5.4	5.8	3.9	
7	5.1	6.0	3.4	
8	5.1	6.2	3.2	
9	5.0	6.4	2.9	
10	<u>6.0</u>	6.6	<u>3.2</u>	
	<u>\$56.4</u>		<u>\$42.3</u>	<u>\$42.3</u>

k. Appendix E is deleted. This appendix provided excerpts from Concepts Statement 7.

E25. FASB Statement No. 146, *Accounting for Costs Associated with Exit or Disposal Activities*, is amended as follows:

a. Paragraph 5:

~~The fair value of a liability is the amount at which that liability could be settled in a current transaction between willing parties, that is, other than in a forced or liquidation transaction. Quoted market prices in active markets are the best evidence of fair value and shall be used as the basis for the measurement, if available. If quoted market prices are not available, the estimate of fair value shall be based on the best information available in the circumstances, including prices for similar liabilities and the results of using other valuation techniques. (Certain valuation techniques are discussed in Appendix A.)~~

b. Paragraph A2 and its related footnote 13:

The objective of initial measurement of a liability for a cost associated with an exit or disposal activity is fair value (paragraph 3). A present value technique is often the best available valuation technique with which to estimate the fair value of a liability for a cost associated with an exit or disposal activity. For a liability that has uncertainties both in timing and amount, an expected present value technique generally will be the appropriate technique. For a liability, fair value represents the amount that a willing third party of comparable credit standing would demand and could expect to receive to assume all of the duties, uncertainties, and risks inherent in the transferor's obligation, including a profit element or risk premium.<sup>13</sup>

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<sup>13</sup>Paragraph 62 of FASB Concepts Statement No. 7, *Using Cash Flow Information and Present Value in Accounting Measurements*, explains:

An estimate of fair value should include the price that marketplace participants are able to receive for bearing the uncertainties in cash flows—the adjustment for risk—if the amount is identifiable, measurable, and significant. An arbitrary adjustment for risk, or one that cannot be evaluated by comparison to marketplace information, introduces an unjustified bias into the measurement. On the other hand, excluding a risk adjustment (if it is apparent that marketplace participants include one) would not produce a measurement that faithfully represents fair value. There are many techniques for estimating a risk adjustment, including matrix pricing, option-adjusted spread models, and fundamental analysis. However, in many cases a reliable estimate of the market risk premium may not be obtainable or the amount may be small relative to potential measurement error in the estimated cash flows. In such situations, the present value of expected cash flows, discounted at a risk-free rate of interest, may be the best available estimate of fair value in the circumstances.

c. Paragraph A4 and its related footnotes 14 and 15:

A present value technique often is the best available valuation technique with which to estimate the fair value of a liability. FASB Concepts Statement No. 7, *Using Cash Flow Information and Present Value in Accounting Measurements*, discusses two present value techniques.<sup>14</sup> The first technique is expected present value, in which multiple cash flow scenarios that reflect the range of possible outcomes and a risk-free rate adjusted for the entity's credit standing<sup>15</sup> are used to estimate fair value. The second technique is traditional present value, in which a single set of estimated cash flows and a single risk-adjusted interest rate are used to estimate fair value. In contrast to a traditional present value technique, which incorporates uncertainty in the amount and timing of cash flows in the interest rate, an expected present value technique incorporates that uncertainty in the estimated cash flows. Thus, an

expected present value technique often will be the appropriate valuation technique if a liability for a cost associated with an exit or disposal activity has uncertainties in both the amount and timing of estimated cash flows.

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<sup>14</sup>Paragraph 23 of Concepts Statement 7 discusses the essential elements of a present value measurement.

<sup>15</sup>When using an expected present value technique, the effect of an entity's credit standing can be reflected in either the discount rate or the estimated cash flows. However, it is usually easier and less complex to reflect that adjustment in the discount rate.

d. Paragraph A5 and its related footnote 16:

When using a present value technique, estimates of future cash flows should incorporate assumptions that marketplace participants would use in their estimates of fair value whenever that information is available without undue cost and effort. Otherwise, an entity may use its own estimates of future cash flows.<sup>16</sup>

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<sup>16</sup>Paragraph 38 of Concepts Statement 7 explains:

As a practical matter, an entity that uses cash flows in accounting measurements often has little or no information about some or all of the assumptions that marketplace participants would use in assessing the fair value of an asset or a liability. In those situations, an entity must necessarily use the information that is available without undue cost and effort in developing cash flow estimates. The use of an entity's own assumptions about future cash flows is compatible with an estimate of fair value, as long as there are no contrary data indicating that marketplace participants would use different assumptions. If such data exist, the entity must adjust its assumptions to incorporate that market information.

E26. FASB Statement No. 150, *Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity*, is amended as follows:

a. Paragraph D1 (glossary):

**Fair value**

The amount at which an asset (liability) could be bought (incurred) or sold (settled) in a current transaction between willing parties, that is, other than in a forced or liquidation sale. Additional guidance on determining fair value is provided in other FASB Statements and FASB Concepts Statements:

E27. FASB Statement No. 156, *Accounting for Servicing of Financial Assets*, is amended as follows:

- a. Paragraph 3(c):

**Fair value**

See paragraphs 68–70 of Statement 140.

E28. FASB Interpretation No. 45, *Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others*, is amended as follows:

- a. Paragraph 9(a):

When a guarantee is issued in a standalone arm's-length transaction with an unrelated party, the liability recognized at the inception of the guarantee should be the premium received or receivable by the guarantor as a practical expedient.

- b. Paragraph 9(b):

When a guarantee is issued as part of a transaction with multiple elements with an unrelated party (such as in conjunction with selling an asset or entering into an operating lease), the liability recognized at the inception of the guarantee should be an estimate of the guarantee's fair value. In that circumstance, guarantors should consider what premium would be required by the guarantor to issue the same guarantee in a standalone arm's-length transaction with an unrelated party as a practical expedient. ~~In the absence of observable transactions for identical or similar guarantees, expected present value measurement techniques as set forth in FASB Concepts Statement No. 7, *Using Cash Flow Information and Present Value in Accounting Measurements*, will likely provide the best estimate of fair value. Concepts Statement 7 states in its glossary that "expected present value refers to the sum of the probability-weighted present values in a range of estimated cash flows, all discounted using the same interest rate convention." The general principles in paragraph 41 of Concepts Statement 7 are also relevant.~~

E29. Statement 133 Implementation Issue No. A23, “Definition of a Derivative: Prepaid Interest Rate Swaps,” is amended as follows:

- a. First paragraph of the Background section:

*A prepaid interest rate swap contract*, as that term is used in this Issue, obligates one party to make periodic payments to another party that are based on a variable interest rate applied to an effective notional amount. It is characterized as an at-the-money interest rate swap contract for which the fixed leg has been fully prepaid ~~(at its fair value—a discounted amount)~~, with the result that the party that receives the variable-leg-based payments has no obligation whatsoever to make any future payments under the contract. Under that characterization, the fair value of the fixed leg and the fair value of the variable leg are equal and offsetting because the at-the-money interest rate swap contract has an overall fair value of zero.

E30. Statement 133 Implementation Issue No. B13, “Embedded Derivatives: Accounting for Remarketable Put Bonds,” is amended as follows:

- a. Third paragraph of Structure 1 of the Response section:

*Determination of the carrying value of the investor’s freestanding call option:* The carrying value of the investor’s attached freestanding written call option to the investment bank should be its fair value in accordance with paragraph 17 of Statement 133. ~~The initial fair value allocated to the call option by the investor should be based on the initial proceeds paid by the investment bank for the purchase of that option.~~ The remaining proceeds would be allocated to the carrying amount of the puttable bond.

- b. Third paragraph of Structure 2 of the Response section:

*Determination of the carrying value of the investor’s freestanding written call option:* The carrying value of the investor’s freestanding written call option to the investment bank should be its fair value in accordance with paragraph 17 of Statement 133. ~~The initial fair value allocated to the call option by the investor should be based on the initial proceeds paid by the investment bank for the purchase of that option.~~ The remaining proceeds would be allocated to the carrying amount of the puttable bond.

c. Third paragraph of Structure 5 of the Response section:

*Determination of the carrying value of the investor's freestanding written call option:* The carrying value of the investor's freestanding written call option to the investment bank should be its fair value in accordance with paragraph 17 of Statement 133. In the remarketing format, the transfer of the purchased call option is concurrent with the issuance of the bond. ~~Therefore, the initial fair value assigned to the call option should be based on the proceeds paid by the investment bank at the inception of the structure for the purchase of that option, and~~ The remaining proceeds would be allocated to the carrying amount of the puttable bond. The debtor recognizes no gain or loss upon the transfer of the option to the investment bank.

d. Third paragraph of Structure 6 of the Response section:

*Determination of the carrying value of the investor's freestanding written call option:* The carrying value of the investor's freestanding written call option to the investment bank should be its fair value in accordance with paragraph 17 of Statement 133 with the remaining proceeds allocated to the carrying amount of the puttable bond. In the assignment format, the transfer of the purchased call option by the debtor to the investment bank may not be concurrent with the issuance of the bond. ~~If the transfer of the purchased call option is concurrent with the issuance of the bond, consistent with the remarketing format, the initial fair value assigned to the call option should be based on the initial proceeds paid by the investment bank at the inception of the structure for the purchase of that option, with the remaining proceeds allocated to the carrying amount of the puttable bond.~~ The debtor recognizes no gain or loss upon the transfer of the call option. In transactions involving a delay between the issuance of the bond and the transfer of the assignable call option to the investment bank, the allocation of the initial proceeds to the carrying value of the option would be equal to the fair value of the option based on a market quote. Presumably, that market quote would be equal to the amount that would be paid by a third party (such as the investment bank) to purchase the call option under current market conditions. The remaining proceeds would be allocated to the carrying amount of the puttable bond. During any period of time between the initial issuance of the bond and the transfer of the call option to the investment bank, the call option must be measured at fair value with changes in value recognized in earnings as required by paragraph 18 of Statement 133. As a result of the requirement to measure the call option at fair value during the time period before it is assigned to the investment bank, the debtor would not recognize a gain or loss

upon the assignment because the proceeds paid by the investment bank would be the option's current fair value on the date of the assignment, which would be the option's carrying amount at that point in time. Any change in the fair value of the option during the time period before it is assigned to the investment bank would be attributable to the passage of time and changes in market conditions.

E31. Statement 133 Implementation Issue No. B35, "Embedded Derivatives: Application of Statement 133 to a Not-for-Profit Organization's Obligation Arising from an Irrevocable Split-Interest Agreement," is amended as follows:

a. Second paragraph of the Response section:

The NFP organization's liability for its obligation under a split-interest agreement would typically not meet the definition of a derivative instrument in its entirety because it would not meet the criterion in paragraph 6(b). That criterion requires the contract to have no initial net investment or an initial net investment that is smaller than would be required for other types of contracts that would be expected to have a similar response to changes in market factors. In contrast, the initial net investment for the liability recognized for typical split-interest agreements is its fair value (generally measured at the present value of the estimated future payments). If the NFP organization's liability for its obligation under the split-interest agreement does not in its entirety meet the definition of a derivative instrument in paragraph 6, that liability must be analyzed to determine whether it contains provisions that constitute an embedded derivative instrument that warrants separate accounting under paragraph 12. Generally, the liability representing an obligation under a split-interest agreement contains an embedded derivative that warrants separate accounting if the payments are variable and the agreement is period-certain (rather than life-contingent) unless a fair value election is made pursuant to Statement 155. The following examples, although not all-inclusive, provide an understanding of the applicability of paragraph 12 to various split-interest agreements.

E32. Statement 133 Implementation Issue No. 12, “Disclosures: Near-Term Reclassification of Gains and Losses That Are Reported in Accumulated Other Comprehensive Income,” is amended as follows:

a. Second paragraph of the Background section:

When interest rate or commodity swaps are used for cash flow hedges, in effect a single derivative is being used to hedge multiple hedged forecasted transactions because a swap involves multiple cash flows (like a series of forward contracts). For instance, a five-year interest rate swap may be designated as the hedging instrument to hedge the variability in cash flows for each of the resets in a five-year variable-rate borrowing. The fair value of a swap may be the net of both positive discounted cash flows (that is, the right to receive future payments) and negative discounted cash flows (that is, the obligation to make future payments). This could happen, for example, if nearby forward rates were below the fixed rate on the swap and far-term forward rates were above the fixed rate on the swap, in which case an entity could have an expectation of having to make cash outflows on the swap for nearby exposures and to receive cash inflows on the swap for the far-term exposures.

