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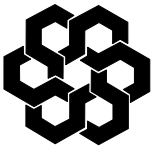

International Accounting Standards Board

This document is provided as a convenience to observers at Financial Instruments Working Group meetings, to assist them in following the discussion. It does not represent an official position of the IASB. Board positions are set out in Standards.
Note: These notes are based on the staff paper prepared for the Financial Instruments Working Group Meetings. Paragraph numbers correspond to paragraph numbers used in the Financial Instruments paper. However, because these notes are less detailed, some paragraph numbers are not used.

INFORMATION FOR OBSERVERS

IASB Meeting: **Financial Instruments Working Group**
Paper: **Agenda Paper 6**

FINANCIAL INSTRUMENTS WORKING GROUP
FAIR VALUE MEASUREMENTS

OVERVIEW

1 In February 2006 the International Accounting Standards Board (IASB) and the US Financial Accounting Standards Board (FASB) published a Memorandum of Understanding reaffirming their commitment to the convergence of US generally accepted accounting principles (GAAP) and International Financial Reporting Standards (IFRSs) and to their shared objective of developing high quality, common accounting standards for use in the world's capital markets. The convergence work programme set out in the Memorandum reflects the standard-setting context of the 'roadmap' developed by the US Securities and Exchange Commission in consultation with the IASB, FASB and European Commission for the removal of the reconciliation requirement for non-US companies that use IFRSs and are registered in the US. The work programme includes a project on measuring fair value.

2 In September 2006 the FASB published Statement of Financial Accounting Standards No. 157 *Fair Value Measurements* (SFAS 157), on which work was well advanced before the Memorandum of Understanding was published. SFAS 157 establishes a single definition of fair value together with a framework for measuring fair value for US GAAP. The IASB recognised the need for guidance on measuring fair value in IFRSs and for increased convergence with US GAAP. Consequently, the IASB decided to use the FASB's standard as the starting point for its deliberations. As the first stage of its project on fair value measurement, the IASB published on 30 November 2006 a discussion paper that comprises:

(a) SFAS 157, its application guidance and basis for conclusions;

(b) excerpts of fair value measurement guidance in IFRSs; and

(c) an invitation to comment, which sets out the IASB's preliminary views on the principal issues contained in SFAS 157 and compares the provisions of SFAS 157 with the guidance in IFRSs.

3 Comments on the discussion paper are due by 4 May 2006.

4 Many of the issues addressed in the invitation to comment of the discussion paper relate to fair value measurements of financial instruments. The staff has selected four key issues on which they seek FIWG input at this meeting:

(a) entry prices versus exit prices

(b) day-one gains or losses,

(c) settlement versus transfer of liabilities, and

(d) identification of the most advantageous market.

5 In addition to these issues, if time permits, the staff welcomes questions and/or comments from the FIWG on other issues in the discussion paper (as listed in paragraph 21) or the fair value measurements project in general.

ENTRY PRICES VERSUS EXIT PRICES

6 IAS 39 *Financial Instruments: Recognition and Measurement* requires nearly all financial assets and financial liabilities be recorded at fair value upon initial recognition. In periods subsequent to initial recognition, many financial assets and financial liabilities are recorded at fair value, with changes in fair value being recorded into either profit and loss or into comprehensive income. A summary of these requirements by type of financial asset and financial liability is included in Attachment 1 to this paper.

7 IAS 39 defines fair value as:

> the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction.

8 This definition is neither an explicit exit price nor an explicit entry price, but is an arm's length exchange price between unrelated parties. IAS 39 contains guidance on measuring fair value, which is included in Attachment 2 to this paper.

9 By comparison, SFAS 157 defines fair value as

> 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.

10 The Board stated a preliminary view in the discussion paper supporting an exit price definition of fair value similar to the definition in SFAS 157. The Board's preliminary view is that an exit price definition of fair value is preferable to the current definition as it articulates a single measurement attribute that reflects the economic benefits market participants would expect from an asset or the outflow of economic benefits market participants would expect from a liability.

11 However, an exit price might not be consistent with the current measurement objective of some fair value measurements required in IAS 39. Therefore, as noted in paragraph 17 of the discussion paper, if the Board proposes to revise the definition of fair value, it will complete a standard-by-standard review of the fair value measurements required by IFRSs to assess whether the intended measurement objective is consistent with the revised definition. If the Board concludes that a particular measurement objective is inconsistent with the proposed definition of fair value, that particular measurement might be relabelled using a

term other than fair value (such as 'current entry price'). The staff seeks FIWG participant views on which fair value measurements currently required by IAS 39 are, in their view, an exit price, an entry price, or some other measurement objective.

Questions for FIWG members

Question 1: *Would you classify the fair value measurements currently required in IAS 39 for financial assets and liabilities (see Attachment 1) as exit prices, entry prices or another measurement basis based on current guidance and current practice? If another basis, how would you describe it? What measurement objective do you believe is ideal, irrespective of current guidance?*

DAY-ONE GAINS OR LOSSES

12 Day one gains or losses might arise whenever an entity's measurement of fair value differs from the transaction price paid (the entry price) or received (the exit price) for the financial asset or financial liability, respectively. At present, under IAS 39, an entity may recognise the difference between an estimate of fair value and the transaction price at initial recognition only if the estimate of fair value is based entirely on observable market inputs.

13 US GAAP currently contains guidance on day-one gains and losses that is similar to the provisions of IAS 39. However, SFAS 157 nullifies that guidance. As a result, an entity might recognise a day one gain or loss if their estimate of fair value differs from the transaction price in some circumstances. This is true even if fair value measurement is based on unobservable inputs. Paragraphs 16 and 17 of SFAS 157 provide guidance on measuring 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).

Questions for FIWG members

Question 2: *If an entity's fair value measurement differs from the transaction price for a financial asset or liability, should the entity recognise this difference if:*

(a) the measurement is based on observable inputs from active markets for the same asset or liability?

(b) the measurement is based on observable inputs from active markets for similar assets or liabilities or the inputs are from inactive markets?

(c) the measurement cannot be corroborated by observable market data?

Question 3: *If you believe differences between the entity's fair value measurement and the transaction price (a day-one gain or loss) should not be recognised in some circumstances, when and how do you think the differences should be recognised?*

SETTLEMENT VERSUS TRANSFER OF LIABILITIES

14 As noted above, IAS 39 defines the fair value of a liability as the amount for which a *liability could be settled* between knowledgeable, willing parties in an arm's length transaction. By comparison, the exit price definition of fair value that the Board preliminarily favoured in the discussion paper states the fair value of a liability is the price that would be paid *to transfer a liability* in an orderly transaction between market participants at the measurement date.

Settlement objective in IAS 39

15 Though IAS 39 refers to a settlement objective, the fair value measurement guidance presently in IAS 39 emphasises the use of market inputs over entity specific inputs. For example, paragraph AG71 states that 'the existence of published price quotations in an active market is the best evidence of fair value and when they exist they are used to measure the financial asset or financial liability.' While this might be different from the amount at which the entity could settle the obligation, the entity is currently required under IAS 39 to use the price observable in the market.

16 IAS 39 discusses that a discounted cash flow approach may be used to measure the fair value of a financial liability if there is no active market for the instrument. Paragraph AG79 states that when applying a discounted cash flow analysis, 'an entity uses one or more discount rates equal to the prevailing rates of return for financial instruments having substantially the same terms and characteristics, including the credit quality of the instrument, the remaining term over which the contractual interest rate is fixed, the remaining term to repayment of the principal and the currency in which payments are to be made.' As such, even in cases in which no active market exists for the financial liability, an entity should use market-based prevailing rates of interest, reflecting similar credit quality, to measure the fair value of the liability.

Transfer objective

17 Paragraph 15 of SFAS 157 discusses the concept of transferring liabilities rather than settling them:

> 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.

18 The Board discussed the differences between a settlement objective and a transfer objective and also considered the guidance in IAS 39 compared to the guidance in SFAS 157. The Board reached the preliminary view the market-based 'settlement' objective for measuring the fair value of financial liabilities in IAS 39 is consistent with the market based 'transfer' objective in SFAS 157. However, the Board viewed that the 'transfer' objective more accurately described the market-based objective of fair value measurements in IFRSs.

Question for FIWG members

> ***Question 4:*** *In your view, does the 'settlement' objective (as described in IAS 39) differ from the 'transfer' objective described in SFAS 157? In other words, would the fair value of a financial liability under IAS 39 (considering current guidance and practice) differ in amount from the fair value of a financial liability under SFAS 157? If so, how?*

MOST ADVANTAGEOUS VERSUS PRINCIPAL MARKETS

19 Paragraph AG71 of IAS 39 states:

> The objective of determining fair value for a financial instrument that is traded in an active market is to arrive at the price at which a transaction would occur at the balance sheet date in that instrument (ie without modifying or repackaging the instrument) in the most advantageous active market to which the entity has immediate access.

20 SFAS 157, on the other hand, requires entities to first look to their principal market for the asset or liability. Only in the absence of a principal market would an entity consider its most advantageous market. These provisions are discussed in paragraph 8 of SFAS 157, which states:

> 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.

Questions for FIWG members

Question 5: *How is the most advantageous market determined in practice under IAS 39? When determining the most advantageous market, do entities consider only the prices that could be received in the markets available? Or, do entities also consider other (perhaps qualitative) attributes of the markets, such as their relative liquidity and activity?*

Question 6: *Do entities tend to switch between markets when measuring fair value depending on which market is more advantageous at a given reporting date? Or, do they tend to determine that one particular market is generally most advantageous, always referring to that market unless there is a significant change in the nature of markets available?*

Question 7: *Are there circumstances in which the most advantageous market (as applied in practice described in Question 5 and Question 6) might not be the principal market for a financial asset or liability?*

OTHER ISSUES

21 The discussion paper on fair value measurements discusses many issues related to financial instruments. Although we selected the matters discussed above as the focus for this meeting, if time permits we welcome any questions and/or comments you might have on the discussion paper or other aspects of the fair value measurements project. For reference purposes, the following issues in the discussion paper relate to financial instruments:

(a) Issue 5 – Attributes specific to the asset or liability (which includes a discussion of transaction costs)

(b) Issue 6 – Valuation of liabilities (which includes a discussion of non-performance risk and own credit risk)

(c) Issue 8 – Fair value hierarchy

(d) Issue 9 – Large positions of a single financial instrument (blocks)

(e) Issue 10 – Measuring fair value within the bid-ask spread

(f) Issue 11 – Disclosures

(g) Issue 12 – Application guidance

Summary of recognition requirements in IAS 39

Fair Value Measurement	Current IAS 39 measurement requirements
financial assets at fair value through profit or loss (for example, derivatives, trading securities	*Initial recognition* – fair value (transaction costs excluded) *Subsequent measurement* – fair value, without any deduction for transaction costs it may incur on sale or other disposal
held-to-maturity investments	*Initial recognition* – fair value plus transaction costs that are directly attributable to the acquisition or issue of the financial asset or financial liability *Subsequent measurement* – measured at amortised cost using the effective interest method (however, subject to review for impairment)
loans and receivables	*Initial recognition* – fair value plus transaction costs that are directly attributable to the acquisition or issue of the financial asset or financial liability *Subsequent measurement* – measured at amortised cost using the effective interest method (however, subject to review for impairment)
available-for-sale financial assets	*Initial recognition* – fair value plus transaction costs that are directly attributable to the acquisition or issue of the financial asset or financial liability *Subsequent measurement* – fair values, without any deduction for transaction costs it may incur on sale or other disposal
investments in equity instruments that do not have a quoted market price in an active market and whose fair value	*Initial recognition* – measured at cost *Subsequent measurement* – measured at cost (however, subject to review for

cannot be reliably measured and derivatives (assets or liabilities) that are linked to and must be settled by delivery of such unquoted equity instruments	impairment)
Financial liabilities at fair value through profit and loss (for example, derivatives)	*Initial recognition* – fair value (transaction costs excluded) *Subsequent measurement* – fair value, without any deduction for transaction costs it may incur on sale or other disposal
Financial liabilities not at fair value through profit and loss (for example, debt)	*Initial recognition* – fair value plus transaction costs that are directly attributable to the issue of the financial liability *Subsequent measurement* – amortised cost using the effective interest method

Fair value measurement guidance in IAS 39

48 **In determining the fair value of a financial asset or a financial liability for the purpose of applying this Standard, IAS 32 or IFRS 7, an entity shall apply paragraphs AG69–AG82 of Appendix A.**

48A The best evidence of fair value is quoted prices in an active market. If the market for a financial instrument is not active, an entity establishes fair value by using a valuation technique. The objective of using a valuation technique is to establish what the transaction price would have been on the measurement date in an arm's length exchange motivated by normal business considerations. Valuation techniques include using recent arm's length market transactions between knowledgeable, willing parties, if available, reference to the current fair value of another instrument that is substantially the same, discounted cash flow analysis and option pricing models. If there is a valuation technique commonly used by market participants to price the instrument and that technique has been demonstrated to provide reliable estimates of prices obtained in actual market transactions, the entity uses that technique. The chosen valuation technique makes maximum use of market inputs and relies as little as possible on entity-specific inputs. It incorporates all factors that market participants would consider in setting a price and is consistent with accepted economic methodologies for pricing financial instruments. Periodically, an entity calibrates the valuation technique and tests it for validity using prices from any observable current market transactions in the same instrument (ie without modification or repackaging) or based on any available observable market data.

49 The fair value of a financial liability with a demand feature (eg a demand deposit) is not less than the amount payable on demand, discounted from the first date that the amount could be required to be paid.

AG69 Underlying the definition of fair value is a presumption that an entity is a going concern without any intention or need to liquidate, to curtail materially the scale of its operations or to

undertake a transaction on adverse terms. Fair value is not, therefore, the amount that an entity would receive or pay in a forced transaction, involuntary liquidation or distress sale. However, fair value reflects the credit quality of the instrument.

AG70 This Standard uses the terms 'bid price' and 'asking price' (sometimes referred to as 'current offer price') in the context of quoted market prices, and the term 'the bid-ask spread' to include only transaction costs. Other adjustments to arrive at fair value (eg for counterparty credit risk) are not included in the term 'bid-ask spread'.

Active market: quoted price

AG71 A financial instrument is regarded as quoted in an active market if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis. Fair value is defined in terms of a price agreed by a willing buyer and a willing seller in an arm's length transaction. The objective of determining fair value for a financial instrument that is traded in an active market is to arrive at the price at which a transaction would occur at the balance sheet date in that instrument (ie without modifying or repackaging the instrument) in the most advantageous active market to which the entity has immediate access. However, the entity adjusts the price in the more advantageous market to reflect any differences in counterparty credit risk between instruments traded in that market and the one being valued. The existence of published price quotations in an active market is the best evidence of fair value and when they exist they are used to measure the financial asset or financial liability.

AG72 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. When an entity has assets and liabilities with offsetting market risks, it may use mid-market prices as a basis for establishing fair values for the offsetting risk positions and apply the bid or asking price to the net open position as appropriate. When current bid and asking prices are unavailable, the price of the most recent transaction provides evidence of the current fair value as long as there has not been a significant change in economic circumstances since the time of the transaction. If conditions have changed since the time of the transaction (eg a change in the risk-free interest rate

following the most recent price quote for a corporate bond), the fair value reflects the change in conditions by reference to current prices or rates for similar financial instruments, as appropriate. Similarly, if the entity can demonstrate that the last transaction price is not fair value (eg because it reflected the amount that an entity would receive or pay in a forced transaction, involuntary liquidation or distress sale), that price is adjusted. 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. If a published price quotation in an active market does not exist for a financial instrument in its entirety, but active markets exist for its component parts, fair value is determined on the basis of the relevant market prices for the component parts.

AG73 If a rate (rather than a price) is quoted in an active market, the entity uses that market-quoted rate as an input into a valuation technique to determine fair value. If the market-quoted rate does not include credit risk or other factors that market participants would include in valuing the instrument, the entity adjusts for those factors.

No active market: valuation technique

AG74 If the market for a financial instrument is not active, an entity establishes fair value by using a valuation technique. Valuation techniques include using recent arm's length market transactions between knowledgeable, willing parties, if available, reference to the current fair value of another instrument that is substantially the same, discounted cash flow analysis and option pricing models. If there is a valuation technique commonly used by market participants to price the instrument and that technique has been demonstrated to provide reliable estimates of prices obtained in actual market transactions, the entity uses that technique.

AG75 The objective of using a valuation technique is to establish what the transaction price would have been on the measurement date in an arm's length exchange motivated by normal business considerations. Fair value is estimated on the basis of the results of a valuation technique that makes maximum use of market inputs, and relies as little as possible on entity-specific inputs. A valuation technique would be expected to arrive at a realistic estimate of the fair value if (a) it reasonably reflects how the market could be expected to price the instrument and (b) the inputs to the valuation technique reasonably represent market expectations and measures of the risk-return factors inherent in

the financial instrument.

AG76 Therefore, a valuation technique (a) incorporates all factors that market participants would consider in setting a price and (b) is consistent with accepted economic methodologies for pricing financial instruments. Periodically, an entity calibrates the valuation technique and tests it for validity using prices from any observable current market transactions in the same instrument (ie without modification or repackaging) or based on any available observable market data. An entity obtains market data consistently in the same market where the instrument was originated or purchased. The best evidence of the fair value of a financial instrument at initial recognition is the transaction price (ie the fair value of the consideration given or received) unless the fair value of that instrument is evidenced by comparison with other observable current market transactions in the same instrument (ie without modification or repackaging) or based on a valuation technique whose variables include only data from observable markets.

AG76A The subsequent measurement of the financial asset or financial liability and the subsequent recognition of gains and losses shall be consistent with the requirements of this Standard. The application of paragraph AG76 may result in no gain or loss being recognised on the initial recognition of a financial asset or financial liability. In such a case, IAS 39 requires that a gain or loss shall be recognised after initial recognition only to the extent that it arises from a change in a factor (including time) that market participants would consider in setting a price.

AG77 The initial acquisition or origination of a financial asset or incurrence of a financial liability is a market transaction that provides a foundation for estimating the fair value of the financial instrument. In particular, if the financial instrument is a debt instrument (such as a loan), its fair value can be determined by reference to the market conditions that existed at its acquisition or origination date and current market conditions or interest rates currently charged by the entity or by others for similar debt instruments (ie similar remaining maturity, cash flow pattern, currency, credit risk, collateral and interest basis). Alternatively, provided there is no change in the credit risk of the debtor and applicable credit spreads after the origination of the debt instrument, an estimate of the current market interest rate may be derived by using a benchmark interest rate reflecting a better credit quality than the underlying debt instrument, holding the credit spread constant, and adjusting for the change in the benchmark interest rate from the origination date. If conditions have changed

since the most recent market transaction, the corresponding change in the fair value of the financial instrument being valued is determined by reference to current prices or rates for similar financial instruments, adjusted as appropriate, for any differences from the instrument being valued.

AG78 The same information may not be available at each measurement date. For example, at the date that an entity makes a loan or acquires a debt instrument that is not actively traded, the entity has a transaction price that is also a market price. However, no new transaction information may be available at the next measurement date and, although the entity can determine the general level of market interest rates, it may not know what level of credit or other risk market participants would consider in pricing the instrument on that date. An entity may not have information from recent transactions to determine the appropriate credit spread over the basic interest rate to use in determining a discount rate for a present value computation. It would be reasonable to assume, in the absence of evidence to the contrary, that no changes have taken place in the spread that existed at the date the loan was made. However, the entity would be expected to make reasonable efforts to determine whether there is evidence that there has been a change in such factors. When evidence of a change exists, the entity would consider the effects of the change in determining the fair value of the financial instrument.

AG79 In applying discounted cash flow analysis, an entity uses one or more discount rates equal to the prevailing rates of return for financial instruments having substantially the same terms and characteristics, including the credit quality of the instrument, the remaining term over which the contractual interest rate is fixed, the remaining term to repayment of the principal and the currency in which payments are to be made. Short-term receivables and payables with no stated interest rate may be measured at the original invoice amount if the effect of discounting is immaterial.

No active market: equity instruments

AG80 The fair value of investments in equity instruments that do not have a quoted market price in an active market and derivatives that are linked to and must be settled by delivery of such an unquoted equity instrument (see paragraphs 46(c) and 47) is reliably measurable if (a) the variability in the range of reasonable fair value estimates is not

significant for that instrument or (b) the probabilities of the various estimates within the range can be reasonably assessed and used in estimating fair value.

AG81 There are many situations in which the variability in the range of reasonable fair value estimates of investments in equity instruments that do not have a quoted market price and derivatives that are linked to and must be settled by delivery of such an unquoted equity instrument (see paragraphs 46(c) and 47) is likely not to be significant. Normally it is possible to estimate the fair value of a financial asset that an entity has acquired from an outside party. However, if the range of reasonable fair value estimates is significant and the probabilities of the various estimates cannot be reasonably assessed, an entity is precluded from measuring the instrument at fair value.

Inputs to valuation techniques

AG82 An appropriate technique for estimating the fair value of a particular financial instrument would incorporate observable market data about the market conditions and other factors that are likely to affect the instrument's fair value. The fair value of a financial instrument will be based on one or more of the following factors (and perhaps others).

(a) *The time value of money (ie interest at the basic or risk-free rate).* Basic interest rates can usually be derived from observable government bond prices and are often quoted in financial publications. These rates typically vary with the expected dates of the projected cash flows along a yield curve of interest rates for different time horizons. For practical reasons, an entity may use a well-accepted and readily observable general rate, such as LIBOR or a swap rate, as the benchmark rate. (Because a rate such as LIBOR is not the risk-free interest rate, the credit risk adjustment appropriate to the particular financial instrument is determined on the basis of its credit risk in relation to the credit risk in this benchmark rate.) In some countries, the central government's bonds may carry a significant credit risk and may not provide a stable benchmark basic interest rate for instruments denominated in that currency. Some entities in these countries may have a better credit standing and a lower borrowing rate than the central government. In such a case, basic interest rates may be more appropriately determined by reference to interest rates for the highest

rated corporate bonds issued in the currency of that jurisdiction.

(b) *Credit risk.* The effect on fair value of credit risk (ie the premium over the basic interest rate for credit risk) may be derived from observable market prices for traded instruments of different credit quality or from observable interest rates charged by lenders for loans of various credit ratings.

(c) *Foreign currency exchange prices.* Active currency exchange markets exist for most major currencies, and prices are quoted daily in financial publications.

(d) *Commodity prices.* There are observable market prices for many commodities.

(e) *Equity prices.* Prices (and indexes of prices) of traded equity instruments are readily observable in some markets. Present value based techniques may be used to estimate the current market price of equity instruments for which there are no observable prices.

(f) *Volatility (ie magnitude of future changes in price of the financial instrument or other item).* Measures of the volatility of actively traded items can normally be reasonably estimated on the basis of historical market data or by using volatilities implied in current market prices.

(g) *Prepayment risk and surrender risk.* Expected prepayment patterns for financial assets and expected surrender patterns for financial liabilities can be estimated on the basis of historical data. (The fair value of a financial liability that can be surrendered by the counterparty cannot be less than the present value of the surrender amount—see paragraph 49.)

(h) *Servicing costs for a financial asset or a financial liability.* Costs of servicing can be estimated using comparisons with current fees charged by other market participants. If the costs of servicing a financial asset or financial liability are significant and other market participants would face comparable costs, the issuer would consider them in determining the fair value of that financial asset or financial liability. It is likely that the fair value at inception of a contractual right to future fees equals the origination costs paid for them, unless future fees and related costs are out of line with market comparables.