

Introduction

Many IFRS permit or require entities to measure or disclose the fair value of assets, liabilities, or equity instruments. However, until recently there was limited guidance in IFRS on how to measure fair value and, in some cases, the guidance was conflicting. To remedy this, the International Accounting Standards Board (IASB) issued IFRS 13 *Fair Value Measurement* (the standard) in May 2011. The standard was the result of a convergence project between the IASB and the US Financial Accounting Standards Board (FASB) (collectively, the Boards).

IFRS 13 defines fair value, provides principles-based guidance on how to measure fair value under IFRS and requires information about those fair value measurements to be disclosed. IFRS 13 does not attempt to remove the judgement that is involved in estimating fair value, rather, it provides a framework that is intended to reduce inconsistency and increase comparability in the fair value measurements used in financial reporting.

IFRS 13 does not address which assets or liabilities to measure at fair value or when those measurements must be performed. An entity must look to other standards in that regard. The standard applies to all fair value measurements, when fair value is required or permitted by IFRS, with some limited exceptions. The standard also applies to measurements, such as fair value less costs to sell, that are based on fair value. However, it does not apply to similar measurement bases, such as value in use.

The standard is effective for annual periods beginning on or after 1 January 2013, with early adoption permitted, and will apply prospectively. In the interim, unless adopted early, existing fair value measurement requirements in other standards will continue to be applicable.

On adoption, fair value measurements recognised in the financial statements may change. The extent of this change will differ depending on the type of asset or liability being measured and the previous fair value measurement requirements to which they were subject. Similarly, the effect of IFRS 13 may differ by industry. At a minimum, the adoption of IFRS 13 will require entities to reconsider their processes and procedures for measuring fair value and providing the required disclosures.

This publication outlines the requirements of IFRS 13, its definitions, measurement framework and disclosure requirements. It addresses some of the key questions that are being asked about how to apply IFRS 13, recognising that some aspects of the standard are still unclear and different views may exist. Further issues and questions are likely to be raised in the future as entities adopt the new standard. We encourage readers to closely monitor developments with respect to fair value measurements.

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What you need to know

- ▶ Common requirements now exist between IFRS and US GAAP on how to measure fair value.
- ▶ IFRS 13 does not change when an entity is required to use fair value, but rather, provides guidance on *how* to measure the fair value of financial and non-financial assets and liabilities when required or permitted by IFRS.
- ▶ While many of concepts in IFRS 13 are consistent with current practice, certain principles, such as the prohibition on blockage discounts for all fair value measurements, could have a significant effect on some entities.
- ▶ The disclosure requirements are substantial and could present challenges for many entities.
- ▶ At a minimum, the adoption of IFRS 13 will require entities to reconsider their processes and procedures for measuring fair value and providing the required disclosures.
- ▶ IFRS 13 applies prospectively to annual periods beginning on or after 1 January 2013, but can be early adopted.

1 Overview and objectives of IFRS 13

1.1 Overview

IFRS 13 provides a principles-based framework for measuring fair value in IFRS. This is based on a number of key concepts including unit of account; exit price; valuation premise; highest and best use; principal market; market participant assumptions and the fair value hierarchy.

The principles in IFRS 13 are intended to increase the consistency and comparability of fair value estimates in financial reporting. The standard applies to all fair value measurements, when fair value is required or permitted by IFRS, with some limited exceptions. IFRS 13 also applies to measurements, such as fair value less costs to sell, that are based on fair value. However, it does not apply to measurement bases that are similar to, but are not intended to represent, fair value, such as value in use.

IFRS 13 establishes a single definition of fair value for financial reporting purposes, provides a framework for applying this definition, and requires numerous disclosures about the use of fair value measurements in the financial statements. The requirements incorporate financial theory and valuation techniques, but are focused solely on how these concepts are to be applied when determining fair value for financial reporting purposes.

IFRS 13 does not address the issue of *what* to measure at fair value. The IASB separately considers issues surrounding *what* to measure at fair value and *when* to measure items at fair value on a project-by-project basis. Other IFRSs determine what items must be measured at fair value, and when. IFRS 13 addresses *how* to measure fair value. The principles in IFRS 13 will provide the IASB with a consistent definition for determining whether fair value is the appropriate measurement basis to be used in any given future project.

The definition of fair value in IFRS 13 is based on an exit price notion, which incorporates the following key concepts:

- ▶ Fair value is the price to sell an asset or transfer a liability, and therefore represents an exit price, not an entry price.
- ▶ The exit price for an asset or liability is conceptually different from its transaction price (an entry price). While exit and entry price may be identical in many situations, the transaction price is not presumed to represent the fair value of an asset or liability on its initial recognition.
- ▶ Fair value is an exit price in the principal market i.e., the market with the highest volume and level of activity. In the absence of a principal market, it is assumed that the transaction would occur in the most advantageous market. This is the market that would maximise the amount that would be received to sell an asset or minimise the amount that would be paid to transfer a liability, taking into consideration transport and transaction costs.¹ In either case, the entity must have access to the market on the measurement date.

¹ While transaction costs are considered in determining the most advantageous market, they do not form part of a fair value measurement (i.e., transaction costs incurred to acquire an item are not added to the price used to measure fair value and transaction costs incurred to sell an item are not deducted from the price used to measure fair value). An exit price would be adjusted for transportation costs if location is a characteristic of the asset or liability being measured. This is discussed further in Chapter 8.

- ▶ Fair value is a market-based measurement, not an entity-specific measurement. When determining fair value, management uses the assumptions that market participants would use when pricing the asset or liability. However, an entity need not identify specific market participants.
- ▶ Fair value measurements should not be adjusted for transaction costs.

These key concepts and the following aspects of IFRS 13's guidance will require particular focus when applying the standard, especially on adoption of the standard:

- ▶ If another standard provides a fair value measurement exemption that applies when fair value cannot be measured reliably, an entity may need to consider IFRS 13's measurement framework in order to determine whether fair value can be reliably measured (see Chapter 2).
- ▶ If there is a principal market for the asset or liability, a fair value measurement represents the price in that market at the measurement date (regardless of whether that price is directly observable or estimated using another valuation technique), even if the price in a different market is potentially more advantageous (see Chapter 5).
- ▶ Fair value measurements should take into consideration the characteristics of the asset or liability being measured, but not characteristics of the transaction to sell an asset or transfer a liability. Transportation costs, for example, must be deducted from the price used to measure fair value when location is a characteristic of the item being measured at fair value (see Chapters 4 and 5). This principle also clarifies when a restriction on the sale or use of an asset or transfer of a liability affects the measurement of fair value (see Chapter 4) and when premiums and discounts can be included. In particular, an entity is prohibited from making adjustments for the size of an entity's holding in comparison to current trading volumes (i.e., blockage factors, see Chapters 14 and 15).
- ▶ The fair value measurement of non-financial assets must reflect the highest and best use of the asset from a market participant's perspective, which might be its current use or some alternative use. This establishes whether to assume a market participant would derive value from using the non-financial asset on its own or in combination with other assets or with other assets and liabilities (see Chapter 9).
- ▶ The standard clarifies that a fair value measurement of a liability must consider non-performance risk (which includes, but is not limited to, an entity's own credit risk, see Chapter 10).
- ▶ IFRS 13 provides guidance on how to measure the fair value of an entity's own equity instruments, which IFRS did not previously provide (see Chapter 10), and aligns it with the fair value measurement of liabilities. If there are no quoted prices available for the transfer of an identical or a similar liability or entity's own equity instrument, but the identical item is held by another party as an asset, an entity uses the fair value of the corresponding asset (from the perspective of the market participant that holds that asset) to measure the fair value of the liability or equity instrument. When no corresponding asset exists, the fair value of the liability is measured from the perspective of a market participant that owes the liability (see Chapter 10).

- ▶ IFRS 13's measurement exception will allow entities to measure financial instruments with offsetting risks on a portfolio basis, provided certain criteria are met both initially and on an ongoing basis (see Chapter 11).
- ▶ IFRS 13's requirements in relation to valuation techniques apply to all methods of measuring fair value. Traditionally, references to valuation techniques in IFRS have indicated a lack of market-based information with which to value an asset or liability. Valuation techniques as discussed in IFRS 13 are broader and, importantly, include market-based approaches. When selecting inputs to use, an entity must prioritise observable inputs over unobservable inputs.
- ▶ IFRS 13 provides application guidance for measuring fair value in situations where there has been a decrease in the volume or level of activity (see Chapter 7).
- ▶ Classification within the fair value hierarchy, previously required for financial instruments only, is required for all fair value measurements. Disclosures required by IFRS 13 are substantially greater for those fair value measurements that are classified within Level 3.

1.2 Objective of IFRS 13

Extract from IFRS 13

1. This IFRS:
 - (a) defines fair value;
 - (b) sets out in a single IFRS a framework for measuring fair value; and
 - (c) requires disclosures about fair value measurements.
2. Fair value is a market-based measurement, not an entity-specific measurement. For some assets and liabilities, observable market transactions or market information might be available. For other assets and liabilities, observable market transactions and market information might not be available. However, the objective of a fair value measurement in both cases is the same – to estimate the price at which an orderly transaction to sell the asset or to transfer the liability would take place between market participants at the measurement date under current market conditions (ie an exit price at the measurement date from the perspective of a market participant that holds the asset or owes the liability).
3. When a price for an identical asset or liability is not observable, an entity measures fair value using another valuation technique that maximises the use of relevant observable inputs and minimises the use of unobservable inputs. Because fair value is a market-based measurement, it is measured using the assumptions that market participants would use when pricing the asset or liability, including assumptions about risk. As a result, an entity's intention to hold an asset or to settle or otherwise fulfil a liability is not relevant when measuring fair value.
4. The definition of fair value focuses on assets and liabilities because they are a primary subject of accounting measurement. In addition, this IFRS shall be applied to an entity's own equity instruments measured at fair value.

IFRS 13 defines fair value and provides principles-based requirements on how to determine fair value for financial reporting purposes. However, it generally does not provide specific rules or detailed “how-to” guidance. Given the broad use of fair

value measurements in accounting for various kinds of assets and liabilities (both financial and non-financial), providing detailed valuation guidance was not deemed practical. As such, the application of IFRS 13 requires significant judgement, using the core concepts of the standard's principles-based framework for fair value measurements.

A primary goal of IFRS 13 is to increase the consistency and comparability of fair value measurements used in financial reporting. It provides a common objective whenever IFRS permits or requires a fair value measurement, irrespective of the type of asset or liability being measured or the entity that holds it.

The objective of a fair value measurement is to estimate the price at which an orderly transaction would take place between market participants under the market conditions that exist at the measurement date.

By highlighting that fair value considers market conditions that exist at the measurement date, the IASB is emphasising that the intent of the measurement is to convey the current value of the asset or liability at the measurement date, and not its potential value at some future date. In addition, a fair value measurement does not consider management's intent to sell the asset or transfer the liability at the measurement date. Instead, it represents a market-based measurement that contemplates a hypothetical transaction between market participants at the measurement date (see Chapters 5-8 for additional discussion of these concepts).

IFRS 13 makes it clear that the objective of a fair value measurement remains the same, regardless of the reason for the fair value measurement (e.g., impairment testing or a recurring measurement) or the extent of observable information available to support the measurement. While the standard requires that the inputs used to measure fair value be prioritised based on their relative reliability (see Chapter 15), the nature of the inputs does not affect the objective of the measurement. That is, the requirement to determine an exit price under current market conditions is not relaxed because the reporting entity cannot observe similar assets or liabilities being transacted at the measurement date.

Even when fair value is estimated using significant unobservable inputs (because observable inputs do not exist), the goal is to determine an exit price based on the assumptions that market participants would consider when transacting for the asset or liability on the measurement date, including assumptions about risk. This might require the inclusion of a risk premium in the measurement to compensate market participants for the uncertainty inherent in the expected cash flows of the asset or liability being measured.

2 Scope

IFRS 13 applies when another IFRS permits or requires the measurement or disclosure of fair value, or a measure that is based on fair value (such as fair value less costs to sell), with the following exceptions:

Extract from IFRS 13

6. The measurement and disclosure requirements of this IFRS do not apply to the following:
 - (a) share-based payment transactions within the scope of IFRS 2 *Share-based Payment*;
 - (b) leasing transactions within the scope of IAS 17 *Leases*; and
 - (c) measurements that have some similarities to fair value but are not fair value, such as net realisable value in IAS 2 *Inventories* or value in use in IAS 36 *Impairment of Assets*.
7. The disclosures required by this IFRS are not required for the following:
 - (a) plan assets measured at fair value in accordance with IAS 19 *Employee Benefits*;
 - (b) retirement benefit plan investments measured at fair value in accordance with IAS 26 *Accounting and Reporting by Retirement Benefit Plans*; and
 - (c) assets for which recoverable amount is fair value less costs of disposal in accordance with IAS 36.

2.1 Items in the scope of IFRS 13

2.1.1 Fair value measurements

The measurement framework in IFRS 13 applies to both fair value measurements on initial recognition and subsequent fair value measurements, if permitted or required by another IFRS (fair value measurement at initial recognition is discussed further in Chapter 12).

It is important to note that IFRS 13 establishes how to measure fair value. It does not prescribe:

- What should be measured at fair value
- When to measure fair value (i.e., the measurement date)

Or

- How (or whether) to account for any subsequent changes in fair value (e.g., in profit or loss or in other comprehensive income).

However, the standard does partly address day one gains or losses on initial recognition at fair value, requiring that they be recognised in profit or loss immediately unless the IFRS that permits or requires initial measurement at fair value specifies otherwise

An entity must consider the relevant IFRSs (e.g., IFRS 3 *Business Combinations*, IFRS 9 *Financial Instruments* or IAS 40 *Investment Property*) for each of these requirements.

2.1.2 Fair value disclosures

The scope of IFRS 13 includes disclosures of fair value. This refers to situations where an entity elects, or may be required, to disclose the fair value of an item whose carrying amount in the financial statements is not fair value. Examples include IAS 40, which requires the fair value to be disclosed for investment properties measured using the cost model,² and IFRS 7 *Financial Instruments: Disclosures*, which requires the fair value of financial instruments that are subsequently measured at amortised cost in accordance with IFRS 9 or IAS 39 *Financial Instruments: Recognition and Measurement* to be disclosed.³ In such situations, the disclosed fair value must be measured in accordance with IFRS 13 and an entity would also need to make certain disclosures about that fair value measurement in accordance with IFRS 13 (see Chapter 19).

In certain circumstances, IFRS 7 provides relief from the requirement to disclose the fair value of a financial instrument that is not measured subsequently at fair value, for example, when the carrying amount is considered a reasonable approximation of fair value.⁴ In these situations, an entity would not need to measure the fair value of the financial asset or financial liability for disclosure. However, it would need to consider the requirements of IFRS 13 in order to determine whether the carrying amount is a reasonable approximation of fair value.

2.1.3 Measurements based on fair value

Measurements or disclosures that are based on fair value, such as fair value less costs to sell, are within the scope of IFRS 13. These include the following:

- ▶ A non-current asset (or disposal group) held for sale measured at fair value less costs to sell in accordance with IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations*, where the fair value less costs to sell is lower than its carrying amount
- ▶ Commodity inventories that are held by commodity broker-traders and measured at fair value less costs to sell, as discussed in IAS 2
- ▶ Where the recoverable amount for an asset or cash-generating unit(s), determined in accordance with IAS 36, is its fair value less costs of disposal. This includes impairment testing of investments in associates accounted for in accordance with IAS 28 *Investments in Associates and Joint ventures* where that standard requires the test to be performed in accordance with IAS 36
- ▶ Biological assets and agricultural produce measured at fair value less costs to sell in accordance with IAS 41 *Agriculture*

In each of these situations, the fair value component would be measured in accordance with IFRS 13. Costs to sell or costs of disposal would be determined in accordance with the applicable standard, for example, IFRS 5.

² IAS 40.79(e)

³ IFRS 7.25

⁴ IFRS 7.29

2.2 Scope exclusions

2.2.1 Share based payments

IFRS 2 requires certain share-based payments to be measured at grant date fair value. However, the objective of the IFRS 2 fair value measurement is not entirely consistent with IFRS 13. Rather than trying to distinguish between these two measures, the IASB decided to exclude share-based payment transactions accounted for in accordance with IFRS 2 from the scope of IFRS 13. The grant date fair value of such share-based payments is therefore measured and disclosed in accordance with IFRS 2, not IFRS 13.⁵

2.2.2 Lease transactions

As noted in the extract from IFRS 13 above, the standard does not apply to any leasing transactions in the scope of IAS 17. The existing fair value measurement and disclosure requirements in IAS 17 apply instead. This scope exception does not extend to lease assets acquired or liabilities assumed in a business combination in accordance with IFRS 3. IFRS 13 would apply to that measurement of fair value.

At the time of issuing the standard, the IASB noted that applying IFRS 13's requirements might have significantly changed the classification of leases and the timing of recognising gains or losses for sale and leaseback transactions. In addition, because of the IASB's current leases project, which would replace IAS 17, requiring entities to make potentially significant changes to their accounting systems for IFRS 13 and then for a new standard on leases (when issued) could be burdensome.⁶

2.2.3 Measurements similar to fair value

Some IFRSs permit or require measurements that are similar to fair value, but are not fair value. These measures are excluded from the scope of IFRS 13. Such measures may be derived using techniques that are similar to those permitted in IFRS 13. IAS 36, for example, requires value in use to be determined using discounted cash flows. An entity may also consider the selling price of an asset, for example, in determining net realisable value for inventories in accordance with IAS 2. Despite these similarities, the objective is not to measure fair value. Therefore, IFRS 13 does not apply to these measurements.

2.2.4 Exemptions from IFRS 13's disclosures requirements

As noted in the extract from IFRS 13 above, the standard's disclosure requirements do not apply to plan assets measured at fair value in accordance with IAS 19, retirement benefit plan investments measured at fair value in accordance with IAS 26 and assets for which the recoverable amount is fair value less costs of disposal in accordance with IAS 36.

In addition, the disclosure requirements in IFRS 13 do not apply to any fair value measurements at initial recognition, i.e., IFRS 13's disclosure requirements apply to fair value measurement after initial recognition (this is discussed further in Chapter 19).

The fair value measurement requirements of IFRS 13 still apply to each of these items, even though the disclosure requirements do not. Therefore, an entity would measure the item in accordance with IFRS 13 and then make the required disclosures in accordance with the applicable standard, i.e., IAS 19, IAS 26, IAS 36

⁵ IFRS 13.BC21

⁶ IFRS 13.BC22

or the standard that requires fair value at initial recognition. For example, an entity that acquires a brand as part of a business combination would be required by IFRS 3 to measure the intangible asset at fair value at initial recognition. The acquirer would measure the asset's fair value in accordance with IFRS 13, but would disclose information about that fair value measurement in accordance with IFRS 3 (since those fair values are measured at initial recognition), not IFRS 13.

2.3 Present value techniques

IFRS 13 provides guidance for using present value techniques, such as a discounted cash flow (DCF) analysis, to measure fair value (see Chapter 20 for additional discussion on the application of present value techniques). However, the use of present value techniques in measuring an asset or liability does not always result in a fair value measurement. As discussed in 2.2.3 above, some IFRSs use present value techniques to measure assets and liabilities at amounts that are not intended to represent a fair value measurement. Unless the objective is to measure fair value, IFRS 13 will not apply.

2.4 Fair value measurement exceptions and practical expedients in other standards

2.4.1 Measurement exceptions to fair value measurement

Some standards may provide an exception to a requirement to measure an asset or liability at fair value. IFRS 13 does not eliminate these exceptions.⁷

IFRS typically limits fair value measurement exceptions to circumstances where fair value is not reliably measurable and, where applied, requires the application of a cost model. For example, IAS 41 permits the use of a cost model if, on initial recognition of a biological asset, an entity is able to rebut the presumption that fair value can be reliably measured. In addition, it requires an entity to revert to the fair value model if fair value subsequently becomes reliably measurable.⁸ Additional disclosures are often required to explain why fair value cannot be reliably measured and, if possible, the range of estimates within which fair value is highly likely to lie, as is required in IAS 40 for investment properties, for example.⁹

In these situations, an entity would need to consider the requirements of IFRS 13 in order to determine whether fair value can be reliably measured. If the entity concludes that it could reliably measure fair value based on the requirements of IFRS 13, even in situations where observable information is not available, it would not be able to apply the exceptions. This may result in a change to current practice on adoption of IFRS 13.

2.4.2 Practical expedient for impaired financial assets carried at amortised cost

IAS 39 allows, as a practical expedient, creditors to measure the impairment of a financial asset carried at amortised cost based on an instrument's fair value using an observable market price.¹⁰ If the practical expedient is used, IFRS 13 applies to the measurement of fair value.

When the practical expedient is not used, the measurement objective is not intended to be fair value (and IFRS 13 would not apply). Instead, IAS 39's requirements for measuring the impairment of the financial asset carried at amortised cost would apply.

⁷ IFRS 13.BC8

⁸ IAS 41.30

⁹ IAS 40.79(e)

¹⁰ IAS 39.AG84

2.5 Measurement exceptions and practical expedients within IFRS 13

2.5.1 Practical expedients in IFRS 13

In addition to maintaining the various practicability exceptions that existed in other IFRSs, as discussed in section 2.4 above, IFRS 13 provides its own practical expedients for applying the fair value framework in certain instances. These practical expedients, each of which is discussed separately in this publication, include the use of mid-market pricing within a bid-ask spread (see Chapter 15). Unlike US GAAP, IFRS 13 does not allow the use of net asset value to estimate the fair value of certain alternative investments (differences from US GAAP are discussed further in Chapter 22).

2.5.2 Measurement exception to the fair value principles for financial instruments

IFRS 13 makes it clear that the concepts of 'highest and best use' and 'valuation premise' only apply to the measurement of non-financial assets. This could have significantly changed the valuation of some over-the-counter (OTC) derivatives, many of which are measured on a portfolio basis. That is, reporting entities typically determine valuation adjustments related to bid-ask spreads and credit risk for OTC derivative contracts considering the net exposure of a portfolio of contracts to a particular market risk or credit risk. To address this concern, IFRS 13 provides an exception to the principles of fair value when measuring financial instruments with offsetting risks if certain criteria are met.

The exception allows an entity to estimate the fair value of a portfolio of financial instruments based on the sale or transfer of its net position for a particular market risk exposure (rather than to the individual instruments in the portfolio). The exception also enables an entity to consider its credit exposure to a particular counterparty on a net basis, provided there is an arrangement in place that mitigates credit risk upon default (e.g., a master netting agreement).

Refer to Chapter 11 for additional discussion on measuring the fair value of financial assets and financial liabilities with offsetting risks.

3 The fair value framework

3.1 Definition of fair value

IFRS 13 defines fair value as follows:

Extract from IFRS 13

9. 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 definition of fair value in IFRS 13 is not significantly different from previous definitions in IFRS, that is, “the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm’s length transaction”.¹¹ However, IFRS 13’s definition, and its guidance in the fair value framework, clarify that:

- ▶ The definition of fair value in IFRS 13 is a current exit price, not an entry price.¹²
- ▶ The exit price for an asset or liability is conceptually different from its transaction price (an entry price). While exit and entry prices may be identical in many situations, the transaction price is not presumed to represent the fair value of an asset or liability on its initial recognition as measured in accordance with IFRS 13.
- ▶ In addition, the exit price objective of a fair value measurement applies regardless of the reporting entity’s intent and/or ability to sell the asset or transfer the liability at the measurement date.¹³
- ▶ Fair value is the exit price in the principal market (or in the absence of a principal market, the most advantageous market (see Chapter 5) in which the reporting entity would transact). However, the price in the exit market should not be adjusted for transaction costs, i.e., transaction costs incurred to acquire an item are not added to the price used to measure fair value and transaction costs incurred to sell an item are not deducted from the price used to measure fair value.
- ▶ In addition, fair value is a market-based measurement, not an entity-specific measurement, and, as such, is determined based on the assumptions that market participants would use in pricing the asset or liability.¹⁴
- ▶ A fair value measurement contemplates the sale of an asset or transfer of a liability, not a transaction to offset the risks associated with an asset or liability.
- ▶ The transaction to sell the asset or transfer the liability is a hypothetical transaction as at the measurement date that is assumed to be orderly and considers an appropriate period of exposure to the market (see Chapter 7).

¹¹ IFRS 13.BC29

¹² IFRS 13.BC36

¹³ IFRS 13.BC39-40

¹⁴ IFRS 13.BC31

The objective of a fair value measurement does not change based on the level of activity in the exit market or the valuation technique(s) used. That is, fair value remains a market-based exit price that considers the current market conditions as at the measurement date, even if there has been a significant decrease in the volume and level of activity for the asset or liability.

How we see it

The language used to describe fair value may have changed, but in many cases, the principles for determining fair value remain unchanged. On adoption of IFRS 13, entities will need to reconsider their previous fair value measurement practices in light of these clarifications.

The effect of applying IFRS 13 is likely to vary by entity. In some cases, it may only lead to a refinement of previous practice. However, in other cases, the change may be more significant.

For example, if an entity previously did not consider the highest and best use of an asset when determining the fair value when revaluing its property, plant and equipment, adopting IFRS 13 could result in a higher fair value than it would have previously determined.

3.2 The fair value measurement framework

Extract from IFRS 13

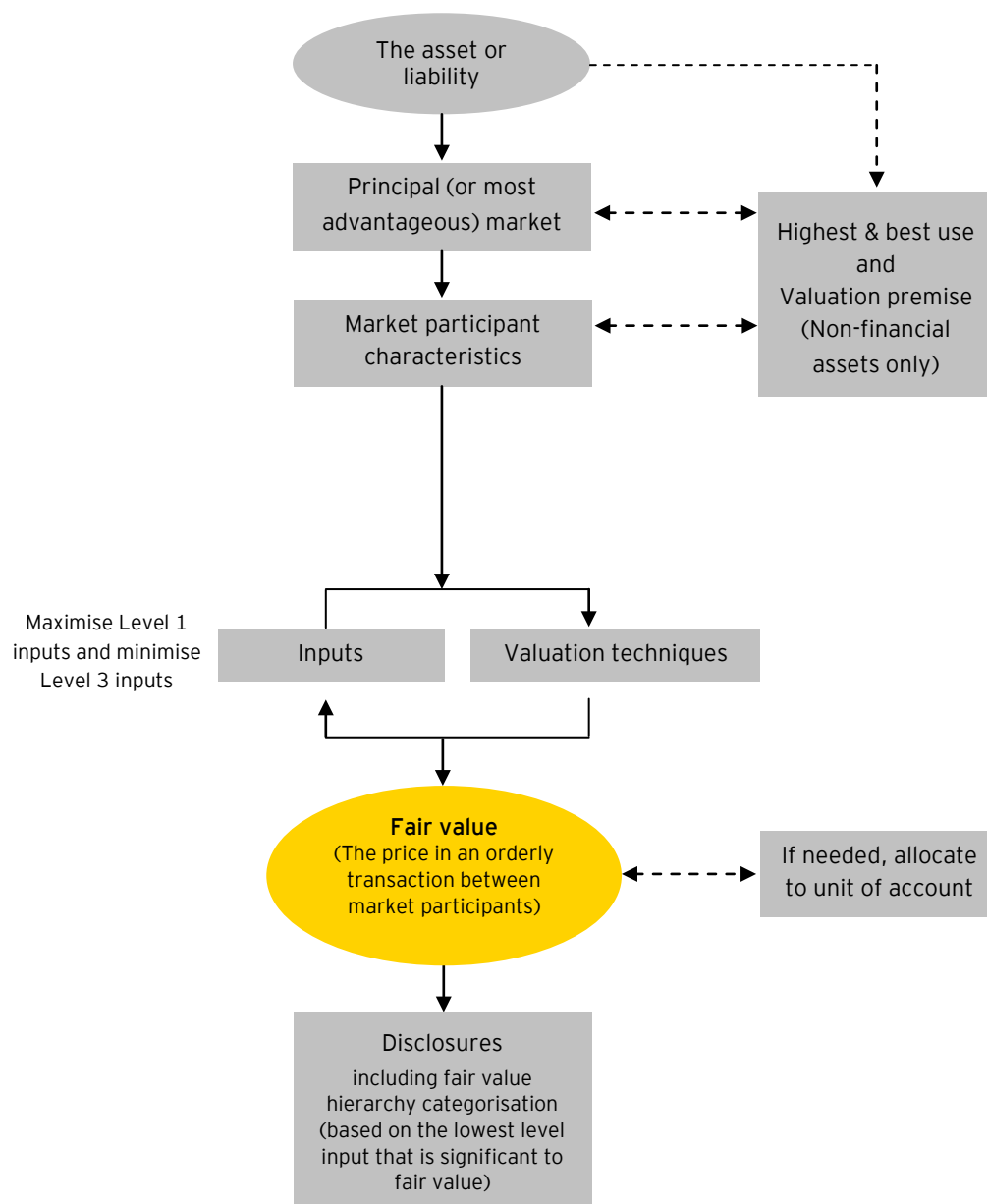
B2. The objective of a fair value measurement is to estimate the price at which an orderly transaction to sell the asset or to transfer the liability would take place between market participants at the measurement date under current market conditions. A fair value measurement requires an entity to determine all the following:

- (a) the particular asset or liability that is the subject of the measurement (consistently with its unit of account).
- (b) for a non-financial asset, the valuation premise that is appropriate for the measurement (consistently with its highest and best use).
- (c) the principal (or most advantageous) market for the asset or liability.
- (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 when pricing the asset or liability and the level of the fair value hierarchy within which the inputs are categorised.

In addition to providing a single definition of fair value, IFRS 13 also includes a framework for applying this definition to financial reporting. Many of the key concepts used in the fair value framework are interrelated and their interaction should be considered in the context of the entire approach.

The following diagram illustrates our view of the interdependence of the various components of the fair value measurement framework in IFRS 13.

Figure 1: The fair value measurement framework



In practice, navigating the fair value framework may be more straight-forward for certain types of assets (e.g., assets that trade in a formalised market) than for others (e.g., intangible assets). For non-financial assets that derive value when used in combination with other assets or for which a developed market does not exist, resolving the circular nature of the relationship between valuation premise, highest and best use and exit market is important in applying the fair value framework (refer to Chapter 9 for additional discussion on the fair value measurement of non-financial assets).

IFRS 13 clarifies that the concepts of 'highest and best use' and 'valuation premise' are only applicable when determining the fair value of non-financial assets. Therefore, the fair value framework is applied differently to non-financial assets

versus other items, such as financial instruments, non-financial liabilities and instruments classified in a reporting entity's shareholders' equity (refer to Chapter 11 for additional discussion on the fair value of financial instruments and Chapter 10 for the fair value measurement of liabilities and instruments classified in an entity's shareholders' equity). Although there are differences in the application of the fair value framework for non-financial assets compared to financial instruments and liabilities, the objective of the fair value measurement remains the same, that is, an exit price in the current market.

As discussed in more detail in Chapter 11, IFRS 13 provides an exception to the principles of fair value, allowing companies to measure a group of financial instruments based on the price to sell (or transfer) its net position for a particular risk exposure, if certain criteria are met. The use of this exception may require a reporting entity to allocate portfolio-level valuation adjustments to the appropriate unit of account.

4 The asset or liability

Extract from IFRS 13

11. A fair value measurement is for a particular asset or liability. Therefore, when measuring fair value an entity shall take into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date. Such characteristics include, for example, the following:
 - (a) the condition and location of the asset; and
 - (b) restrictions, if any, on the sale or use of the asset.
12. The effect on the measurement arising from a particular characteristic will differ depending on how that characteristic would be taken into account by market participants.
13. The asset or liability measured at fair value might be either of the following:
 - (a) a stand-alone asset or liability (eg a financial instrument or a non-financial asset); or
 - (b) a group of assets, a group of liabilities or a group of assets and liabilities (eg a cash-generating unit or a business).
14. Whether the asset or liability is a stand-alone asset or liability, a group of assets, a group of liabilities or a group of assets and liabilities for recognition or disclosure purposes depends on its unit of account. The unit of account for the asset or liability shall be determined in accordance with the IFRS that requires or permits the fair value measurement, except as provided in this IFRS.

4.1 The asset or liability

IFRS 13 states that a fair value measurement is for a particular asset or liability, which is different from the price to offset certain of the risks associated with that particular asset or liability.

This is an important distinction, particularly in the valuation of certain financial instruments that are typically not 'exited' through a sale or transfer, but whose risks are hedged through other transactions (e.g., derivatives). However, IFRS 13 does allow for financial instruments with offsetting risks to be measured based on their net risk exposure to a particular risk, in contrast to the assets or liabilities that give rise to this exposure (see Chapter 11 for additional discussion on the criteria to qualify for this measurement exception and application considerations).

4.2 The unit of account

The identification of exactly what asset or liability is being measured is fundamental to determining its fair value. Fair value may need to be measured for either:

- A stand-alone asset or liability (e.g., a financial instrument or an operating asset)

Or

- A group of assets, a group of liabilities, or a group of assets and liabilities (e.g., a cash-generating unit or a business)

This will depend on the unit of account for the asset or liability. For non-financial assets, an entity must also consider the highest and best use and valuation premise for the asset (see 4.2.1 below).

The unit of account defines what is being measured for financial reporting purposes. It is an accounting concept that determines the level at which an asset or liability is aggregated or disaggregated for the purpose of applying IFRS 13, as well as other standards.

Unless specifically addressed in IFRS 13, the appropriate unit of account is determined by the applicable IFRS (i.e., the standard that permits or requires the fair value measurement or disclosure).

IFRS 13 does specify the unit of account to be used when measuring fair value in relation to a reporting entity that holds a position in a single asset or liability that is traded in an active market (including a position comprising a large number of identical assets or liabilities, such as a holding of financial instruments). In this situation, IFRS 13 requires an entity to measure the asset or liability based on the product of the quoted price for the individual asset or liability and the quantity held (price x quantity, PxQ).

There is some debate about whether IFRS 13 prescribes the unit of account in relation to the portfolio exception. A reporting entity that manages a group of financial assets and financial liabilities with offsetting risks on the basis of its net exposure to market or credit risks is allowed to measure the group based on the price that would be received to sell its net long position, or paid to transfer its net short position, for a particular risk (if certain criteria are met). Some believe the portfolio exception in IFRS 13 specifies the unit of measurement for any financial instruments within the portfolio(s), i.e., that the net exposure of the identified group to a particular risk, and not the individual instruments within the group, represents the new unit of measurement. This may have a number of consequences. For example, the entity may be able to include premiums or discounts in the fair value measurement of the portfolio that are consistent with that unit of account, but not the individual instruments that make up the portfolio. In addition, because the net exposure for the identified group may not be actively traded (even though some financial instruments within the portfolio may be) PxQ may not be applied to the actively traded instruments within the portfolio. Others believe that the portfolio exception does not override the unit of account as provided in IAS 39 or IFRS 9. Therefore, any premiums or discounts that are inconsistent with this unit of account, i.e., the individual financial instruments within the portfolio, would be excluded, including any premiums or discounts related to the size of the portfolio. Regardless of which view is taken, it is clear in the standard that the portfolio exception does not change the financial statement presentation requirements (see Chapter 11 for further discussion on the portfolio exception and Chapter 14 for further discussion on premiums and discounts).

In the US, Topic 820 *Fair Value Measurement* in the FASB Accounting Standards Codification (ASC 820) has been interpreted by many as prescribing the unit of measurement when the portfolio exception is used. That is, when the portfolio approach is used to measure an entity's net exposure to a particular market risk, the net position becomes the unit of measurement. This view is consistent with how many US financial institutions determined the fair value of their over-the-counter

derivative portfolios prior to the amendments to ASC 820 (ASU 2011-04)¹⁵ (see Chapter 22). However, we understand that the IASB did not intend for application of the portfolio exception to override the requirements in IFRS 13 regarding the use of PxQ to measure instruments traded in active markets and the prohibition on block discounts.

4.2.1 Unit of account vs the valuation premise

In valuing non-financial assets, the concepts of unit of account and valuation premise are distinct, even though both concepts deal with determining the appropriate level of aggregation (or disaggregation) for assets and liabilities. The unit of account identifies what is being measured for financial reporting and drives the level of aggregation (or disaggregation) for presentation and disclosure purposes (e.g., whether classification in the fair value hierarchy is determined at the individual asset level or for a group of assets). Valuation premise is a valuation concept that addresses how a non-financial asset derives its maximum value to market participants, either on a standalone basis or through its use in combination with other assets and liabilities.

Since financial instruments do not have alternative uses and their fair values typically do not depend on their use within a group of other assets or liabilities, the concepts of highest and best use and valuation premise are not relevant for financial instruments. As a result, the fair value for financial instruments should be largely based on the unit of account prescribed by the standard that requires (or permits) the fair value measurement.

The distinction between these two concepts becomes clear when the unit of account of a non-financial asset differs from its valuation premise. Consider an asset (e.g., customised machinery) that was acquired other than by way of a business combination, along with other assets as part of an operating line. Although the unit of account for the customised machinery may be as a standalone asset (i.e., it is presented for financial reporting purposes at the individual asset level in accordance with IAS 16 *Property, Plant and Equipment*), the determination of the fair value of the machinery may be derived from its use with other assets in the operating line (see Chapter 9 for additional discussion on the concept of valuation premise).

4.2.2 Does IFRS 13 allow fair value to be measured by reference to an asset's (or liability's) components?

IFRS 13 states that the objective of a fair value measurement is to determine the price that would be received for an asset or paid to transfer a liability at the measurement date. That is, a fair value measurement is to be determined for a particular asset or liability. The unit of account determines what is being measured by reference to the level at which the asset or liability is aggregated (or disaggregated) for accounting purposes.

Unless decomposition of an asset (or liability) into its component parts is required or allowed under IFRS (e.g., a requirement to bifurcate under IFRS 9 or IAS 39), we generally do not believe it is appropriate to consider the unit of account at a level below that of the legal form of the asset or liability being measured. A valuation methodology that uses a sum-of-the-parts approach may still be appropriate under IFRS 13; for example, when measuring complex financial instruments, companies

¹⁵ US Accounting Standards Update 2011-04, *Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in U.S. GAAP and IFRSs*

often use valuation methodologies that attempt to determine the value of the entire instrument based on its component parts.

However, in situations where fair value can be determined for an asset or liability as a whole, we would generally not expect that an entity would use a higher amount to measure fair value because the sum of the parts exceeds the whole. Using a higher value inherently suggests that the asset would be decomposed and the various components or risk attributes transferred to different market participants who would pay more for the pieces than a market participant would for the asset or liability as a whole.

4.3 Characteristics of the asset or liability

When measuring fair value, IFRS 13 requires an entity to consider the characteristics of the asset or liability. For example, age and miles flown are attributes to be considered in determining a fair value measure for an aircraft. Examples of such characteristics could include:

- The condition and location of an asset

And

- Restrictions, if any, on the sale or use of an asset or transfer of a liability

The fair value of the asset or liability must take into account those characteristics that market participants would take into consideration when pricing the asset or liability at the measurement date. For example, when valuing individual shares in an unlisted company, market participants might consider factors such as the nature of the company's operations and where it is located; its performance to date and forecast future performance; and how the business is funded, including whether it is highly leveraged.

The requirement to consider the characteristics of the asset or liability being measured is not new to fair value measurement under IFRS. For example, prior to the issuance of IFRS 13, IAS 41 referred to measuring the fair value of a biological asset or agricultural produce in its present location and condition and IAS 40 stated that an entity should identify any differences between the investment property being measured at fair value and similar properties for which observable market prices are available and make the appropriate adjustments for those differences.¹⁶

4.3.1 Condition and location

An asset may not be in the condition or location that market participants would require for its sale at an observable market price. In order to determine the fair value of the asset as it currently exists, the market price would need to be adjusted to the price a market participant would pay for the asset in its current condition and location. This would include deducting the cost of transporting the asset to the market if location is a characteristic of the asset being measured, and might include deducting the costs of converting or transforming the asset, as well as a normal profit margin.

For non-financial assets, condition and location considerations may influence, or be dependent on, the highest and best use of an asset. That is, an asset's highest and best use may require an asset to be in a different condition. However, the objective of a fair value measurement is to determine the price for the asset in its current form. Therefore, if no market exists for an asset in its current form, but there is a

¹⁶ IFRS 13.BC46

market for the converted or transformed asset, an entity adjusts this market price for the costs a market participant would incur to re-condition the asset (after acquiring the asset in its current condition) and the compensation they would expect for the effort. The example below illustrates how costs to convert or transform an asset might be considered in determining fair value based on the current use of the asset.

Example 4-1: Adjusting fair value for condition and location

An entity owns a forest. The trees take approximately 25 years to mature, after which they can be cut down and sold. The average age of the trees in the forest is 14 years at the end of the reporting period. The current use of the forest is presumed to be its highest and best use.

There is no market for the trees in their current form. However, there is a market for the harvested timber from trees aged 25 years or older. To measure the fair value of the forest, the entity uses an income approach and uses the price for 25 year-old harvested timber in the market today as an input. However, since the trees are not yet ready for harvest, the cash flows must be adjusted for the costs a market participant would incur. Therefore, the estimated cash flows would include costs to manage the forest (including silviculture activities, such as fertilising and pruning the trees) until the trees reach maturity; costs to harvest the trees; and costs to transport the harvested logs to the market. The entity estimates these costs using market participant assumptions. The entity also adjusts the value for a normal profit margin because a market participant acquiring the forest today would expect to be compensated for the cost and effort of managing the forest for the 11 years before the trees will be harvested and the timber is sold (i.e., this would include compensation for costs incurred and a normal profit margin for the effort of managing the forest).

4.3.2 Restrictions on assets or liabilities

IFRS 13 indicates that the effect on fair value of a restriction on the sale or use of an asset will differ depending on whether the restriction is deemed to be a characteristic of the asset or the entity holding the asset. A restriction that would transfer with the asset in an assumed sale would generally be deemed a characteristic of the asset and therefore would likely be considered by market participants in pricing the asset. Conversely, a restriction that is specific to the entity holding the asset would not transfer with the asset in an assumed sale and therefore would not be considered when measuring fair value. Determining whether a restriction is a characteristic of the asset or of the entity holding the asset may be contractual in some cases. In other cases, this determination may require judgement based on the specific facts and circumstances.

The following illustrative examples highlight the distinction between restrictions that are characteristics of the asset and that of the entity holding the asset, including how this determination affects the fair value measurement. Restrictions on non-financial assets are discussed further in Chapter 9.

Example 4-2: Restrictions on assets¹⁷

An entity holds an equity instrument for which sale is legally restricted for a specified period. The restriction is a characteristic of the instrument that would transfer to market participants. As such, the fair value of the instrument would be measured based on the quoted price for an otherwise identical unrestricted equity instrument that trades in a public market, adjusted for the effect of the restriction. The adjustment would reflect the discount market participants would demand for the risk relating to the inability to access a public market for the instrument for the specified period. The adjustment would vary depending on:

- The nature and duration of the restriction
- The extent to which buyers are limited by the restriction
- Qualitative and quantitative factors specific to both the instrument and the issuer

Example 4-3: Entity-specific restrictions on assets¹⁸

A donor of land specifies that the land must be used by a sporting association as a playground in perpetuity. Upon review of relevant documentation, the association determines that the donor's restriction would not transfer to market participants if the association sold the asset (i.e., the restriction on the use of the land is specific to the association). Furthermore, the association is not restricted from selling the land. Without the restriction on the use of the land, it could be used as a site for residential development. In addition, the land is subject to an easement (a legal right that enables a utility to run power lines across the land).

Under these circumstances, the effect of the restriction and the easement on the fair value measurement of the land is as follows:

- (a) Donor restriction on use of land – The donor restriction on the use of the land is specific to the association and thus would not transfer to market participants. Therefore, regardless of the restriction on the use of the land by the association, the fair value of the land would be measured based on the higher of its indicated value:
 - (i) As a playground (i.e., the maximum value of the land is through its use in combination with other assets or with other assets and liabilities)

Or

 - (ii) As a residential development (i.e., the fair value of the asset would be maximised through its use by market participants on a standalone basis)
- (b) Easement for utility lines – Because the easement for utility lines is a characteristic of the land, this easement would be transferred to market participants with the land. The fair value of the land would include the effect of the easement, regardless of whether the land's valuation premise is as a playground or as a site for residential development.

¹⁷ IFRS 13.IE28

¹⁸ IFRS 13.IE29

In contrast to Example 4-2 above, Example 4-3 illustrates a restriction on the use of donated land that applies to a specific entity, but not to other market participants.

A liability or an entity's own equity instrument may be subject to restrictions that prevent the transfer of the item. When measuring the fair value of a liability or equity instrument, IFRS 13 does not allow an entity to include a separate input (or an adjustment to other inputs) for such restrictions. This is because the effect of the restriction is either implicitly or explicitly included in other inputs to the fair value measurement. Restrictions on liabilities and an entity's own equity are discussed further in Chapter 10.

IFRS 13 has different treatments for restrictions on assets and those over liabilities. The IASB believes this is appropriate because restrictions on the transfer of a liability relate to the performance of the obligation (i.e., the entity is legally obliged to satisfy the obligation and needs to do something to be relieved of the obligation), whereas restrictions on the transfer of an asset generally relate to the marketability of the asset. In addition, nearly all liabilities include a restriction preventing the transfer of the liability. In contrast, most assets do not include a similar restriction. As a result, the effect of a restriction preventing the transfer of a liability, theoretically, would be consistent for all liabilities and, therefore, would require no additional adjustment beyond the factors considered in determining the original transaction price. If an entity is aware that a restriction on the transfer of a liability is not already reflected in the price (or in the other inputs used in the measurement), it would adjust the price or inputs to reflect the existence of the restriction.¹⁹ However, in our view this would be rare because nearly all liabilities include a restriction and, when measuring fair value, market participants are assumed by IFRS 13 to be sufficiently knowledgeable about the liability to be transferred.

4.3.2.A In determining the fair value of a restricted security, is it appropriate to apply a constant discount percentage over the entire life of the restriction?

We generally do not believe a constant discount percentage should be used to measure the fair value of a restricted security because market participants would consider the remaining time on the security's restriction, and that changes from period to period. Market participants, for example, would generally not assign the same discount for a restriction that terminates in one month, as they would for a two-year restriction.

One approach to valuing the restriction may be through an option pricing model that explicitly incorporates the duration of the restriction and the characteristics of the underlying security. The principal economic factor underlying a discount for lack of marketability is the increased risk resulting from the inability to quickly and efficiently return the investment to a cash position (i.e., the risk of a price decline during the restriction period). One way in which the price of this risk may be determined is by using an option pricing model that estimates the value of a protective put option. For example, restricted or non-marketable securities are acquired along with a separate option that provides the holder with the right to sell those shares at the current market price for unrestricted securities. The holder of such an option has, in effect, purchased marketability for the shares. The value of the put option may be considered an estimate of the discount for the lack of marketability associated with the restricted security. Other techniques or approaches may also be appropriate in measuring the discount associated with restricted securities.

¹⁹ IFRS 13.BC99-100

5 The principal (or most advantageous) market

Extract from IFRS 13

16. A fair value measurement assumes that the transaction to sell the asset or transfer the liability takes place either:

- (a) in the principal market for the asset or liability; or
- (b) in the absence of a principal market, in the most advantageous market for the asset or liability.

17. An entity need not undertake an exhaustive search of all possible markets to identify the principal market or, in the absence of a principal market, the most advantageous market, but it shall take into account all information that is reasonably available. In the absence of evidence to the contrary, the market in which the entity would normally enter into a transaction to sell the asset or to transfer the liability is presumed to be the principal market or, in the absence of a principal market, the most advantageous market.

18. 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 estimated using another valuation technique), even if the price in a different market is potentially more advantageous at the measurement date.

The entity must have access to the principal (or most advantageous) market at the measurement date. Because different entities (and businesses within those entities) with different activities may have access to different markets, the principal (or most advantageous) market for the same asset or liability might be different for different entities (and businesses within those entities). Therefore, the principal (or most advantageous) market (and thus, market participants) shall be considered from the perspective of the entity, thereby allowing for differences between and among entities with different activities.

A fair value measurement contemplates an orderly transaction to sell the asset or transfer the liability in its principal market. IFRS 13 is clear that, if there is a principal market for the asset or liability, a fair value measurement represents the price in that market at the measurement date (regardless of whether that price is directly observable or estimated using another valuation technique). The price in the principal market must be used even if the price in a different market is potentially more advantageous. This is illustrated in the example below.

Example 5-1: The effect of determining the principal market²⁰

An asset is sold in two different active markets at different prices. An entity enters into transactions in both markets and can access the price in those markets for the asset at the measurement date.

	Market A	Market B
Price that would be received	CU 26	CU 25
Transaction costs in that market	CU (3)	CU (1)
Costs to transport the asset to the market	CU (2)	CU (2)
Net amount that would be received	CU 21	CU 22

If Market A is the principal market for the asset (i.e., the market 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, even though the net proceeds in Market B are more advantageous. In this case, the fair value would be CU 24 after taking into account transport costs.

The identification of a principal (or most advantageous) market could be impacted by whether there are observable markets for the item being measured. However, even where there is no observable market, fair value measurement assumes a transaction takes place at the measurement date. The assumed transaction establishes a basis for estimating the price to sell the asset or to transfer the liability.

5.1 The principal market

The principal market is the market for the asset or liability that has the greatest volume or level of activity for the asset or liability. There is a general presumption that the principal market is the one in which the entity would normally enter into a transaction to sell the asset or transfer the liability, unless there is evidence to the contrary. In practice, an entity would first consider the markets it can access. Then it would determine which of those markets has the greatest volume and liquidity in relation to the particular asset or liability.

Management is not required to perform an exhaustive search to identify the principal market. However, management cannot ignore evidence that is reasonably available when considering which market has the greatest volume and level of activity. For example, it may be appropriate to take into account information available in trade journals, if reliable market information about volumes transacted is available in such journals. In the absence of evidence to the contrary, the principal market is presumed to be the market in which an entity normally enters into transactions for the asset and liability.

²⁰ IFRS 13.IE19-20

The principal market is considered from the perspective of the reporting entity, which means that the principal market could be different for different entities (this is discussed further in section 5.1.1). For example, a securities dealer may exit a financial instrument by selling it in the inter-dealer market, while a manufacturing company would sell a financial instrument in the retail market. However, the entity must be able to access the principal market as at the measurement date. Therefore, continuing with our example, it would not be appropriate for a manufacturing company to assume that it would transact in the inter-dealer market (even when considering a hypothetical transaction) because the company does not have access to this market.

IFRS 13 indicates that the principal market is determined from the perspective of the reporting entity, which has led some to question whether the principal market should be determined on the basis of (a) entity-specific volume (i.e., the market where the reporting entity has historically sold, or intends to sell, the asset with the greatest frequency and volume) or (b) market-based volume and activity. However, IFRS 13 is clear that the principal market for an asset or liability should be determined based on the market with the greatest volume and level of activity that the reporting entity can access. It is not determined based on the volume or level of activity of the reporting entity's transactions in a particular market. That is, the determination as to which market(s) a particular entity can access is entity-specific, but once the accessible markets are identified, market-based volume and activity determines the principal market (see section 5.1.2 below).²¹

The recognition in IFRS 13 that different entities may sell identical instruments in different markets (and therefore at different exit prices) has important implications, particularly with respect to the initial recognition of certain financial instruments, such as derivatives. For example, a derivative contract between a dealer and a retail customer would likely be initially recorded at different fair values by the two entities, as they would exit the derivative in different markets and, therefore, at different exit prices. Day one gains and losses are discussed further in Chapter 12.

Although an entity must be able to access the market at the measurement date, IFRS 13 does not require an entity to be able to sell the particular asset or transfer the particular liability on that date. For example, if there is a restriction on the sale of the asset, IFRS 13 simply requires that the entity be able to access the market for that asset when that restriction ceases to exist (it is important to note that the existence of the restriction may still affect the price a market participant would pay – refer to section 4.2.2 for discussion on restrictions on assets and liabilities).

²¹ IFRS 13.BC52

How we see it

In general, the market with the greatest volume and deepest liquidity will probably be the market in which the entity most frequently transacts. In these instances, the principal market would likely be the same as the most advantageous market and is likely to be the market considered when measuring fair value prior to the adoption of IFRS 13.

However, the requirement to measure fair value by reference to the principal (or most advantageous) market could lead to a change in current practice. In particular, this could affect entities that previously determined fair value based solely on the market where they transact with the greatest frequency (without considering other markets with greater volume and deeper liquidity). For example, if an entity previously measured the fair value of agricultural produce based on its local market, but there is a deeper and more liquid market for the same agricultural produce (for which transportation costs are not prohibitive), the latter market would be deemed the principal market and would be used when measuring fair value.

5.1.1 Can an entity have more than one principal market for the same asset or liability?

IFRS 13.19 indicates that, in certain instances, it may be appropriate for a reporting entity to determine that it has different principal markets for the same asset or liability. However, such a determination would need to be based on the reporting entity's business units engaging in different activities to ensure they were accessing different markets.

In our view, determining the principal market is not based on management's intent. Therefore, we would not expect a reporting entity to have different principal markets for identical assets held within a business unit solely because management has different exit strategies for those assets.

Consider Example 5-2 below, in which multiple exit markets exist for an asset and the reporting entity has access to all of the various exit markets. In our view, the fact that a reporting entity (or business unit within a reporting entity) has historically exited virtually identical assets in different markets does not justify the entity utilising different exit markets in determining the fair value of these assets. Instead, the concept of a principal market (and most advantageous market) implies that one consistent market should generally be considered in determining the fair value of these identical assets.

Example 5-2: Determining the principal market

The following three markets exist for a particular asset. The company has the ability to transact in all three markets (and has historically done so).

Market	Price
A	CU 30,000
B	CU 25,000
C	CU 22,000

Under the principal market concept, it would not be appropriate to value identical assets at different prices solely because management intends to sell the assets in different markets. Likewise, a consistent fair value measurement for each asset utilising a blended price that is determined based on the proportion of assets management intends to sell in each market would not be appropriate. Instead, all assets would be measured at the price in the market determined to be the company's principal market.

If Market B were determined to represent the principal market for the asset being measured, each asset would be valued at CU 25,000. Selling the assets in either Market A or Market C would result in a gain or loss for the company. We believe this result is consistent with one of the fundamental concepts in the fair value framework, that is, the consequences of management's decisions (or a company's comparative advantages or disadvantages) should be recognised when those decisions are executed (or those advantages or disadvantages are achieved).

5.1.2 In situations where an entity has access to multiple markets, should the determination of the principal market be based on entity-specific volume and activity or market-based volume and activity?

As discussed in section 5.1 above, in most instances, the market in which a reporting entity would sell an asset (or transfer a liability) with the greatest frequency will also represent the market with the greatest volume and deepest liquidity for all market participants. In these instances, the principal market would be the same regardless of whether it is determined based on entity-specific volume and activity or market-based volume and activity. However, when this is not the case, a reporting entity's principal market is determined using market-based volume.

Different entities engage in different activities and, as such, have access to different markets compared to other entities. For example, an entity that does not function as a wholesaler would not have access to the wholesale market and therefore would need to look to the retail market as its principal market. Once the markets to which a particular entity has access have been identified, the determination of the principal market should not be based on management's intent or entity-specific volume, but rather should be based on the market with the greatest volume and level of activity for the asset or liability.

Example 5-3: Determining the principal market

The following three markets exist for Entity A's fleet of vehicles. Entity A has the ability to transact in all three markets (and has done so historically). As at the measurement date, the entity has 100 vehicles (same make, model and mileage) that it needs to measure at fair value. Volumes and prices in the respective markets are as follows:

Market	Price	The entity's volume for the asset in the market (based on history and/or intent)	Total market-based volume for the asset
A	CU 30,000	60%	15%
B	CU 25,000	25%	75%
C	CU 20,000	15%	10%

Based on this information, Market B would be the principal market as this is the market in which the majority of transactions for the asset occur. As such, the fair value of the 100 cars as at the measurement date would be CU 2,500,000 (i.e., CU 25,000 per car). Actual sales of the assets in either Market A or C would result in a gain or loss to the entity, i.e., when compared with the fair value of CU 25,000.

5.2 The most advantageous market

As noted above, if there is a principal market for the asset or liability being measured, fair value should be determined using the price in that market, even if the price in a different market is more advantageous at the measurement date.

Only in situations where there is no principal market for the asset or liability being measured, can an entity consider the most advantageous market.

The most advantageous market is the one that maximises the amount that would be received to sell the asset or minimises the amount that would be paid to transfer the liability, after considering transaction costs and transport costs.

This definition reasonably assumes that most entities transact with an intention to maximise profits or net assets. Assuming economically rational behaviour, the IASB observed that the principal market would generally represent the most advantageous market. However, when this is not the case, the IASB decided to prioritise the price in the most liquid market (i.e., the principal market) as this market provides the most reliable price to determine fair value and also serves to increase consistency among reporting entities.²²

When determining the most advantageous market, an entity must take into consideration the transaction costs and transportation costs it would incur to sell the asset or transfer the liability. The market that would yield the highest price after deducting these costs is the most advantageous market.

²² IFRS 13.BC52

Example 5-4: Determining the most advantageous market²³

Consider the same facts as in example 5-1 above. 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 that maximises the amount that would be received to sell the asset, after taking into account transaction costs and transport costs (i.e., the net amount that would be received in the respective markets).

	Market A	Market B
Price that would be received	CU 26	CU 25
Transaction costs in that market	CU (3)	CU (1)
Costs to transport the asset to the market	CU (2)	CU (2)
Net amount that would be received	CU 21	CU 22

Because the entity would maximise the net amount that *would be received* for the asset in Market B (CU 22), that is the most advantageous market. Market B is the most advantageous market even though the fair value that would be recognised in that market (CU 23 = CU 25 - CU 2) is lower than in Market A (CU 24 = CU 26 - CU 2).

It is important to note that, while transaction costs and transportation costs are considered in determining the most advantageous market, the treatment of these costs in relation to measuring fair value differs (transaction costs and transportation costs are discussed further in Chapter 8).

²³ IFRS 13.IE19,21-22

6 Market participants

Extract from IFRS 13

22. An entity shall measure the fair value of an asset or a liability using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.
23. In developing those assumptions, an entity need not identify specific market participants. Rather, the entity shall identify characteristics that distinguish market participants generally, considering factors specific to all the following:
- (a) the asset or liability;
 - (b) the principal (or most advantageous) market for the asset or liability; and
 - (c) market participants with whom the entity would enter into a transaction in that market.

When measuring fair value, an entity is required to use the assumptions that market participants would use when pricing the asset or liability. However, IFRS 13 does not require an entity to identify specific market participants. Instead, an entity must identify characteristics of market participants that would generally transact for the asset or liability being measured. Determining these characteristics takes into consideration factors that are specific to the asset or liability; the principal (or most advantageous) market; and the market participants in that market. This determination, and how these characteristics affect a fair value measurement, may require significant judgement.

The principal (or most advantageous) market is determined from the perspective of the reporting entity (or business units within a reporting entity). As a result, other entities within the same industry as the reporting entity will most likely be considered market participants. However, market participants may come from outside the reporting entity's industry, especially when considering the fair value of assets on a standalone basis. For example, a residential real estate development entity may be considered a market participant when measuring the fair value of land held by a manufacturing company if the highest and best use of the land is deemed to be residential real estate development.

6.1 Characteristics of market participants

IFRS 13 defines market participants as buyers and sellers in the principal (or most advantageous) market for an asset or liability that have *all* of the following characteristics:²⁴

- ▶ They are independent of each other, that is, they are not related parties, as defined in IAS 24 *Related Party Disclosures*.
- ▶ They are knowledgeable, having a reasonable understanding of the asset or liability using all available information, including information obtained through usual and customary due diligence efforts.
- ▶ They are able to enter into a transaction for the asset or liability.

²⁴ IFRS 13.BC55-59

- They are willing to enter into a transaction for the asset or liability, i.e., they are motivated but not forced or otherwise compelled to do so.

Since market participants are independent of each other, the hypothetical transaction is assumed to take place between market participants at the measurement date, not between the reporting entity and another market participant. While market participants are not related parties, the standard does allow the price in a related party transaction to be used as an input in a fair value measurement provided the entity has evidence the transaction was entered into at market terms.²⁵

Market participants in the principal (or most advantageous) market should have sufficient knowledge about the asset or liability for which they are transacting. The appropriate level of knowledge does not necessarily need to come from publicly available information, but could be obtained in the course of a normal due diligence process.

When determining potential market participants, certain characteristics should be considered, including the legal capability and the operating or financial capacity of an entity to purchase the asset or assume the liability. Market participants must have both the willingness and the ability to transact for the item being measured. For example, when measuring the fair value less costs of disposal of a cash-generating unit (CGU), as part of testing the CGU for impairment in accordance with IAS 36, the market participants considered in the analysis should be in both a financial and operating position to purchase the CGU.

6.2 Market participant assumptions

IFRS 13 specifies that fair value is not the value specific to one entity, but rather is meant to be a market-based measurement. If market participants would consider adjustments for the inherent risk of the asset or liability, or consider the risk in the valuation technique used to measure fair value, then such risk adjustments should be considered in the fair value assumptions. For example, when measuring the fair value of certain financial instruments, market participants may include adjustments for liquidity, uncertainty and/(or) non-performance risk.

Fair value is not the value specific to the reporting entity nor is it the specific value to one market participant whose risk assessment or specific synergies may differ from other market participants. The reporting entity should consider those factors that market participants, in general, would consider. Fair value should not be measured based on a single market participant's assumptions or their specific intent or use of the asset or liability. For example, if a single market participant, Market Participant A is willing to pay a higher price for an asset than would the remaining market participants due to specific synergies that only Market Participant A could achieve, fair value would not be the price that Market Participant A would be willing to pay for the asset. Instead, fair value would be the price that typical market participants would pay for the asset.

The underlying assumptions used in a fair value measurement are driven by the characteristics of the market participants that would transact for the item being measured and the factors those market participants would consider when pricing the asset or liability. Importantly, IFRS 13 notes that fair value should be based on assumptions that market participants acting in their 'economic best interest' would use when pricing an asset or liability. That is, market participants are assumed to

²⁵ IFRS 13.BC57

transact in a manner that is consistent with the objective of maximising the value of their business, their net assets or profits. In certain instances, this may result in market participants considering premiums or discounts (e.g., control premiums or discounts for lack of marketability) when determining the price at which they would transact for a particular asset or liability (refer to section 15.2 for additional discussion on the consideration of premiums and discounts in a fair value measurement).

In situations where market observable data is not available, the reporting entity can use its own data as a basis for its assumptions. However, adjustments should be made to the entity's own data if readily available market data indicates that market participant assumptions would differ from the assumptions specific to that reporting entity (see Chapter 18 for further discussion regarding Level 3 inputs).

The intended use and risk assumptions for an asset or asset group may differ among market participants transacting in the principal market for the asset. For example, the principal market in which the reporting entity would transact may contain both strategic and financial buyers. Both types of buyers would be considered in determining the characteristics of market participants; however, the fair value measurement of an asset may differ among these two types of market participants. The following example from the standard illustrates this point.

Example 6-1: Asset group²⁶

An entity acquires assets and assumes liabilities in a business combination. One of the groups of assets acquired comprises Assets A, B and C. Asset C is billing software integral to the business developed by the acquired entity for its own use in conjunction with Assets A and B (i.e., the related assets). The entity measures the fair value of each of the assets individually, consistently with the specified unit of account for the assets. The entity determines that the highest and best use of the assets is their current use and that each asset would provide maximum value to market participants principally through its use in combination with other assets or with other assets and liabilities (i.e., its complementary assets and the associated liabilities). There is no evidence to suggest that the current use of the assets is not their highest and best use.

In this situation, the entity would sell the assets in the market in which it initially acquired the assets (i.e., the entry and exit markets from the perspective of the entity are the same). Market participant buyers with whom the entity would enter into a transaction in that market have characteristics that are generally representative of both strategic buyers (such as competitors) and financial buyers (such as private equity or venture capital firms that do not have complementary investments) and include those buyers that initially bid for the assets. Although market participant buyers might be broadly classified as strategic or financial buyers, in many cases there 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.

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:

²⁶ IFRS 13.IE3-6

Example 6-1: Asset Group continued

- (a) *Strategic buyer asset group* – The entity determines that strategic buyers have related assets that would enhance the value of the group within which the assets would be used (i.e., 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 on its own 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 CU 360, CU 260 and CU 30, respectively. The indicated fair value of the assets as a group within the strategic buyer asset group is CU 650.
- (b) *Financial buyer asset group* – The 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 (i.e., 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 CU 300, CU 200 and CU 100, respectively. The indicated fair value of the assets as a group within the financial buyer asset group is CU 600.

The fair values of Assets A, B and C would be determined on the basis of the use of the assets as a group within the strategic buyer group (CU 360, CU 260 and CU 30). Although the use of the assets within the strategic buyer group does not maximise the fair value of each of the assets individually, it maximises the fair value of the assets as a group (CU 650).

The example above illustrates that the principal (or most advantageous) market for an asset group may include different types of market participants (e.g., strategic and financial buyers), who would make different assumptions in pricing the assets.

When there are two or more different types of market participants that would transact for the asset, or the asset group, separate fair value estimates of the assets should generally be performed for each type of market participant in order to identify which type of market participant (and the appropriate related assumptions) should be considered in the fair value measurement.

In each of these analyses, the intended use of the asset and any resulting market participant synergies are considered. These include synergies among the assets in the asset grouping and synergies in combination with other assets held by (or available to) market participants generally. The selection of the appropriate market participants is based on the type of market participants that generate the maximum value for the asset group in aggregate.

This is illustrated in Example 6-1 above. Fair value would be measured by reference to assumptions made by the Strategic Buyer, because the fair value of the group of assets (CU 650) exceeds that of the Financial Buyer (CU 600). Consequently, the fair value of the individual assets within the asset grouping would be estimated based on the indicated values related to the market participants with the highest overall value for the asset grouping. In other words, once the assets are appropriately grouped based on their valuation premise, they should be valued using a consistent set of assumptions (i.e., the assumptions for the same type of

market participants and the same related use). As shown in the example, this is true even though the fair value measurement of a specific asset, Asset C in the example, is deemed to be higher for the Financial Buyer.

Example 6-1 also highlights the interdependence between the key concepts within the IFRS 13 fair value framework. Understanding the interrelationships between market participants, the exit market and the concepts of valuation premise and highest and best use is important when measuring the fair value of non-financial assets (the concepts of 'valuation premise' and 'highest and best use' are discussed in Chapter 9).

In the example, the indicated value for the assets as a group is determined based on the valuation premise (i.e., their use in combination with other assets) and market participant assumptions that would maximise the value of the asset group as a whole (i.e., assumptions consistent with strategic buyers). The valuation premise for Assets A, B and C is based on their use in combination with each other (or with other related assets and liabilities held by or available to market participants), consistent with these assets' highest and best use.

The example also highlights the distinction between the unit of account (i.e., what is being measured and presented for financial reporting purposes) and the valuation premise, which forms the basis of how assets are grouped for valuation purposes (i.e., as a group or on a standalone basis). The unit of account may be the individual assets (i.e., Asset A separate from Asset B and Asset C), but the valuation premise is the asset group comprised of Assets A, B and C. Therefore, the indicated value of the assets in combination (CU 650) must be attributed to the assets based on their unit of account, resulting in the fair value measurement to be used for financial reporting purposes.

7 The transaction

Extract from IFRS 13

15. 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 under current market conditions.
20. Although an entity must be able to access the market, the entity does not need to be able to sell the particular asset or transfer the particular liability on the measurement date to be able to measure fair value on the basis of the price in that market.
21. Even when there is no observable market to provide pricing information about the sale of an asset or the transfer of a liability at the measurement date, a fair value measurement shall assume that a transaction takes place at that date, considered from the perspective of a market participant that holds the asset or owes the liability. That assumed transaction establishes a basis for estimating the price to sell the asset or to transfer the liability.

As at the measurement date, the transaction to sell an asset or transfer a liability is, by definition, a hypothetical transaction for the particular asset or liability being measured at fair value. If the asset had actually been sold or the liability actually transferred as at the measurement date, there would be no asset or liability for the reporting entity to measure at fair value.

IFRS 13 assumes this hypothetical transaction will take place in the principal (or most advantageous) market (see Chapter 5) and will:

- Be orderly in nature
- Take place between market participants that are independent of each other, but knowledgeable about the asset or liability (See Chapter 6 for additional discussion on market participants)
- Take place under current market conditions
- Occur on the measurement date

These assumptions are critical in ensuring that the estimated exit price in the hypothetical transaction is consistent with the objective of a fair value measurement. For example, the concept of an orderly transaction is intended to distinguish a fair value measurement from the exit price in a distressed sale or forced liquidation. Unlike a forced liquidation, an orderly transaction assumes that the asset or liability is exposed to the market prior to the measurement date for a period that is usual and customary to allow for information dissemination and marketing. That is, the hypothetical transaction assumes that market participants have sufficient knowledge and awareness of the asset or liability, including that which would be obtained through customary due diligence even if, in actuality, this process may not have begun yet (or may never occur at all if the entity does not sell the asset or transfer the liability).

The hypothetical transaction between market participants does not consider whether management actually intends to sell the asset or transfer the liability at the measurement date, nor does it consider the reporting entity's ability to enter into the transaction on the measurement date. To illustrate, consider a hypothetical

transaction to sell a security that is restricted from sale as at the measurement date. Although the restriction may affect the determination of fair value for the asset, it does not preclude the consideration of a hypothetical transaction to sell the security (see Chapter 4 for further discussion on restrictions).

An orderly transaction assumes there will be adequate market exposure, so that market participants would be sufficiently knowledgeable about the asset or liability. This does not mean the hypothetical exchange takes place at some point in the future. A fair value measurement considers market conditions as they exist at the measurement date and is intended to represent the current value of the asset or liability, not the potential value of the asset or liability at some future date. The transaction is therefore assumed to take place on the measurement date and the entity assumes that the marketing activities and due diligence activities have already been performed. For example, assume an entity is required to re-measure an asset to fair value at its balance sheet date of 31 December 2013. The customary marketing activities and due diligence procedures required for the asset to be sold takes six months. The asset's fair value should not be based on the price the entity expects to receive for the asset in June 2014. Instead, it must be determined based on the price that would be received if the asset were sold on 31 December 2013, assuming adequate market exposure has taken place.

Although a fair value measurement contemplates a price in an assumed transaction, pricing information from actual transactions for identical or similar assets and liabilities is considered in measuring fair value. IFRS 13 establishes a fair value hierarchy (discussed in Chapter 15) to prioritise the inputs used to measure fair value, based on the relative reliability of those inputs. The standard requires that valuation techniques maximise the use of observable inputs and minimise the use of unobservable inputs. As such, even in situations where the market for a particular asset is deemed to be inactive (e.g., due to liquidity issues), relevant prices or inputs from this market should still be considered in the measurement of fair value. It would not be appropriate for an entity to default solely to a model's value based on unobservable inputs (a Level 3 measurement), when Level 2 information is available. Judgement is required in assessing the relevance of observable market data to determine the priority of inputs under the fair value hierarchy, particularly in situations where there has been a significant decrease in market activity for an asset or liability, as discussed in section 7.1.

Assessing whether a transaction is orderly may require significant judgement, and the Boards believe this determination can be more difficult if there has been a significant decrease in the volume or level of activity for the asset or liability in relation to normal market activity. As such, IFRS 13 provides various factors to consider when assessing whether there has been a significant decrease in the volume or level of activity in the market (see section 7.1 below) as well as circumstances that may indicate that a transaction is not orderly (see section 7.2 below). Making these determinations is based on the weight of all available evidence.

7.1 Evaluating whether there has been a significant decrease in the volume or level of activity for an asset or liability

Extract from IFRS 13

B37. The fair value of an asset or a liability might be affected when there has been a significant decrease in the volume or level of activity for that asset or liability in relation to normal market activity for the asset or liability (or similar assets or liabilities). To determine whether, on the basis of the evidence available, there has been a significant decrease in the volume or level of activity for the asset or liability, an entity shall evaluate the significance and relevance of factors such as the following:

- (a) There are few recent transactions.
- (b) Price quotations are not developed using current information.
- (c) Price quotations vary substantially either over time or among market-makers (eg some brokered markets).
- (d) Indices that previously were highly correlated with the fair values of the asset or liability are demonstrably uncorrelated with recent indications of fair value for that asset or liability.
- (e) There is a significant increase in implied liquidity risk premiums, yields or performance indicators (such as delinquency rates or loss severities) for observed transactions or quoted prices when compared with the entity's estimate of expected cash flows, taking into account all available market data about credit and other non-performance risk for the asset or liability.
- (f) There is a wide bid-ask spread or significant increase in the bid-ask spread.
- (g) There is a significant decline in the activity of, or there is an absence of, a market for new issues (ie a primary market) for the asset or liability or similar assets or liabilities.
- (h) Little information is publicly available (eg for transactions that take place in a principal-to-principal market).

B38. If an entity concludes that there has been a significant decrease in the volume or level of activity for the asset or liability in relation to normal market activity for the asset or liability (or similar assets or liabilities), further analysis of the transactions or quoted prices is needed. A decrease in the volume or level of activity on its own may not indicate that a transaction price or quoted price does not represent fair value or that a transaction in that market is not orderly. However, if an entity determines that a transaction or quoted price does not represent fair value (eg there may be transactions that are not orderly), an adjustment to the transactions or quoted prices will be necessary if the entity uses those prices as a basis for measuring fair value and that adjustment may be significant to the fair value measurement in its entirety. Adjustments also may be necessary in other circumstances (eg when a price for a similar asset requires significant adjustment to make it comparable to the asset being measured or when the price is stale).

Extract from IFRS 13 *continued*

- B39. This IFRS does not prescribe a methodology for making significant adjustments to transactions or quoted prices. See paragraphs 61-66 and B5-B11 for a discussion of the use of valuation techniques when measuring fair value. Regardless of the valuation technique used, an entity shall include appropriate risk adjustments, including a risk premium reflecting the amount that market participants would demand as compensation for the uncertainty inherent in the cash flows of an asset or a liability (see paragraph B17). Otherwise, the measurement does not faithfully represent fair value. In some cases determining the appropriate risk adjustment might be difficult. However, the degree of difficulty alone is not a sufficient basis on which to exclude a risk adjustment. The risk adjustment shall be reflective of an orderly transaction between market participants at the measurement date under current market conditions.
- B40. If there has been a significant decrease in the volume or level of activity for the asset or liability, a change in valuation technique or the use of multiple valuation techniques may be appropriate (eg the use of a market approach and a present value technique). When weighting indications of fair value resulting from the use of multiple valuation techniques, an entity shall consider the reasonableness of the range of fair value measurements. The objective is to determine the point within the range that is most representative of fair value under current market conditions. A wide range of fair value measurements may be an indication that further analysis is needed.
- B41. Even when there has been a significant decrease in the volume or level of activity for the asset or liability, the objective of a fair value measurement remains the same. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction (ie not a forced liquidation or distress sale) between market participants at the measurement date under current market conditions.
- B42. Estimating the price at which market participants would be willing to enter into a transaction at the measurement date under current market conditions if there has been a significant decrease in the volume or level of activity for the asset or liability depends on the facts and circumstances at the measurement date and requires judgement. An entity's intention to hold the asset or to settle or otherwise fulfil the liability is not relevant when measuring fair value because fair value is a market-based measurement, not an entity-specific measurement.

There are many reasons why the trading volume or level of activity for a particular asset or liability may decrease significantly. For example, shifts in supply and demand dynamics, changing levels of investors' risk appetites and liquidity constraints of key market participants could all result in a significant reduction in the level of activity for certain items or class of items. While determining fair value for any asset or liability that does not trade in an active market often requires judgement, the guidance in the extract above is primarily focused on assets and liabilities in markets that have experienced a significant reduction in volume or activity. Prior to a decrease in activity, a market approach is often the primary valuation approach used to estimate fair value for these items, given the availability and relevance of observable data. Under a market approach, fair value is based on prices and other relevant information generated by market transactions involving assets and liabilities that are identical or comparable to the item being measured. As transaction volume or activity for the asset decreases significantly, application of the market approach can prove more challenging and the use of additional valuation techniques may be warranted.

The objective of a fair value measurement remains the same even when there has been a significant decrease in the volume or level of activity for the asset or liability. IFRS 13.B37 provides factors to consider when evaluating whether there has been a significant decrease in the volume or level of activity for an asset or liability. These factors are not intended to be all-inclusive and should be considered along with any additional factors based on the individual facts and circumstances. Determining whether the asset or liability has experienced a significant decrease in activity is based on the weight of the available evidence.

IFRS 13 is clear that a decrease in the volume or level of activity, on its own, does not necessarily indicate that a transaction price or quoted price does not represent fair value or that a transaction in that market is not orderly. Additional analysis is required in these instances to assess the relevance of observed transactions or quoted prices in these markets. When market volumes decrease, adjustments to observable prices (which could be significant) may be necessary (see section 7.3 below). As discussed in Chapter 15, an adjustment based on unobservable inputs that is significant to the fair value measurement in its entirety would result in a Level 3 measurement. Observed prices associated with transactions that are not orderly would not be deemed to be representative of fair value.

7.1.1 Can a market exhibit a significant decrease in volume or level of activity and still be considered active?

A significant decrease in the volume of transactions does not automatically imply that a market is no longer active. IFRS 13 defines a market as active if transactions for the asset or liability occur with sufficient frequency and volume to provide pricing information on an ongoing basis. While the same factors may be used to assess whether a market has experienced a significant decrease in activity and to determine whether a market is active or inactive, these are separate and distinct determinations.

The determination that a market has experienced a significant decrease in volume does not change the requirements of IFRS 13 related to the use of relevant observable data from active markets. That is, despite a decrease from recent (or historical) levels of activity, transactions for an asset or liability in a particular market may still occur with sufficient frequency and volume to provide pricing information on an ongoing basis. For example, this might be the case for an equity security traded on a public exchange. Therefore, if an entity concludes there has been a significant decrease in the volume or level of activity for the asset or liability in relation to normal market activity for the asset or liability (or similar assets or liabilities), it must perform further analysis of the transactions or quoted prices to assess the relevance of observed transactions or quoted prices in these markets. If there has been a significant decrease in activity, but a market is still deemed to be active, entities would continue to measure the fair value of identical instruments that trade in this market using PxQ (Level 1 measurement).

A recent example related to 2011 trading activity for Greek sovereign bonds. During that calendar year, the economic situation in Greece had deteriorated and some had questioned whether the Greek sovereign bonds were still being actively traded. In a public statement, the European Securities and Market Authority (ESMA) indicated that, “[b]ased on trading data obtained from the Bank of Greece, it [was their] opinion that, as of 30 June 2011, the market was active for some Greek sovereign bonds but could be judged inactive for some others.”²⁷ While ESMA provided no predictions about the level of trading activity as at 31 December 2011, ESMA clearly stated their expectation that a fair value measurement of Greek sovereign bonds, in interim and annual financial statements during 2011 should be a Level 1 measurement in situations where there was still an active market. Furthermore, ESMA expected entities to use a Level 2 measurement method that maximises the use of observable market data to measure the fair value of those bonds that were traded in inactive markets.

7.2 Identifying transactions that are not orderly

Extract from IFRS 13

B43. The determination of whether a transaction is orderly (or is not orderly) is more difficult if there has been a significant decrease in the volume or level of activity for the asset or liability in relation to normal market activity for the asset or liability (or similar assets or liabilities). In such circumstances it is not appropriate to conclude that all transactions in that market are not orderly (ie forced liquidations or distress sales). Circumstances that may indicate that a transaction is not orderly include the following:

- (a) There was not adequate exposure to the market for a period before the measurement date to allow for marketing activities that are usual and customary for transactions involving such assets or liabilities under current market conditions.
- (b) There was a usual and customary marketing period, but the seller marketed the asset or liability to a single market participant.
- (c) The seller is in or near bankruptcy or receivership (ie the seller is distressed).

²⁷ European Securities and Markets Authority public statement *Sovereign Debt in IFRS Financial Statements*, November 2011

Extract from IFRS 13 *continued*

- (d) The seller was required to sell to meet regulatory or legal requirements (ie the seller was forced).
- (e) The transaction price is an outlier when compared with other recent transactions for the same or a similar asset or liability.

An entity shall evaluate the circumstances to determine whether, on the weight of the evidence available, the transaction is orderly.

B44. An entity shall consider all the following when measuring fair value or estimating market risk premiums:

- (a) If the evidence indicates that a transaction is not orderly, an entity shall place little, if any, weight (compared with other indications of fair value) on that transaction price.
- (b) If the evidence indicates that a transaction is orderly, an entity shall take into account that transaction price. The amount of weight placed on that transaction price when compared with other indications of fair value will depend on the facts and circumstances, such as the following:
 - (i) the volume of the transaction.
 - (ii) the comparability of the transaction to the asset or liability being measured.
 - (iii) the proximity of the transaction to the measurement date.
- (c) If an entity does not have sufficient information to conclude whether a transaction is orderly, it shall take into account the transaction price. However, that transaction price may not represent fair value (ie the transaction price is not necessarily the sole or primary basis for measuring fair value or estimating market risk premiums). When an entity does not have sufficient information to conclude whether particular transactions are orderly, the entity shall place less weight on those transactions when compared with other transactions that are known to be orderly.

An entity need not undertake exhaustive efforts to determine whether a transaction is orderly, but it shall not ignore information that is reasonably available. When an entity is a party to a transaction, it is presumed to have sufficient information to conclude whether the transaction is orderly.

IFRS 13 defines an orderly transaction as “a transaction that assumes exposure to the market for a period before 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 (e.g., a forced liquidation or distress sale)”.²⁸ This definition includes two key components:

- (i) Adequate market exposure is required in order to provide market participants with the ability to gain an awareness and knowledge of the asset or liability necessary for a market-based exchange

²⁸ IFRS 13 Appendix A

(ii) The transaction should involve market participants that, while being motivated to transact for the asset or liability, are not compelled to do so. IFRS 13 acknowledges that the determination of whether a transaction is orderly may be more difficult if there has been a significant decrease in the volume or level of activity. However, the standard is clear that, even when there has been a significant decrease in the volume or level of activity for an asset or liability, it is not appropriate to conclude that all transactions in that market are not orderly (i.e., distressed or forced). Instead, further assessment as to whether an observed transaction is not orderly generally needs to be made at the individual transaction level.

IFRS 13 does not require an entity to undertake all possible efforts in assessing whether a transaction is orderly. However, information that is available without undue cost and effort cannot be ignored. For instance, when an entity is party to a transaction, the standard presumes it would have sufficient information to conclude whether the transaction is orderly. Conversely, the lack of transparency into the details of individual transactions occurring in the market, to which the entity is not a party, can pose practical challenges for many entities in making this assessment. Recognising this difficulty, the IASB provided additional guidance in IFRS 13.B44(c), which indicates that while observable data should not be ignored when the reporting entity does not have sufficient information to conclude on whether the transaction is orderly, the entity should place less weight on those transactions in comparison to other transactions that the reporting entity has concluded are orderly (see section 7.3 below for further discussion).

7.2.1 Are all transactions entered into to meet regulatory requirements or transactions initiated during bankruptcy assumed to be not orderly?

Although an entity may be viewed as being compelled to sell assets to comply with regulatory requirements, such transfers are not necessarily disorderly. If the entity was provided the usual and customary period of time to market the asset to multiple potential buyers, the transaction price may be representative of the asset's fair value. Similarly, transactions initiated during bankruptcy are not automatically assumed to be disorderly. The determination of whether a transaction is not orderly requires a thorough evaluation of the specific facts and circumstances, including the exposure period and the number of potential buyers.

7.2.2 Is it possible for orderly transactions to take place in a distressed market?

Yes. While there may be increased instances of transactions that are not orderly when a market has undergone a significant decrease in volume, it is not appropriate to assume that all transactions that occur in a market during a period of dislocation are distressed or forced. This determination is made at the individual transaction level and requires the use of judgement based on the specific facts and circumstances. While market factors such as an imbalance in supply and demand can affect the prices at which transactions occur in a given market, such an imbalance, in and of itself, does not indicate that the parties to a transaction were not knowledgeable and willing market participants or that a transaction was not orderly. For example, a transaction in a dislocated market is less likely to be considered a distressed sale when multiple buyers have bid on the asset.

In addition, while a fair value measurement incorporates the assumptions that sellers, as well as buyers, would consider in pricing the asset or liability, an entity's conclusion that it would not sell its own asset (or transfer its own liability) at prices currently observed in the market does not mean these transactions should be presumed to be distressed. IFRS 13 makes clear that fair value is a market-based

measurement, not an entity-specific measurement, and notes that the entity's intention to hold an asset or liability is not relevant in estimating its fair value. The objective of a fair value measurement is to estimate the exit price in an orderly transaction between willing market participants at the measurement date under current market conditions. This price should include a risk premium that reflects the amount market participants would require as compensation for bearing any uncertainty inherent in the cash flows, and this uncertainty (as well as the compensation demanded to assume it) may be affected by current marketplace conditions. The objective of a fair value measurement does not change when markets are inactive or in a period of dislocation.

7.3 Estimating fair value when there has been a significant decrease in the volume or level of activity

Estimating the price at which market participants would be willing to enter into a transaction if there has been a significant decrease in the volume or level of activity for the asset or liability will depend on the specific facts and circumstances and will require judgement. However, the core concepts of the fair value framework continue to apply. For example, an entity's intentions regarding the asset or liability, e.g., to sell an asset or settle a liability, are not relevant when measuring fair value because that would result in an entity-specific measurement.

If there has been a significant decrease in the volume or level of activity for the asset or liability, it may be appropriate to reconsider the valuation technique being used or to use multiple valuation techniques, for example, the use of both a market approach and a present value technique (see section 7.3.2 below for further discussion).

If quoted prices provided by third parties are used, an entity must evaluate whether those quoted prices have been developed using current information that reflects orderly transactions or a valuation technique that reflects market participant assumptions, including assumptions about risk. This evaluation must take into consideration the nature of a quote (e.g., whether the quote is an indicative price or a binding offer). In weighting a quoted price as an input to a fair value measurement, more weight is given to quotes that reflect the result of actual transactions or those that represent binding offers. Less weight is given to quotes that are not binding, reflect indicative pricing or do not reflect the result of transactions.

In some instances, an entity may determine that a transaction or quoted price requires an adjustment, such as when the price is stale or when the price for a similar asset requires significant adjustment to make it comparable to the asset being measured. The impact of these adjustments may be significant to the fair value measure and, if so, would affect its classification in the fair value hierarchy (see section 15.2 for further discussion on classification within the fair value hierarchy).

7.3.1 Assessing the relevance of observable data

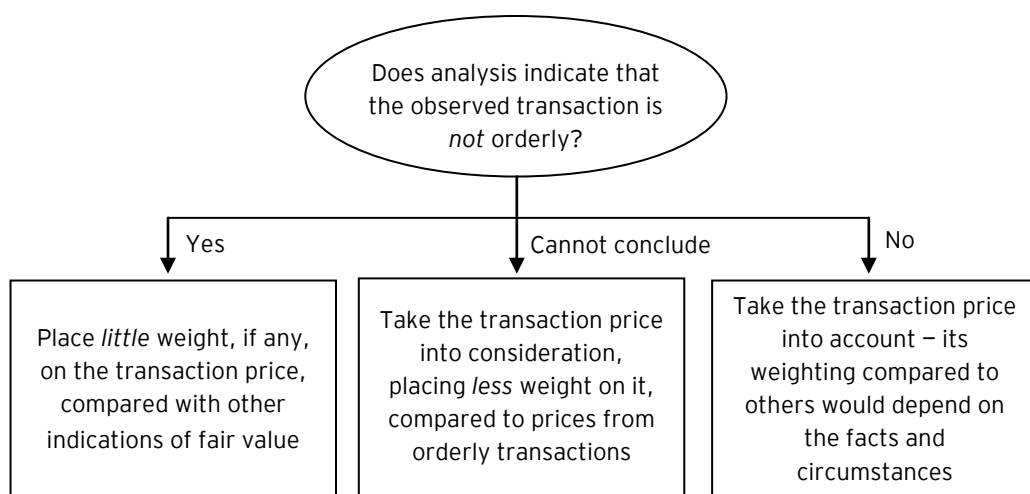
While observable prices from inactive markets may not be representative of fair value in all cases, this data should not be ignored. Instead, IFRS 13.B38 and B44 clarify that additional analysis is required to assess the relevance of the observable data. The relevance of a quoted price from an inactive market is dependent on whether the transaction is determined to be orderly. If the observed price is based on a transaction that is determined to be forced or disorderly, little, if any, weight should be placed on it compared with other indications of value.

If the quoted price is based on a transaction that is determined to be orderly, this data point should be considered in the estimation of fair value. However, the relevance of quoted prices associated with orderly transactions can vary based on factors specific to the asset or liability being measured and the facts and circumstances surrounding the price. Some of the factors to be considered include:

- ▶ The condition and/or location of the asset or liability
- ▶ The similarity of the transactions to the asset or liability being measured (e.g., the extent to which the inputs relate to items that are comparable to the asset or liability)
- ▶ The size of the transactions
- ▶ The volume or level of activity in the markets within which the transactions are observed
- ▶ The proximity of the transactions to the measurement date
- ▶ Whether the market participants involved in the transaction had access to information about the asset or liability that is usual and customary

If the adjustments made to the observable price are significant and based on unobservable data, the resulting measurement would represent a Level 3 measurement.

Figure 2: Orderly transactions: measuring fair value and estimating market risk premiums



7.3.2 Selection and use of valuation techniques when there has been a significant decrease in volume or level of activity

As discussed above, when activity has significantly decreased for an asset or liability an assessment of the relevance of observable market data will be required and adjustments to observable market data may be warranted. A significant decrease in volume or activity can also influence which valuation technique(s) are used and how those techniques are applied.

The following example from IFRS 13 highlights some key valuation considerations for assets that trade in markets that have experienced a significant decrease in volume and level of activity.

Example 7-1: Estimating a market rate of return when the volume or level of activity for an asset has significantly decreased²⁹

Entity A invests in a junior AAA-rated tranche of a residential mortgage-backed security on 1 January 20X8 (the issue date of the security). The junior tranche is the third most senior of a total of seven tranches. The underlying collateral for the residential mortgage-backed security is unguaranteed non-conforming residential mortgage loans that were issued in the second half of 20X6.

At 31 March 20X9 (the measurement date) the junior tranche is now A-rated. This tranche of the residential mortgage-backed security was previously traded through a brokered market. However, trading volume in that market was infrequent, with only a few transactions taking place per month from 1 January 20X8 to 30 June 20X8 and little, if any, trading activity during the nine months before 31 March 20X9.

Entity A takes into account the factors in paragraph B37 of the IFRS to determine whether there has been a significant decrease in the volume or level of activity for the junior tranche of the residential mortgage-backed security in which it has invested. After evaluating the significance and relevance of the factors, Entity A concludes that the volume and level of activity of the junior tranche of the residential mortgage-backed security have significantly decreased. Entity A supported its judgement primarily on the basis that there was little, if any, trading activity for an extended period before the measurement date.

Because there is little, if any, trading activity to support a valuation technique using a market approach, Entity A decides to use an income approach using the discount rate adjustment technique described in paragraphs B18-B22 of the IFRS to measure the fair value of the residential mortgage-backed security at the measurement date. Entity A uses the contractual cash flows from the residential mortgage-backed security (see also paragraphs 67 and 68 of the IFRS).

Entity A then estimates a discount rate (i.e., a market rate of return) to discount those contractual cash flows. The market rate of return is estimated using both of the following:

- (a) The risk-free rate of interest
- (b) Estimated adjustments for differences between the available market data and the junior tranche of the residential mortgage-backed security in which Entity A has invested. Those adjustments reflect available market data about expected non-performance and other risks (e.g., default risk, collateral value risk and liquidity risk) that market participants would take into account when pricing the asset in an orderly transaction at the measurement date under current market conditions

Entity A took into account the following information when estimating the adjustments in paragraph IE53(b):

- (a) The credit spread for the junior tranche of the residential mortgage-backed security at the issue date as implied by the original transaction price

²⁹ IFRS 13.IE49-58

Example 7-1: Estimating a market rate of return when the volume or level of activity for an asset has significantly decreased *continued*

- (b) The change in the credit spread implied by any observed transactions from the issue date to the measurement date for comparable residential mortgage-backed securities or on the basis of relevant indices
- (c) The characteristics of the junior tranche of the residential mortgage-backed security compared with comparable residential mortgage-backed securities or indices, including all the following:
 - (i) The quality of the underlying assets, i.e., information about the performance of the underlying mortgage loans such as delinquency and foreclosure rates, loss experience and prepayment rates
 - (ii) The seniority or subordination of the residential mortgage-backed security tranche held
 - (iii) Other relevant factors
- (d) Relevant reports issued by analysts and rating agencies.
- (e) Quoted prices from third parties such as brokers or pricing services.

Entity A estimates that one indication of the market rate of return that market participants would use when pricing the junior tranche of the residential mortgage-backed security is 12 per cent (1,200 basis points). This market rate of return was estimated as follows:

- (a) Begin with 300 basis points for the relevant risk-free rate of interest at 31 March 20X9
- (b) Add 250 basis points for the credit spread over the risk-free rate when the junior tranche was issued in January 20X8
- (c) Add 700 basis points for the estimated change in the credit spread over the risk-free rate of the junior tranche between 1 January 20X8 and 31 March 20X9. This estimate was developed on the basis of the change in the most comparable index available for that time period
- (d) Subtract 50 basis points (net) to adjust for differences between the index used to estimate the change in credit spreads and the junior tranche.

The referenced index consists of subprime mortgage loans, whereas Entity A's residential mortgage-backed security consists of similar mortgage loans with a more favourable credit profile (making it more attractive to market participants). However, the index does not reflect an appropriate liquidity risk premium for the junior tranche under current market conditions. Thus, the 50 basis point adjustment is the net of two adjustments:

- (i) The first adjustment is a 350 basis point subtraction, which was estimated by comparing the implied yield from the most recent transactions for the residential mortgage-backed security in June 20X8 with the implied yield in the index price on those same dates. There was no information available that indicated that the relationship between Entity A's security and the index has changed

Example 7-1: Estimating a market rate of return when the volume or level of activity for an asset has significantly decreased *continued*

- (ii) The second adjustment is a 300 basis point addition, which is Entity A's best estimate of the additional liquidity risk inherent in its security (a cash position) when compared with the index (a synthetic position). This estimate was derived after taking into account liquidity risk premiums implied in recent cash transactions for a range of similar securities

As an additional indication of the market rate of return, Entity A takes into account two recent indicative quotes (i.e., non-binding quotes) provided by reputable brokers for the junior tranche of the residential mortgage-backed security that imply yields of 15-17 per cent. Entity A is unable to evaluate the valuation technique(s) or inputs used to develop the quotes. However, Entity A is able to confirm that the quotes do not reflect the results of transactions.

Because Entity A has multiple indications of the market rate of return that market participants would take into account when measuring fair value, it evaluates and weights the respective indications of the rate of return, considering the reasonableness of the range indicated by the results.

Entity A concludes that 13 per cent is the point within the range of indications that is most representative of fair value under current market conditions. Entity A places more weight on the 12 per cent indication (i.e., its own estimate of the market rate of return) for the following reasons:

- (a) Entity A concluded that its own estimate appropriately incorporated the risks (e.g., default risk, collateral value risk and liquidity risk) that market participants would use when pricing the asset in an orderly transaction under current market conditions
- (b) The broker quotes were non-binding and did not reflect the results of transactions, and Entity A was unable to evaluate the valuation technique(s) or inputs used to develop the quotes

In Example 7-1 above, Entity A uses an income approach (i.e., discount rate adjustment technique, see Chapter 20 for further discussion regarding present value techniques) to estimate the fair value of its residential mortgage-backed security (RMBS), because limited trading activity precluded a market approach as at the measurement date.

Example 7-1 illustrates that the entity's use of an income approach does not change the objective of the fair value measurement, which is a current exit price. Valuation models should take into account all the factors that market participants would consider when pricing an asset or liability. The discount rate used by Entity A, for example, tries to incorporate all of the risks (e.g., liquidity risk, non-performance risk) market participants would consider in pricing the RMBS under current market conditions. Liquidity, credit or any other risk factors market participants would consider in pricing the asset or liability may require adjustments to model values if such factors are not sufficiently captured in the model.

Entity A prioritises observable inputs (to the extent available) over unobservable inputs in its application of the income approach. Entity A assesses market-based data from various sources to estimate the discount rate. For example, the entity

estimates the change in the credit spread of the RMBS since its issuance based on spread changes observed from the most comparable index, for which trades continue to occur. Using the best available market information, the entity adjusts this input to account for differences between the observed index and the RMBS. These adjustments include the entity's assessment of the additional liquidity risk inherent in the RMBS compared to the index.

IFRS 13.89 indicates that an entity may use its own internal assumptions when relevant observable market data does not exist. However, if reasonably available data indicates that market participant assumptions would differ, the entity should adjust its assumptions to incorporate that information. Relevant market data is not limited to transactions for the identical asset or liability being measured.

In the above example, Entity A is unable to use a market approach because of limited trading activity for the RMBS. Therefore, Entity A considers implied liquidity risk premiums from recent transactions for a range of similar securities to estimate the incremental premium market participants would demand for its RMBS in the current market (as compared with the benchmark spread). In addition, Entity A considers two indicative broker quotes to estimate an appropriate discount rate for its RMBS. Although these quotes are specific to the RMBS being valued, Entity A puts less weight on these quotes since they are not binding and are not based on actual transactions. Furthermore, Entity A is unable to evaluate the valuation techniques and underlying data used by the brokers.

Importantly, the illustrative example is not intended to imply that an entity's own assumptions carry more weight than non-binding broker quotes. Rather, the example illustrates that each indication of value needs to be assessed based on the extent these indications rely on observable versus unobservable inputs.

Even though the market approach could not be used because of limited trading activity for the RMBS, Entity A was able to corroborate many of the assumptions used in developing the discount rate with relevant observable market data. As a result, the decision by the entity to place additional weight on its own market-corroborated assumptions (and less on the broker quotes) was warranted. When differences between broker quotes or pricing service data and an entity's own determination of value are significant, management should seek to understand the reasons behind these differences, if possible.

8 Price

Extract from IFRS 13

24. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction in the principal (or most advantageous) market at the measurement date under current market conditions (i.e. an exit price) regardless of whether that price is directly observable or estimated using another valuation technique.
25. 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. Transaction costs shall be accounted for in accordance with other IFRSs. Transaction costs are not a characteristic of an asset or a liability; rather, they are specific to a transaction and will differ depending on how an entity enters into a transaction for the asset or liability.
26. Transaction costs do not include transport costs. If location is a characteristic of the asset (as might be the case, for example, for a commodity), the price in the principal (or most advantageous) market shall be adjusted for the costs, if any, that would be incurred to transport the asset from its current location to that market.

IFRS 13 requires the entity to estimate fair value based on the price that would be received to sell the asset or transfer the liability being measured (i.e., an exit price). While the determination of this price may be straight forward in some cases (e.g., when the identical instrument trades in an active market), in others it will require significant judgement. However, IFRS 13 makes it clear that the price used to measure fair value must not be adjusted for transaction costs, but would consider transportation costs.

The standard's guidance on the valuation techniques and inputs to these techniques used in determining the exit price (including the prohibition on block discounts) is discussed in Chapters 13 and 14.

8.1 Transaction costs

Transaction costs are defined as the costs to sell an asset or transfer a liability that are directly attributable to the disposal of an asset or the transfer of the liability (i.e., the costs the seller would incur). In addition, these costs are incremental, i.e., they would not have been incurred by the entity had the decision to sell the asset or transfer the liability not been made. Examples of transaction costs include commissions or certain due diligence costs. However, transaction costs do not include transportation costs.

Fair value is not adjusted for transaction costs. This is because transaction costs are not a characteristic of an asset or a liability; they are a characteristic of the transaction. While not deducted from fair value, an entity considers transaction costs in the context of determining the most advantageous market (in the absence of a principal market – see Example 5-4 in section 5.2 above) because in this instance the entity is seeking to determine the market that would maximise the net amount that would be *received* for the asset.

IFRS 13 discusses transaction costs from the perspective of the holder of the asset or issuer of the liability (i.e., the seller). It does not discuss the costs that might be incurred by a potential buyer of the asset or liability or whether such costs might

influence the price a buyer would be willing to pay to acquire the asset or assume the liability.

8.1.1 Are transaction costs in IFRS 13 the same as 'costs to sell' in other IFRSs?

As discussed in section 2.1.2 above, some IFRSs permit or require measurements based on fair value, where costs to sell or costs of disposal are deducted from the fair value measurement. IFRS 13 does not change the measurement objective for assets accounted for at fair value less cost to sell. The 'fair value less cost to sell' measurement objective includes (1) fair value and (2) cost to sell, and the fair value component should be measured in accordance with IFRS 13.

Consistent with the definition of transaction costs in IFRS 13, IAS 36 describes costs of disposal as "the direct incremental costs attributable to the disposal of the asset or cash-generating unit, excluding finance costs and income tax expense".³⁰ IAS 41 and IFRS 5 similarly define costs to sell.

As such, transaction costs excluded from the determination of fair value in accordance with IFRS 13 will generally be consistent with costs to sell or costs of disposal, determined in other IFRSs (listed in section 2.1.2 above), provided they exclude transportation costs.

Since the fair value component is measured in accordance with IFRS 13, the standard's disclosure requirements apply in situations where the fair value less cost to sell measurement is required subsequent to the initial recognition (unless specifically exempt from the disclosure requirements, see Chapter 19). In addition, IFRS 13 clarifies that adjustments used to arrive at measurements based on fair value (e.g., the cost to sell when estimating fair value less cost to sell) should not be considered when determining where to categorise the measurement in the fair value hierarchy (see Chapter 15).

8.1.2 Transaction costs in IFRS 13 versus acquisition-related transaction costs in other IFRSs?

The term 'transaction costs' is used in many IFRSs, but sometimes it refers to transaction costs actually incurred when acquiring an item and sometimes to transaction costs expected to be incurred when selling an item. While the same term might be used, it is important to differentiate between these types of transaction costs.

IAS 36, IAS 41 and IFRS 5 discuss costs to sell or dispose of an item (as discussed in section 8.1.1 above).

In contrast, other standards refer to capitalising or expensing transaction costs incurred in the context of acquiring an asset, assuming a liability or issuing an entity's own equity (a buyer's perspective). IFRS 3 *Business Combinations*, for example, requires acquisition-related costs to be expensed in the period incurred.³¹

IFRS 13 indicates that transaction costs are not included in a fair value measurement. As such, actual transaction costs (e.g., commissions paid) that are incurred by an entity when acquiring an asset would not be included at initial recognition when fair value is the measurement objective. Likewise, transaction costs that would be incurred in a hypothetical sales transaction would also not be included in a fair value measurement.

³⁰ IAS 36.6

³¹ IFRS 3.53

Some standards permit acquisition-related transaction costs to be capitalised at initial recognition, then permit or require the item (to which those costs relate) to be subsequently measured at fair value. In those situations, some or all of the acquisition-related transaction costs that were capitalised will effectively be expensed as part of the resulting fair value gain or loss. This is consistent with current practice. For example, IAS 40 permits transaction costs to be capitalised as part of an investment property's cost on initial recognition.³² However, if the fair value model is applied to the subsequent measurement of the investment property, transaction costs would be excluded from the fair value measurement.

Similarly, at initial recognition, financial assets or liabilities in the scope of IAS 39 or IFRS 9 are measured at their "fair value plus or minus, in the case of a financial asset or liability not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition or issue of the financial asset or liability".³³ For those items subsequently measured at amortised cost, these transaction costs will be captured as part of the instrument's effective interest rate.

8.2 Transportation costs

Transportation costs represent those that would be incurred to transport an asset or liability to (or from) the principal (or most advantageous) market. If location is a characteristic of the asset or liability being measured (e.g., as might be the case with a commodity), the price in the principal (or most advantageous) market should be adjusted for transportation costs. The following simplified example illustrates this concept.

Example 8-1 Transportation costs

Entity A holds a physical commodity measured at fair value in its warehouse in Europe. For this commodity, the London exchange is determined to be the principal market as it represents the market with the greatest volume and level of activity for the asset that the entity can reasonably access.

The exchange price for the asset is CU 25. However, the contracts traded on the exchange for this commodity require physical delivery to London. Entity A determines that it would cost CU 5 to transport the physical commodity to London and the broker's commission would be CU 3 to transact on the London exchange.

Since location is a characteristic of the asset and transportation to the principal market is required, the fair value of the physical commodity would be CU 20 – the price in the principal market for the asset CU 25, less transportation costs of CU 5. The CU3 broker commission represents a transaction cost that would not adjust the price in the principal market.

³² IAS 40.20

³³ IAS 39.43, IFRS 9.5.1.1

9 Application to non-financial assets

Many non-financial assets, either through the initial or subsequent measurement requirements of an IFRS or, the requirements of IAS 36 for impairment testing (if recoverable amount is based on fair value less costs of disposal), are either permitted or required to be measured at fair value (or a measure based on fair value). For example, management may need to measure the fair value of non-financial assets and liabilities when completing the purchase price allocation for a business combination in accordance with IFRS 3. First-time adopters of IFRS might need to measure fair value of assets and liabilities if they use a 'fair value as deemed cost' approach in accordance with IFRS 1 *First-time Adoption of International Financial Reporting Standards*.

The principles described in the previous chapters apply to non-financial assets. In addition, the fair value measurement of non-financial assets must reflect the highest and best use of the asset from a market participant's perspective.

The highest and best use of an asset establishes the valuation premise used to measure the fair value of the asset, i.e., whether to assume market participants would derive value from using the non-financial asset (based on its highest and best use) on its own or in combination with other assets or with other assets and liabilities. As discussed below, this may be its current use or some alternative use.

As discussed in Chapter 3, the concepts of highest and best use and valuation premise in IFRS 13 are only relevant for non-financial assets (and not financial assets and liabilities). This is because:

- ▶ Financial assets have specific contractual terms; they do not have alternative uses. Changing the characteristics of the financial asset (i.e., changing the contractual terms) causes the item to become a different asset and the objective of a fair value measurement is to measure the asset as it exists as at the measurement date.
- ▶ The different ways in which an entity may relieve itself of a liability are not alternative uses. In addition, entity-specific advantages (or disadvantages) that enable an entity to fulfil a liability more or less efficiently than other market participants are not considered in a fair value measurement.
- ▶ The concepts of highest and best use and valuation premise were developed within the valuation profession to value non-financial assets, such as land.³⁴

³⁴ IFRS 13.BC63

9.1 Highest and best use

Extract from IFRS 13

27. A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.
28. The highest and best use of a non-financial asset takes into account the use of the asset that is physically possible, legally permissible and financially feasible, as follows:
- (a) A use that is physically possible takes into account the physical characteristics of the asset that market participants would take into account when pricing the asset (eg the location or size of a property).
 - (b) A use that is legally permissible takes into account any legal restrictions on the use of the asset that market participants would take into account when pricing the asset (eg the zoning regulations applicable to a property).
 - (c) A use that is financially feasible takes into account whether a use of the asset that is physically possible and legally permissible generates adequate income or cash flows (taking into account the costs of converting the asset to that use) to produce an investment return that market participants would require from an investment in that asset put to that use.
29. Highest and best use is determined from the perspective of market participants, even if the entity intends a different use. However, an entity's current use of a non-financial asset is presumed to be its highest and best use unless market or other factors suggest that a different use by market participants would maximise the value of the asset.
30. To protect its competitive position, or for other reasons, an entity may intend not to use an acquired non-financial asset actively or it may intend not to use the asset according to its highest and best use. For example, that might be the case for an acquired intangible asset that the entity plans to use defensively by preventing others from using it. Nevertheless, the entity shall measure the fair value of a non-financial asset assuming its highest and best use by market participants.

Highest and best use is a valuation concept that considers how market participants would use a non-financial asset to maximise its benefit or value. The maximum value of a non-financial asset to market participants may come from its use (a) in combination with other assets or with other assets and liabilities or (b) on a standalone basis.

In determining the highest and best use of a non-financial asset, IFRS 13.28 indicates uses that are physically possible, legally permissible and financially feasible should be considered. As such, when assessing alternative uses, entities should consider the physical characteristics of the asset, any legal restrictions on its use and whether the value generated provides an adequate investment return for market participants.

To be legally permissible, the standard indicates a use of a non-financial asset need not be legal (or have legal approval) at the measurement date, but it must not be legally prohibited in the jurisdiction.³⁵ The IASB seems to be distinguishing between a use that is explicitly prohibited (i.e., it is illegal) and a use that would be legal if the jurisdiction's specific legal requirements are met. The standard gives the example of a land development. Assume the government has prohibited building on or developing certain land (i.e., the land is a protected area). For the entity to develop the land, a change of law would be required. Since development of this land would be illegal, it cannot be the highest and best use of the land. Alternatively, assume the land has been zoned for commercial use, but nearby areas have recently been developed for residential use and, as such, market participants would consider residential development as a potential use of the land. Since re-zoning the land for residential development would only require approval from an authority and that approval is usually given, this alternative use could be deemed to be legally permissible.

It is assumed that market participants would consider all relevant factors, as they exist at the measurement date, in determining whether the legally permissible use of the non-financial asset may be something other than its current use. That is, market participants would consider the probability, extent and timing of different types of approvals that may be required in assessing whether a change in the legal use of the non-financial asset could be obtained.

In our view, an entity would need to have sufficient evidence to support its assumption about the potential for an alternative use, particularly in light of IFRS 13's presumption that the highest and best use is an asset's current use. In the example above of re-zoning land for residential development, the entity's belief that re-zoning was possible (or even likely) is unlikely to be sufficient evidence that the re-zoning is legally permissible. However, the fact that nearby areas had recently been re-zoned for residential use may provide additional evidence as to the likelihood that the land being measured could similarly be re-zoned. If obtaining re-zoning permission is not merely perfunctory, there may be a significant burden on the entity to prove that market participants would consider commercial use of the land to be legally permissible.

Provided there is sufficient evidence to support these assertions, alternative uses that would enable market participants to maximise value should be considered, but a search for potential alternative uses need not be exhaustive. In addition, any costs to transform the non-financial asset (e.g., obtaining a new zoning permit or converting the asset to the alternative use) and profit expectations from a market participant's perspective are also considered in the fair value measurement.

If there are multiple types of market participants who would use the asset differently, these alternative scenarios must be considered before concluding on the asset's highest and best use. While applying the fair value framework may be straightforward in many situations, in other instances, an iterative process may be needed to consistently apply the various components. This may be required due to the interdependence among several key concepts in IFRS 13's fair value framework (see Figure 1 in section 3.2 above). For example, the highest and best use of a non-financial asset determines its valuation premise and affects the identification of the appropriate market participants. Likewise, the determination of the principal (or

³⁵ IFRS 13.BC69

most advantageous) market can be important in determining the highest and best use of a non-financial asset.

How we see it

Determining whether the maximum value to market participants would be achieved either by using an asset in combination with other assets and liabilities as a group, or by using the asset on a stand-alone basis, requires judgement and an assessment of the specific facts and circumstances.

A careful assessment is particularly important when the highest and best use of a non-financial asset is in combination with one or more non-financial assets. As discussed in section 9.2 below, all assets in an asset group should be valued using the same valuation premise. For example, if the fair value of a piece of machinery on a manufacturing line is measured assuming its highest and best use is in conjunction with other equipment in the manufacturing line, those other non-financial assets in the asset group (i.e., the other equipment on the manufacturing line) would also be valued on the same premise. As highlighted by Example 9-3 below, once it is determined that the value for a set of assets is maximised when considered as a group, all of the assets in that group would be valued under the same premise, regardless of whether any individual asset within the group would have a higher value on a standalone basis.

9.1.1 Highest and best use vs current use

Although IFRS 13 presumes that an entity's current use of an asset is its highest and best use, market or other factors may suggest that a different use by market participants would maximise the value of that asset. Because the highest and best use of an asset is determined based on market participants' expectations, reporting entities may need to consider alternative uses of an asset (e.g., land) in their analysis of fair value. An entity's current or intended use of a non-financial asset might not be the highest and best use of the asset, and thus would not determine its premise of value. Instead, the highest and best use of the asset (or asset group) should be determined based on how market participants would maximise the asset's value. For example, market participants may maximise the value of land, currently used as a site for a manufacturing facility, for residential housing instead.

The consideration of alternative uses is not intended to be exhaustive. It is not necessary that all possible alternatives be considered. Instead, judgement is required in assessing those alternative uses that market participants would consider in pricing the asset. As noted above, consideration of what is physically possible, legally permissible and financially feasible would be part of this assessment. Example 9-1 below, which is based on an example in IFRS 13, illustrates this further.

If an entity determines that the highest and best use of an asset is different from its current use, IFRS 13 requires that fact to be disclosed as well as the reason why the non-financial asset is being used in a manner that differs from its highest and best use (disclosures are discussed further in Chapter 19).

It is important to note that even if the current use of a non-financial asset is the same as its highest and best use, the underlying assumptions used to value the asset should not be entity-specific, but instead should be based on the assumptions that market participants would use when transacting for the asset in its current condition. Entity-specific synergies, should they differ from market participant synergies, would not be considered in the determination of the highest and best use of the asset.

Example 9-1: Highest and best use vs current use³⁶

An entity acquires land in a business combination. The land is currently developed for industrial use as a site for a factory. The current use of the land is presumed to be its highest and best use unless market or other factors suggest a different use. Nearby sites have recently been developed for residential use as sites for high-rise apartment buildings. On the basis of that development and recent zoning and other changes to facilitate that development, the entity determines that the land currently used as a site for a factory could be developed as a site for residential use (i.e., for high-rise apartment buildings) because market participants would take into account the potential to develop the site for residential use when pricing the land.

The highest and best use of the land would be determined by comparing both of the following:

- (a) The value of the land as currently developed for industrial use (i.e., the land would be used in combination with other assets, such as the factory, or with other assets and liabilities)
- (b) The value of the land as a vacant site for residential use, taking into account the costs of demolishing the factory and other costs (including the uncertainty about whether the entity would be able to convert the asset to the alternative use) necessary to convert the land to a vacant site (i.e., the land is to be used by market participants on a stand-alone basis)

The highest and best use of the land would be determined based on the higher of those values. In situations involving real estate appraisal, the determination of highest and best use may take into account factors relating to the factory operations, including its assets and liabilities.

Assume that the fair value of the land in-use as a manufacturing operation is determined to be CU 4,000,000 and that the fair value for the land as a vacant site that can be used for residential purposes is CU 5,000,000. In order to convert the land from a manufacturing operation to a vacant site for residential use, the manufacturing facility must be removed. Assuming demolition and other costs of CU 500,000, the fair value of the land as a vacant lot for residential use would be CU 4,500,000.³⁷ In order to determine the fair value of the land, the price of the land as a residential development site (CU 5,000,000) would need to be adjusted for the transformation costs (CU 500,000) necessary to prepare the land for residential use. Therefore, the amount of CU 4,500,000 must be used as the fair value of the land.

9.1.2 Highest and best use vs intended use (including defensive value)

An entity's intended use of an asset, at the time it is acquired, may not be the same as how market participants would use the asset. If the highest and best use and the entity's intended use of an asset are not the same, differences could arise between the price to acquire the asset and fair value measured in accordance with IFRS 13 (see Chapter 12 below). IFRS 13 requires that the highest and best use of an asset

³⁶ IFRS 13.IE7-8

³⁷ For simplicity, this example does not specifically discuss other types of costs that may need to be considered in determining the fair value of the land for residential use (such as the effect of intangible or other assets related to the manufacturing facility or operational costs, to the extent that market participants would take them into consideration).

be determined from the perspective of market participants, even if management intends a different use, as is illustrated in Example 9-2.

In certain instances, the highest and best use of an asset may be not to actively use it, but instead to lock it up or shelve it (commonly referred to as a defensive asset). That is, the maximum value provided by an asset may be its defensive value. IFRS 13 clarifies that the fair value of an asset used defensively is not assumed to be zero or a nominal amount. Instead, an entity should consider the incremental value such a use provides to the assets being protected, such as the incremental value provided to an entity's existing brand name by acquiring and shelving a competing brand. Generally speaking, a nominal fair value is appropriate only when an asset is abandoned (i.e., when an entity would be willing to give the asset away for no consideration).

Importantly, an entity's decision to use an asset defensively does not mean that market participants would necessarily maximise the asset's value in a similar manner. Likewise, an entity's decision to actively use an asset does not preclude its highest and best use to market participants as being defensive in nature. The following example in IFRS 13 illustrates these points.

Example 9-2: Highest and best use vs intended use³⁸

An entity acquires a research and development (R&D) project in a business combination. The entity does not intend to complete the project. If completed, the project would compete with one of its own projects (to provide the next generation of the entity's commercialised technology). Instead, the entity intends to hold (i.e., lock up) the project to prevent its competitors from obtaining access to the technology. In doing so, the project is expected to provide defensive value, principally by improving the prospects for the entity's own competing technology. To measure the fair value of the project at initial recognition, the highest and best use of the project would be determined on the basis of its use by market participants. For example:

- (a) The highest and best use of the R&D project would be to continue development if market participants would continue to develop the project and that use would maximise the value of the group of assets or of assets and liabilities in which the project would be used (i.e., the asset would be used in combination with other assets or with other assets and liabilities). That might be the case if market participants do not have similar technology, either in development or commercialised. The fair value of the project would be measured on the basis of the price that would be received in a current transaction to sell the project, assuming that the R&D would be used with its complementary assets and the associated liabilities and that those assets and liabilities would be available to market participants.
- (b) The highest and best use of the R&D project would be to cease development if, for competitive reasons, market participants would lock up the project and that use would maximise the value of the group of assets or assets and liabilities in which the project would be used. That might be the case if market participants have technology in a more advanced stage of development that would compete with the project if completed and the project would be expected to improve the prospects for their own competing technology if locked up. The fair value of the project would be measured on the basis of the price that would be received in a current transaction to sell the project, assuming that the R&D would be used (i.e., locked up) with its complementary assets and the associated liabilities and that those assets and liabilities would be available to market participants.
- (c) The highest and best use of the R&D project would be to cease development if market participants would discontinue its development. That may be the case if the 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 project would be measured on the basis of the price that would be received in a current transaction to sell the project on its own (which might be zero).

If the highest and best use in this example was (a), then that is the value that the entity must ascribe to the R&D project, even though its intended use is to lock up the project.

³⁸ IFRS 13.IE9

The fair value of the in-process research and development project in Example 9-2 above depends on whether market participants would use the asset offensively, defensively or abandon it (as illustrated by points (a), (b) and (c) in the example, respectively). As discussed in section 9.1 above, if there are multiple types of market participants who would use the asset differently, these alternative scenarios must be considered before concluding on the asset's highest and best use.

9.2 Valuation premise for non-financial assets

Extract from IFRS 13

31. The highest and best use of a non-financial asset establishes the valuation premise used to measure the fair value of the asset, as follows:
- (a) The highest and best use of a non-financial asset might provide maximum value to market participants through its use in combination with other assets as a group (as installed or otherwise configured for use) or in combination with other assets and liabilities (eg a business).
 - (i) If the highest and best use of the asset is to use the asset in combination with other assets or with other assets and liabilities, the fair value of the asset is the price that would be received in a current transaction to sell the asset assuming that the asset would be used with other assets or with other assets and liabilities and that those assets and liabilities (ie its complementary assets and the associated liabilities) would be available to market participants.
 - (ii) Liabilities associated with the asset and with the complementary assets include liabilities that fund working capital, but do not include liabilities used to fund assets other than those within the group of assets.
 - (iii) Assumptions about the highest and best use of a non-financial asset shall be consistent for all the assets (for which highest and best use is relevant) of the group of assets or the group of assets and liabilities within which the asset would be used.
 - (b) The highest and best use of a non-financial asset might provide maximum value to market participants on a stand-alone basis. If the highest and best use of the asset is to use it on a stand-alone basis, the fair value of the asset is the price that would be received in a current transaction to sell the asset to market participants that would use the asset on a stand-alone basis.
32. The fair value measurement of a non-financial asset assumes that the asset is sold consistently with the unit of account specified in other IFRSs (which may be an individual asset). That is the case even when that fair value measurement assumes that the highest and best use of the asset is to use it in combination with other assets or with other assets and liabilities because a fair value measurement assumes that the market participant already holds the complementary assets and the associated liabilities.

Depending on its highest and best use, the fair value of the non-financial asset will either be measured based on the value it would derive on a standalone basis or in combination with other assets or other assets and liabilities, i.e., the asset's valuation premise.

9.2.1 Valuation premise – stand-alone basis

If the highest and best use of the asset is its use on a stand-alone basis, an entity measures its fair value separately. That is, the asset is assumed to be sold to market participants for use on its own. Fair value is the price that would be received in a current transaction under those circumstances. For instance, alternative (c) in Example 9-2 above suggests the highest and best use of the research and development project could be to cease development. Since its highest and best use is on a stand-alone basis, the fair value of the project would be the price that would be received in a current transaction to sell the project on its own and assuming a market participant would cease development of the project. In addition, the asset should be measured based only on its current characteristics, potentially requiring an adjustment for transformation costs. For example, if land that is used as a factory site is to be valued on a standalone basis, transformation costs (e.g., the cost of removing the factory) should be considered in the fair value measurement.

When the valuation premise of one non-financial asset in an asset group is valued on a standalone basis, all of the other assets in the group should also be valued using a consistent valuation premise. For example, based on Example 9-1 in section 9.1.1 above, if the highest and best use of the land is determined to be on a standalone basis (i.e., as vacant land), the fair value of the equipment in the factory could be determined under two alternative valuation premises: (a) standalone (i.e., the value of the equipment sold on a standalone basis); or (b) in conjunction with other equipment on the operating line, but in a different factory (i.e., not in combination with the land, since the land would be valued on a standalone basis). Regardless of the valuation premise used to measure the equipment, market participant assumptions regarding the cost of redeployment, such as costs for disassembling, transporting and reinstalling the equipment should be considered in the fair value measurement.

9.2.2 Valuation premise – in combination with other assets and/or liabilities

If the highest and best use of a non-financial asset is in combination with other assets as a group or in combination with other assets and liabilities, the fair value of the asset is the price that would be received in a current transaction to sell the asset and would assume that:

- (i) Market participants would use the asset together with other assets or with other assets and liabilities
- (ii) Those assets and liabilities (i.e., its complementary assets and the associated liabilities) would be available to market participants. That is, the fair value of the asset would be measured from the perspective of market participants who are presumed to hold the complementary assets and liabilities (see section 9.2.3 for further discussion regarding associated liabilities)

Once an entity determines that the valuation premise for a non-financial asset is its use in combination with a set of assets (or assets and liabilities), all of the complimentary non-financial assets in the group should be valued using the same valuation premise (i.e., assuming the same highest and best use), regardless of whether any individual asset within the group would have a higher value under another premise. The following example illustrates this further.

Example 9-3: Consistent assumptions about highest and best use in an asset group

A wine producer owns and manages a vineyard and produces its own wine on site. The vines are measured at fair value less costs to sell in accordance with IAS 41 at the end of each reporting period. The grapes are measured at the point of harvest at fair value less costs to sell in accordance with IAS 41 (being its cost when transferred to IAS 2). Before harvest, the grapes are considered part of the vines. The wine producer elects to measure its land using IAS 16's revaluation model (fair value less any subsequent accumulated depreciation and accumulated impairment). All other non-financial assets are measured at cost.

At the end of the reporting period, the entity assesses the highest and best use of the vines and the land from the perspective of market participants. The vines and land could continue to be used, in combination with the entity's other assets and liabilities, to produce and sell its wine (i.e., its current use). Alternatively, the land could be converted into residential property. Conversion would include removing the vines and plant and equipment from the land.

Scenario A

The entity determines that the highest and best use of these assets in combination as a vineyard (i.e., its current use). The entity must make consistent assumptions for assets in the group (for which highest and best use is relevant, i.e., non-financial assets). Therefore, the highest and best use of all non-financial assets in the group is to produce and sell wine, even if conversion into residential property might yield a higher value for the land on its own.

Scenario B

The entity determines that the highest and best use of these assets is to convert the land into residential property, even if the current use might yield a higher value for the vines on their own. The entity would need to consider what a market participant would do to convert the land, which could include the cost of rezoning, selling cuttings from the vines or simply removing the vines, and the sale of the buildings and equipment either individually or as an asset group.

Since the highest and best use of these assets is not their current use in this scenario, the entity would disclose that fact, as well as the reason why those assets are being used in a manner that differs from their highest and best use.

When the asset's highest and best use is in combination with other items, the effect of the valuation premise on the measurement of fair value will depend on the specific circumstances. The following extract from IFRS 13 provides some examples.

Although the approach used to incorporate the valuation premise into a fair value measurement may differ based on the facts and circumstances, the determination of a non-financial asset's valuation premise (based on its highest and best use) and the inputs applied in the valuation technique used to estimate fair value should always be considered from the perspective of market participants, not the reporting entity.

Extract from IFRS 13

B3. When measuring the fair value of a non-financial asset used in combination with other assets as a group (as installed or otherwise configured for use) or in combination with other assets and liabilities (eg a business), the effect of the valuation premise depends on the circumstances. For example:

- (a) the fair value of the asset might be the same whether the asset is used on a stand-alone basis or in combination with other assets or with other assets and liabilities. That might be the case if the asset is a business that market participants would continue to operate. In that case, the transaction would involve valuing the business in its entirety. The use of the assets as a group in an ongoing business would generate synergies that would be available to market participants (ie market participant synergies that, therefore, should affect the fair value of the asset on either a stand-alone basis or in combination with other assets or with other assets and liabilities).
- (b) an asset's use in combination with other assets or with other assets and liabilities might be incorporated into the fair value measurement through adjustments to the value of the asset used on a stand-alone basis. 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 transport and installation costs so that the fair value measurement reflects the current condition and location of the machine (installed and configured for use).
- (c) an asset's use in combination with other assets or with other assets and liabilities might be incorporated into the fair value measurement through the market participant assumptions used to measure the fair value of the asset. For example, if the asset is work in progress inventory that is unique and market participants would convert the inventory into finished goods, the fair value of the inventory would assume that market participants have acquired or would acquire any specialised machinery necessary to convert the inventory into finished goods.
- (d) an asset's use in combination with other assets or with other assets and liabilities might be incorporated into the valuation technique used to measure the fair value of the asset. That might be the case when using the multi-period excess earnings method to measure the fair value of an intangible asset because that valuation technique specifically takes into account the contribution of any complementary assets and the associated liabilities in the group in which such an intangible asset would be used.
- (e) in more limited situations, when an entity uses an asset within a group of assets, the entity might measure the asset at an amount that approximates its fair value when allocating the fair value of the asset group to the individual assets of the group. That might be the case if the valuation involves real property and the fair value of improved property (ie an asset group) is allocated to its component assets (such as land and improvements).

9.2.3 How should associated liabilities be considered when measuring the fair value of a non-financial asset?

As discussed in section 9.2.2, an asset's highest and best use may be in combination with associated liabilities and complementary assets in an asset group. IFRS 13.B3(d), for example, notes that an asset's use in combination with other assets and liabilities might be incorporated when using the multi-period excess earnings method to measure the fair value of an intangible asset that has been acquired in a business acquisition. The multi-period excess earnings method specifically takes into account the contribution of any complementary assets and the associated liabilities in the group in which such an intangible asset would be used.

'Associated liabilities' is not defined and IFRS 13 provides limited guidance on the types of liabilities that could be considered associated to a non-financial asset. IFRS 13.31(a)(ii) provides some guidance, stating that associated liabilities can include those that fund working capital, but must exclude liabilities used to fund assets other than those within the group of assets.

Management will need to exercise judgement in determining which liabilities to include or exclude from the group, based on the specific facts and circumstances. This assessment must reflect what market participants would consider when determining the non-financial asset's highest and best use. Entities will need to be careful to exclude entity-specific assumptions when valuing liabilities, particularly if valuation techniques are used that are based on their own data (valuation techniques are discussed further in Chapter 13).

In our view, the clarification on considering associated liabilities when measuring the fair value of non-financial assets was generally intended to align the guidance in IFRS 13 with current practice for measuring the fair value of certain non-financial assets (e.g., intangible assets). We generally would not expect this clarification to result in significant changes to the valuation of most non-financial assets. For example, we believe that real estate should generally be valued independently from any debt used to finance the property.

9.2.4 Unit of account vs the valuation premise

Fair value measurement of a non-financial asset assumes the asset is sold consistently with its unit of account (as specified in other IFRSs), irrespective of its valuation premise. This assumption applies even if the highest and best use of the asset is in combination with other assets and/or liabilities. This is because the fair value measurement contemplates the sale of the individual asset to market participants that already hold, or are able to obtain, the complementary assets and liabilities. Only when the unit of account of the item being measured at fair value is an asset group (which may be the case when measuring non-financial assets for impairment as part of a cash-generating unit), can one consider the sale of an asset group. That is, the valuation premise for a non-financial asset does not override the unit of account as defined by the applicable IFRS. However, this can be confusing in practice as both concepts deal with determining the appropriate level of aggregation or disaggregation for assets and liabilities.

Unit of account is an accounting concept. It identifies what is being measured for financial reporting purposes. When applying IFRS 13, this drives the level of aggregation (or disaggregation) for presentation and disclosure purposes, for example, whether the information presented and disclosed in the financial statements is for an individual asset or for a group of assets.

The valuation premise is a valuation concept (sometimes referred to as the unit of valuation). It determines how the asset or liability is measured, i.e., based on the value it derives on a standalone basis or the value it derives in conjunction with other assets and liabilities. As discussed above, the unit of account established by an IFRS may be an individual item. However, that item may need to be grouped with others for the purpose of measuring fair value, i.e., the valuation premise may differ from the unit of account.

For example, an entity may own an investment property that is attached to land and contains other assets, such as fixtures and fittings. The unit of account for the investment property would likely be the standalone asset in accordance with IAS 40. However, the value of this asset on a standalone basis may have little meaning since it is physically attached to the land and derives its benefit in combination with the fixtures and fittings in the building. Therefore, when determining fair value, the valuation premise would likely reflect its use in combination with other assets.

It is important to note that when the valuation premise for measuring the fair value of a non-financial asset (or group of assets and corresponding liabilities) differs from its unit of account, classification within IFRS 13's fair value hierarchy (for disclosure purposes) must be determined at a level consistent with the unit of account for the asset or liability.

10 Application to liabilities and an entity's own equity

IFRS 13 applies to liabilities, both financial and non-financial, and an entity's own equity when those instruments are required to be measured at fair value under IFRS. For example, in accordance with IFRS 3, in a business combination management may need to determine the fair value of liabilities assumed, when completing the purchase price allocation, and the fair value of its own equity instruments to measure the consideration given.

For financial liabilities and an entity's own equity that are within the scope of IAS 32 *Financial Instruments: Presentation*, IAS 39 or IFRS 9, it is important to note that IFRS 13 would apply to any initial and subsequent fair value measurements that are recognised in the Statement of Financial Position. In addition, if those instruments are not subsequently measured at fair value in the Statement of Financial Position, for example, financial liabilities may be subsequently measured at amortised cost, an entity may still need to disclose their fair value in the notes to the financial statements. At a minimum, this would be a requirement for financial liabilities. In these situations, IFRS 13 would also need to be applied to measure the instruments' fair value for disclosure.

The classification of an instrument as either a liability or an equity instrument in other IFRSs may depend on the specific facts and circumstances, such as the characteristics of the transaction and the characteristics of the instrument. Examples of these instruments include contingent consideration issued in a business combination in accordance with IFRS 3 or equity warrants issued by an entity in accordance with IAS 39 or IFRS 9. In developing the requirements in IFRS 13 for measuring the fair value of liabilities and an entity's own equity, the Boards concluded the requirements should generally be consistent between these instruments. That is, the accounting classification of an instrument, as either a liability or own equity, should not affect that instrument's fair value measurement.³⁹

Prior to the issuance of IFRS 13, IFRS did not provide guidance on how to measure the fair value of an entity's own equity instruments. While IFRS 13 may be consistent with how many entities value their own equity, it could change practice for entities that concluded the principal market for its own equity, (and therefore the assumption of market participants in that market), would be different when valuing the instrument as an asset. For example, this may be the case if an entity measuring the fair value of a warrant previously assumed a volatility that differs from the volatility assumptions market participants would use in pricing the warrant as an asset.

³⁹ IFRS 13.BC106

10.1 General Principles

Extract from IFRS 13

34. A fair value measurement assumes that a financial or non-financial liability or an entity's own equity instrument (eg equity interests issued as consideration in a business combination) is transferred to a market participant at the measurement date. The transfer of a liability or an entity's own equity instrument assumes the following:
- (a) A liability would remain outstanding and the market participant transferee would be required to fulfil the obligation. The liability would not be settled with the counterparty or otherwise extinguished on the measurement date.
 - (b) An entity's own equity instrument would remain outstanding and the market participant transferee would take on the rights and responsibilities associated with the instrument. The instrument would not be cancelled or otherwise extinguished on the measurement date.
35. Even when there is no observable market to provide pricing information about the transfer of a liability or an entity's own equity instrument (eg because contractual or other legal restrictions prevent the transfer of such items), there might be an observable market for such items if they are held by other parties as assets (eg a corporate bond or a call option on an entity's shares).
36. In all cases, an entity shall maximise the use of relevant observable inputs and minimise the use of unobservable inputs to meet the objective of a fair value measurement, which is to estimate the price at which an orderly transaction to transfer the liability or equity instrument would take place between market participants at the measurement date under current market conditions.
- IE30. A fair value measurement of a liability assumes that the liability, whether it is a financial liability or a non-financial liability, is transferred to a market participant at the measurement date (ie the liability would remain outstanding and the market participant transferee would be required to fulfil the obligation; it would not be settled with the counterparty or otherwise extinguished on the measurement date).
- IE31. The fair value of a liability reflects the effect of non-performance risk. Non-performance risk relating to a liability includes, but may not be limited to, the entity's own credit risk. An entity takes into account 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 that hold the entity's obligations as assets would take into account the effect of the entity's credit standing when estimating the prices they would be willing to pay.

10.1.1 Fair value of a liability

IFRS 13 states that the fair value measurement of a liability contemplates the transfer of the liability to a market participant at the measurement date. The liability is assumed to continue (ie it is not settled or extinguished), and the market participant to whom the liability is transferred would be required to fulfil the obligation.

The fair value of a liability also reflects the effect of non-performance risk, i.e., the risk that an obligation will not be fulfilled. This risk includes, but may not be limited to, the entity's own credit risk (see section 10.2 below). The requirement that non-performance risk remains unchanged before and after the transfer implies that the liability is hypothetically transferred to a market participant of equal credit standing.

The clarification in IFRS 13 that fair value is not based on the price to settle a liability with the existing counterparty, but rather to transfer it to a market participant of equal credit standing, affects the assumptions about the principal (or most advantageous) market and the market participants in the exit market for the liability (refer to section 10.1.3 below for further detail on the distinction between the settlement notion for liabilities and the transfer notion in IFRS 13).

10.1.2 Fair value of an entity's own equity

For an entity's own equity, IFRS 13 states that the fair value measurement would contemplate a transfer of the equity instrument. The equity instrument would remain outstanding and the market participant transferee would take on the rights and responsibilities associated with the instrument. The instrument would not be cancelled or otherwise extinguished on the measurement date.

The requirements for measuring the fair value of an entity's own equity are generally consistent with the requirements for measuring liabilities, except for the requirement to incorporate non-performance risk, which does not apply directly to an entity's own equity.

10.1.3 Settlement value vs transfer value

While IFRS 13 requires the use of an exit price to measure fair value, an entity might not intend (or be able) to transfer its liability to a third party. For example, it may be more beneficial for the entity to fulfil or settle a liability or the counterparty may not permit the liability to be transferred to another party. The issuer of an equity instrument may only be able to exit from that instrument if it ceases to exist or if the entity repurchases the instrument from the holder. Even if an entity is unable to transfer a liability, the IASB believes the transfer notion is necessary for measuring fair value, because "it captures market participants' expectations about the liquidity, uncertainty and other associated factors, whereas, a settlement notion may not because it may consider entity-specific factors".⁴⁰

Under a transfer notion, the fair value of a liability is based on the price that would be paid to market participants to assume the obligation. The guidance is clear that an entity's intention to settle or otherwise fulfil the liability or exit the equity instrument is not relevant when measuring its fair value. Because the fair value of the liability is considered from the perspective of market participants, and not the entity itself, any relative efficiencies (or inefficiencies) of the reporting entity in settling the liability would not be considered in the fair value measurement.

Unlike a transfer notion, a settlement notion may allow for the consideration of a reporting entity's specific advantages (or disadvantages) in settling (or performing) the obligation. However, the Boards concluded that "... when a liability is measured at fair value, the relative efficiency of an entity in settling the liability using its own

⁴⁰ IFRS 13.BC82

internal resources appears in profit or loss over the course of its settlement, and not before".⁴¹

While similar thought processes will be needed to estimate both the amount to settle a liability and the amount to transfer that liability, IFRS 13 requires the fair value of a liability be measured on the assumption that the liability is *transferred* to a market participant. Therefore, an entity cannot presume that the fair value of a liability is the same as its settlement value. In particular, the requirement to reflect the effect of non-performance risk in the fair value measurement of a liability could result in a difference between the fair value of a liability and the settlement value because it is unlikely that the counterparty would accept a different amount as settlement of the obligation if the entity's credit standing changed (i.e., the settlement value would not necessarily consider changes in credit risk). The IASB is expected to address this issue in its project on non-financial liabilities.

10.2 Measuring the fair value of a liability or an entity's own equity when quoted prices for the liability or equity instruments are not available

In many cases, there may be no quoted prices available for the transfer of an instrument that is identical or a similar to an entity's own equity or a liability, particularly as liabilities are generally not transferred. For example, this might be the case for debt obligations that are legally restricted from being transferred, or for decommissioning liabilities that the entity does not intend to transfer. In such situations, an entity must determine whether the identical item is held by another party as an asset:

- ▶ If the identical item is held by another party as an asset – an entity is required to measure the fair value of a liability or its own equity from the perspective of a market participant that holds the asset (see section 10.2.1 below).
- ▶ If the identical item is *not* held by another party as an asset – an entity measures the fair value of the liability or equity instrument using a valuation technique from the perspective of a market participant that owes the liability or has issued the claim on equity (see section 10.2.2 below).

Regardless of how an entity measures the fair value of a liability or its own equity, the entity is required to maximise the use of relevant observable inputs and minimise the use of unobservable inputs to meet the objective of a fair value measurement. That is, it must estimate the price at which an orderly transaction to transfer the liability or its own equity would take place between market participants at the measurement date under current market conditions.

⁴¹ IFRS 13.BC81

10.2.1 Liabilities or an entity's own equity that are held by other parties as assets**Extract from IFRS 13**

37. When a quoted price for the transfer of an identical or a similar liability or entity's own equity instrument is not available and the identical item is held by another party as an asset, an entity shall measure the fair value of the liability or equity instrument from the perspective of a market participant that holds the identical item as an asset at the measurement date.
38. In such cases, an entity shall measure the fair value of the liability or equity instrument as follows:
- (a) using the quoted price in an active market for the identical item held by another party as an asset, if that price is available.
 - (b) if that price is not available, using other observable inputs, such as the quoted price in a market that is not active for the identical item held by another party as an asset.
 - (c) if the observable prices in (a) and (b) are not available, using another valuation technique, such as:
 - (i) an income approach (eg a present value technique that takes into account the future cash flows that a market participant would expect to receive from holding the liability or equity instrument as an asset; see paragraphs B10 and B11).
 - (ii) a market approach (eg using quoted prices for similar liabilities or equity instruments held by other parties as assets; see paragraphs B5-B7).
39. An entity shall adjust the quoted price of a liability or an entity's own equity instrument held by another party as an asset only if there are factors specific to the asset that are not applicable to the fair value measurement of the liability or equity instrument. An entity shall ensure that the price of the asset does not reflect the effect of a restriction preventing the sale of that asset. Some factors that may indicate that the quoted price of the asset should be adjusted include the following:
- (a) The quoted price for the asset relates to a similar (but not identical) liability or equity instrument held by another party as an asset. For example, the liability or equity instrument may have a particular characteristic (eg the credit quality of the issuer) that is different from that reflected in the fair value of the similar liability or equity instrument held as an asset.
 - (b) The unit of account for the asset is not the same as for the liability or equity instrument. For example, for liabilities, in some cases the price for an asset reflects a combined price for a package comprising both the amounts due from the issuer and a third-party credit enhancement. If the unit of account for the liability is not for the combined package, the objective is to measure the fair value of the issuer's liability, not the fair value of the combined package. Thus, in such cases, the entity would adjust the observed price for the asset to exclude the effect of the third-party credit enhancement.

If there are no quoted prices available for the transfer of an identical or similar liability or the entity's own equity instrument, but the identical item is held by another party as an asset, the entity uses the fair value of the corresponding asset to measure the fair value of the liability or equity instrument. The fair value of the asset should be measured from the perspective of the market participant that holds that asset at the measurement date. This approach applies even when the identical item held as an asset is not traded (i.e., when the fair value of the corresponding asset is a Level 3 measurement). For example, under the guidance in IFRS 13, the fair value of a contingent consideration liability should equal its fair value when held as an asset despite the fact that the asset would likely be a Level 3 measurement.

As with all fair value measurements, inputs used to determine the fair value of a liability or an entity's own equity from the perspective of a market participant that holds the identical instrument as an asset must be prioritised in accordance with the fair value hierarchy. Accordingly, IFRS 13 indicates that the fair value of a liability or equity instrument held by another party as an asset should be determined based on the quoted price of the corresponding asset in an active market, if available. This is illustrated in Example 10-1 below. If such a price is not available, other observable inputs for the identical asset would be used, such as a quoted price in an inactive market. In the absence of quoted prices for the identical instrument held as an asset, other valuation techniques, including an income approach (as illustrated in Example 10-2 below) or a market approach, would be used to determine the fair value of the liability or equity. In these instances, the objective is still to determine the fair value of the liability or equity from the perspective of a market participant that holds the identical instrument as an asset.

In some cases, the corresponding asset price may need to be adjusted for factors specific to the identical item held as an asset but not applicable to the liability, such as the following:

- ▶ The quoted price for the asset relates to a similar (but not identical) liability or equity instrument held by another party as an asset. IFRS 13 gives the example of a liability or equity instrument where the credit quality of the issuer is different from that reflected in the fair value of the similar liability or equity instrument held as an asset.
- ▶ The unit of account for the asset is not the same as for the liability or equity instrument. For instance, assume the price for an asset reflects a combined price for a package that comprises both the amounts due from the issuer and a third-party credit enhancement. If the unit of account for the liability is only its own liability, not the combined package, the entity would adjust the observed price for the asset to exclude the effect of the third-party credit enhancement.

In addition, IFRS 13.39 states that when using the price of a corresponding asset to determine the fair value of a liability or entity's own equity, the fair value of the liability or equity should not incorporate the effect of any restriction preventing the sale of that asset. If the quoted price did reflect the effect of a restriction, it would need to be adjusted. That is, all else being equal, the liability's or equity's fair value would be the same as the fair value of an otherwise unrestricted corresponding asset.

The fair value of a liability may also differ from the price of its corresponding asset when the instrument is priced within a bid-ask spread. In these instances, the liability should be valued based on the price within the bid-ask spread that is most

representative of where liability would be exited, not the corresponding asset (see section 14.3 for discussion on pricing within the bid-ask spread).

The Boards believe the fair value of a liability or equity instrument will equal the fair value of a properly defined corresponding asset (i.e., an asset whose features mirror those of the liability), assuming an exit from both positions in the same market. This assumes markets are efficient and arbitrage-free. For example, if the prices differed for a liability and the corresponding asset, the market participant taking on the liability would be able to earn a profit by financing the purchase of the asset with the proceeds received by taking on the liability. In an efficient market, the price for the liability and the price for the asset would adjust until the arbitrage opportunity was eliminated. In the Boards' view, the price for the liability or equity instrument and the corresponding asset would generally only differ if the entity was measuring an asset relating to a similar (not identical) instrument or the unit of account was different. The Boards did consider whether the effects of illiquidity could create a difference, but noted that they are difficult to differentiate from credit-related effects.

The following two examples extracted from IFRS 13 include factors to consider when measuring the fair value of a liability or entity's own equity by estimating the fair value of the corresponding asset held by another party. The first example highlights how entities need to assess whether the quoted price for a corresponding asset includes the effects of factors not applicable to the liability. However, for simplicity purposes, the example does not consider bid-ask spread considerations.

Example 10-1: Debt obligation – quoted price⁴²

On 1 January 20X1, Entity B issues at par a CU 2,000,000 BBB-rated exchange-traded five-year fixed rate debt instrument with an annual 10% coupon. Entity B designated this financial liability as at fair value through profit or loss.

On 31 December 20X1, the instrument is trading as an asset in an active market at CU 929 per CU 1,000 of par value after payment of accrued interest. Entity B uses the quoted price of the asset in an active market as its initial input into the fair value measurement of its liability (CU 929 x [CU 2,000,000 / CU 1,000] = CU 1,858,000).

In determining whether the quoted price of the asset in an active market represents the fair value of the liability, Entity B evaluates whether the quoted price of the asset includes the effect of factors not applicable to the fair value measurement of a liability, for example, whether the quoted price of the asset includes the effect of a third-party credit enhancement if that credit enhancement would be separately accounted for from the perspective of the issuer. Entity B determines that no adjustments are required to the quoted price of the asset. Accordingly, Entity B concludes that the fair value of its debt instrument at 31 December 20X1 is CU 1,858,000. Entity B categorises and discloses the fair value measurement of its debt instrument within Level 1 of the fair value hierarchy.

⁴² IFRS 13.IE40-42

The second example provides factors that would be incorporated when using a present value technique to estimate the fair value of a financial liability (e.g., changes in credit spreads for the liability) as well as factors that would be excluded (e.g., adjustments related to transferability restrictions or profit margin).

Example 10-2: Debt obligation: present value technique⁴³

On 1 January 20X1, Entity C issues at par in a private placement a CU 2,000,000 BBB-rated five-year fixed rate debt instrument with an annual 10% coupon. Entity C designated this financial liability as at fair value through profit or loss.

At 31 December 20X1, Entity C still carries a BBB credit rating. Market conditions, including available interest rates, credit spreads for a BBB-quality credit rating and liquidity, remain unchanged from the date the debt instrument was issued. However, Entity C's credit spread has deteriorated by 50 basis points because of a change in its risk of non-performance. After taking into account all market conditions, Entity C concludes that if it was to issue the instrument at the measurement date, the instrument would bear a rate of interest of 10.5% or Entity C would receive less than par in proceeds from the issue of the instrument.

For the purpose of this example, the fair value of Entity C's liability is calculated using a present value technique. Entity C concludes that a market participant would use all the following inputs when estimating the price the market participant would expect to receive to assume Entity C's obligation:

- (a) The terms of the debt instrument, including all of the following:
 - (i) Coupon of 10%
 - (ii) Principal amount of CU 2,000,000
 - (iii) Term of four years.
- (b) The market rate of interest of 10.5% (which includes a change of 50 basis points in the risk of non-performance from the date of issue).

On the basis of its present value technique, Entity C concludes that the fair value of its liability at 31 December 20X1 is CU 1,968,641.

Entity C does not include any additional input into its present value technique for risk or profit that a market participant might require for compensation for assuming the liability. Because Entity C's obligation is a financial liability, Entity C concludes that the interest rate already captures the risk or profit that a market participant would require as compensation for assuming the liability. Furthermore, Entity C does not adjust its present value technique for the existence of a restriction preventing it from transferring the liability.

While the example above assumes that relevant market data on the non-performance risk of the debt obligation is readily available, estimating the appropriate credit spreads is often the most challenging aspect of using a present value technique to value a debt instrument. Credit spreads on identical or similar liabilities issued by the same obligor represent high-quality market data. But even

⁴³ IFRS 13.IE43-47

when issued by the same obligor, credit spreads on liabilities with significantly different features or characteristics may not appropriately capture the credit risk of the liability being measured. When spreads on identical instruments do not exist and data from comparable debt instruments (e.g., option adjusted spreads (OAS)) is used, the specific characteristics of these comparable liabilities (e.g., tenor, seniority, collateral, coupon, principal amortisation, and covenant strength, etc.) should be analysed carefully. In addition, credit default swap (CDS) spreads, which represent the compensation required by the CDS issuer to accept the default risk of a debt issuer (i.e., the reference obligor), may also provide useful market data.

In some instances, observable market data is not available for a specific debt issuer, but the issuer has a reported credit rating. In these circumstances, credit spreads or CDS spreads of similarly rated entities or debt instruments may be used as a proxy to evaluate the credit risk of the liability being measured. Once again, the specific characteristics of these similar debt instruments and the subject liability should be compared.

Other situations may involve a liability with no observable credit quality measures (e.g., credit spreads) issued by an entity that is not rated. In these circumstances, techniques such as regression or other quantitative analysis may be performed to determine the credit quality of the issuer. Comparing financial metrics such as profit margins, leverage ratios, and asset sizes between the non-rated issuer of the liability being measured to rated entities may allow a credit rating to be estimated. Once a credit rating has been determined, an appropriate credit spread could be quantified from other comparable (i.e., similarly rated) debt instruments.

10.2.2 Liabilities or an entity's own equity not held by other parties as assets

Extract from IFRS 13

40. When a quoted price for the transfer of an identical or a similar liability or entity's own equity instrument is not available and the identical item is not held by another party as an asset, an entity shall measure the fair value of the liability or equity instrument using a valuation technique from the perspective of a market participant that owes the liability or has issued the claim on equity.
41. For example, when applying a present value technique an entity might take into account either of the following:
- (a) the future cash outflows that a market participant would expect to incur in fulfilling the obligation, including the compensation that a market participant would require for taking on the obligation (see paragraphs B31-B33).
 - (b) the amount that a market participant would receive to enter into or issue an identical liability or equity instrument, using the assumptions that market participants would use when pricing the identical item (eg having the same credit characteristics) in the principal (or most advantageous) market for issuing a liability or an equity instrument with the same contractual terms.

Extract from IFRS 13 *continued*

B31. When using a present value technique to measure the fair value of a liability that is not held by another party as an asset (eg a decommissioning liability), an entity shall, among other things, estimate the future cash outflows that market participants would expect to incur in fulfilling the obligation. Those future cash outflows shall include market participants' expectations about the costs of fulfilling the obligation and the compensation that a market participant would require for taking on the obligation. Such compensation includes the return that a market participant would require for the following:

- (a) undertaking the activity (ie the value of fulfilling the obligation; eg by using resources that could be used for other activities); and
- (b) assuming the risk associated with the obligation (ie a risk premium that reflects the risk that the actual cash outflows might differ from the expected cash outflows; see paragraph B33).

B32. For example, a non-financial liability does not contain a contractual rate of return and there is no observable market yield for that liability. In some cases the components of the return that market participants would require will be indistinguishable from one another (eg when using the price a third party contractor would charge on a fixed fee basis). In other cases an entity needs to estimate those components separately (eg when using the price a third party contractor would charge on a cost plus basis because the contractor in that case would not bear the risk of future changes in costs).

B33. An entity can include a risk premium in the fair value measurement of a liability or an entity's own equity instrument that is not held by another party as an asset in one of the following ways:

- (a) by adjusting the cash flows (ie as an increase in the amount of cash outflows); or
- (b) by adjusting the rate used to discount the future cash flows to their present values (ie as a reduction in the discount rate).

An entity shall ensure that it does not double-count or omit adjustments for risk. For example, if the estimated cash flows are increased to take into account the compensation for assuming the risk associated with the obligation, the discount rate should not be adjusted to reflect that risk.

While many liabilities are held by market participants as corresponding assets, some are not. For example, there is typically no corresponding asset holder for a decommissioning liability. When no observable price is available for a liability and no corresponding asset exists, the fair value of the liability is measured from the perspective of a market participant that owes the liability, using an appropriate valuation technique (e.g., a present value technique).

Generally, an instrument classified as an entity's own equity would have a corresponding asset. However, if no corresponding asset exists and no observable price is available for an entity's own equity, fair value is measured from the perspective of a market participant that has issued the claim on equity, using an appropriate valuation technique.

IFRS 13 gives two examples of factors an entity may take into account in measuring fair value in such situations:

- (a) The future cash outflows that a market participant would expect to incur in fulfilling the obligation (i.e., a present value technique). This includes any compensation a market participant would require for taking on the obligation.
- (b) The amount that a market participant would receive to enter into an identical liability, or issue an identical equity instrument.

These two approaches are discussed further in sections 10.2.2.A and 10.2.2.B respectively.

10.2.2.A Use of present value techniques to measure fair value for liabilities and an entity's own equity instruments not held by other parties as assets

If an entity uses a present value technique to measure the fair value of a liability or its own equity not held by other parties as assets, IFRS 13 requires the entity to estimate the future cash outflows that a market participant would expect to incur in fulfilling the obligation, among other things. The estimated cash flows include:

- ▶ Market participants' expectations about the costs of fulfilling the obligation
- ▶ Compensation that a market participant would require for taking on the obligation. This compensation includes the return that a market participant would require for the following:
 - (i) Undertaking the activity (i.e., the value of fulfilling the obligation), e.g., by using resources that could be used for other activities
 - (ii) Assuming the risk associated with the obligation (i.e., a risk premium that reflects the risk that the actual cash outflows might differ from the expected cash outflows)

In some cases, the components of the return that a market participant would require will be indistinguishable from one another. In other cases, an entity will need to estimate those components separately. For example, assume an entity uses the price a third-party contractor would charge as part of the discounted cash flows. If the contract is priced on a fixed fee basis, both the return for undertaking the activity and the risk premium would be indistinguishable. However, as is shown in Example 10-3 below, if the contractor would charge on a cost plus basis, an entity would need to estimate the components separately, because, in that case, the contractor would not bear the risk of future changes in costs.

A risk premium can be included in such fair value measurements, either by:

- (a) Adjusting the cash flows (i.e., as an increase in the amount of cash outflows)
- (b) Adjusting the rate used to discount the future cash flows to their present values (i.e., as a reduction in the discount rate)

However, an entity must ensure adjustments for risk are not double-counted or omitted.

IFRS 13 provides the following example, which illustrates how these considerations would be captured when using a valuation technique to measure the fair value of a liability not held by another party as an asset.

Example 10-3: Decommissioning Liability⁴⁴

On 1 January 20X1 Entity A assumes a decommissioning liability in a business combination. The entity is legally required to dismantle and remove an offshore oil platform at the end of its useful life, which is estimated to be 10 years. Entity A uses the expected present value technique to measure the fair value of the decommissioning liability.

If Entity A were contractually allowed to transfer its decommissioning liability to a market participant, Entity A would conclude that a market participant would use all the following inputs, probability-weighted as appropriate, when estimating the price it would expect to receive:

- (a) labour costs
 - (b) allocation of overhead costs
 - (c) the compensation that a market participant would require for undertaking the activity and for assuming the risk associated with the obligation to dismantle and remove the asset. Such compensation includes both of the following:
 - (i) profit on labour and overhead costsAnd
 - (ii) the risk that the actual cash outflows might differ from those expected, excluding inflation;
 - (d) effect of inflation on estimated costs and profits
 - (e) time value of money, represented by the risk-free rate
- And
- (f) non-performance risk relating to the risk that Entity A will not fulfil the obligation, including Entity A's own credit risk.

The significant assumptions used by Entity A to measure fair value are as follows:

- (a) Labour costs are developed on the basis of current marketplace wages, adjusted for expectations of future wage increases and a requirement to hire contractors to dismantle and remove offshore oil platforms. Entity A assigns probability assessments to a range of cash flow estimates as follows:

Cash flow estimate	Probability assessment	Expected cash flows
CU 100,000	25%	CU 25,000
CU 125,000	50%	CU 62,500
CU 175,000	25%	CU 43,750
		<u>CU 131,250</u>

The probability assessments are developed on the basis of Entity A's experience with fulfilling obligations of this type and its knowledge of the market.

⁴⁴ IFRS 13.IE35-39

Example 10-3: Decommissioning Liability *continued*

- (b) Entity A estimates allocated overhead and equipment operating costs using the rate it applies to labour costs (80% of expected labour costs). This is consistent with the cost structure of market participants.
- (c) Entity A estimates the compensation that a market participant would require for undertaking the activity and for assuming the risk associated with the obligation to dismantle and remove the asset as follows:
- (i) A third-party contractor typically adds a mark-up on labour and allocated internal costs to provide a profit margin on the job. The profit margin used (20%) represents Entity A's understanding of the operating profit that contractors in the industry generally earn to dismantle and remove offshore oil platforms. Entity A concludes that this rate is consistent with the rate that a market participant would require as compensation for undertaking the activity.
 - (ii) A contractor would typically require compensation for the risk that the actual cash outflows might differ from those expected because of the uncertainty inherent in locking in today's price for a project that will not occur for 10 years. Entity A estimates the amount of that premium to be 5% of the expected cash flows, including the effect of inflation.
- (d) Entity A assumes a rate of inflation of 4% over the 10-year period on the basis of available market data.
- (e) The risk-free rate of interest for a 10-year maturity on 1 January 20X1 is 5%. Entity A adjusts that rate by 3.5% to reflect its risk of non-performance (i.e., the risk that it will not fulfil the obligation), including its credit risk. Therefore, the discount rate used to compute the present value of the cash flows is 8.5%.

Entity A concludes that its assumptions would be used by market participants. In addition, Entity A does not adjust its fair value measurement for the existence of a restriction preventing it from transferring the liability even if such a restriction exists. As illustrated in the following table, Entity A measures the fair value of its decommissioning liability as CU 194,879.

	<u>Expected cash flows</u>
Expected labour costs	CU 131,250
Allocated overhead and equipment costs (0.80 × CU 131,250)	CU 105,000
Contractor's profit mark-up [0.20 × (CU 131,250 + CU 105,000)]	CU 47,250
Expected cash flows before inflation adjustment	CU 283,500
Inflation factor (4% for 10 years)	1.4802
Expected cash flows adjusted for inflation	CU 419,637
Market risk premium (0.05 × CU 419,637)	CU 20,982
Expected cash flows adjusted for market risk	CU 440,619
Expected present value using discount rate of 8.5% for 10 years	<u>CU 194,879</u>

In practice, estimating the risk premium for the decommissioning liability in the example above requires significant judgement, particularly in circumstances where

the decommissioning activities will be performed many years in the future. Information about the compensation market participants would demand to assume decommissioning liability may be limited, because very few decommissioning liabilities are transferred in the manner contemplated by IFRS 13.

These data limitations may lead to entities looking at risk premiums observed from business combinations where decommissioning liabilities are assumed, including their own business combination transactions. IFRS 13 indicates that when market information is not reasonably available, an entity may consider its own data in developing assumptions related to the market risk premium (refer to Chapter 18 for additional discussion on the use of an entity's own data to determine unobservable inputs).

Alternatively, as noted above, the market risk premium might be estimated by considering the difference between a fixed-price arrangement and a cost-plus arrangement with a third party to complete the remediation and monitor the site. The difference between the fixed-price arrangement and the cost-plus arrangement may provide insight into the risk premium market participants would demand to fulfil the obligation.

While all available evidence about market participant assumptions regarding the market risk premium should be considered, circumstances may exist when an explicit assumption cannot be determined. In such cases, based on the specific guidance in IFRS 13 – which acknowledges, in some cases, it may not be possible to incorporate explicit assumptions into the measurement of a decommissioning liability – we believe the market risk premium may be incorporated into the fair value measurement on an implicit basis.

10.2.2.B Consideration of an entry price in measuring a liability or entity's own equity not held as an asset

Although fair value represents an exit price, IFRS 13 indicates that, in certain situations, an entry price may be considered in estimating the fair value of a liability or an entity's own equity instrument⁴⁵. This approach uses assumptions that market participants would use when pricing the identical item (e.g., having the same credit characteristics) in the principal (or most advantageous) market – i.e., the principal (or most advantageous) market for issuing a liability or equity instrument with the same contractual terms.

The standard allows for entry prices to be considered in estimating the fair value of a liability because the IASB believes that a liability's entry and exit prices will be identical in many instances. As a result, the price at which a market participant could enter into the identical liability on the measurement date (e.g., an obligation having the same credit characteristics) may be indicative of its fair value.

However, an entry price may differ from the exit price for a liability for a number of reasons. For example, an entity may transfer the liability in a different market from that in which the obligation was incurred. When entry and exit prices differ, we believe IFRS 13 is clear that the objective of the measurement remains an exit price.

⁴⁵ IFRS 13.B4, BC44

10.3 Non-performance risk

Extract from IFRS 13

42. The fair value of a liability reflects the effect of non-performance risk. Non-performance risk includes, but may not be limited to, an entity's own credit risk (as defined in IFRS 7 Financial Instruments: Disclosures). Non-performance risk is assumed to be the same before and after the transfer of the liability.
43. When measuring the fair value of a liability, an entity shall take into account the effect of its credit risk (credit standing) and any other factors that might influence the likelihood that the obligation will or will not be fulfilled. That effect may differ depending on the liability, for example:
- (a) whether the liability is an obligation to deliver cash (a financial liability) or an obligation to deliver goods or services (a non-financial liability).
 - (b) the terms of credit enhancements related to the liability, if any.
44. The fair value of a liability reflects the effect of non-performance risk on the basis of its unit of account. The issuer of a liability issued with an inseparable third-party credit enhancement that is accounted for separately from the liability shall not include the effect of the credit enhancement (eg a third-party guarantee of debt) in the fair value measurement of the liability. If the credit enhancement is accounted for separately from the liability, the issuer would take into account its own credit standing and not that of the third party guarantor when measuring the fair value of the liability.

IFRS 13 requires a fair value measurement of a liability to incorporate non-performance risk (i.e., the risk that an obligation will not be fulfilled). Conceptually, non-performance risk encompasses more than just an entity's credit risk, and may also include other risks such as settlement risk. In the case of non-financial instruments such as commodity contracts, non-performance risk could represent the risk associated with physically extracting and transferring an asset to the point of delivery.

When measuring the fair value of a liability, an entity must:

- Take into account the effect of its credit risk (credit standing) and any other factors that could influence the likelihood of whether or not the obligation will be fulfilled
- Assume that non-performance risk will be the same before and after the transfer of a liability
- Ensure the effect of non-performance risk on the fair value of the liability is consistent with its unit of account for financial reporting purposes

If a liability is issued with a third-party credit enhancement that the issuer accounts for separately from the liability, the fair value of the liability does not include the effect of the credit enhancement (e.g., a third-party guarantee of debt). That is, the issuer would take into account its own credit standing and not that of the third-party guarantor when measuring the fair value of the liability (see section 10.3.1 below).

An entity takes into account 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 market participants valuing the entity's obligations as assets would take into account the effect of the entity's credit standing when estimating the prices at which they would transact.

Incorporating non-performance risk into subsequent fair value measurements of a liability is also consistent with the notion that credit risk affects the initial measurement of a liability. Since the terms of a liability are determined based on an entity's credit standing at the time of issuance (and since IFRS 13 assumes the liability is transferred to another party with the same credit standing at the measurement date), subsequent changes in an entity's credit standing will result in the obligation's terms being favourable or unfavourable relative to current market requirements. The standard gives the following example illustrating how the fair value of the same instrument could be different depending on the credit risk of the issuer.

Example 10-4: Non-performance risk⁴⁶

Assume that Entity X and Entity Y each enter into a contractual obligation to pay cash (CU 500) to Entity Z in five years. Entity X has a AA credit rating and can borrow at 6%, and Entity Y has a BBB credit rating and can borrow at 12%.

Entity X will receive about CU 374 in exchange for its promise (the present value of CU 500 in five years at 6%). Entity Y will receive about CU 284 in exchange for its promise (the present value of CU 500 in five years at 12%). The fair value of the liability to each entity (i.e., the proceeds) incorporates that entity's credit standing.

The effect of non-performance risk on the fair value measurement of the liability will depend on factors, such as the terms of any related credit enhancement or the nature of the liability – i.e., whether the liability is an obligation to deliver cash (a financial liability) or an obligation to deliver goods or services (a non-financial liability). The following example, from the standard, illustrates changes in fair value measurement due to changes in non-performance risk. In this example, changes to an entity's non-performance risk do not require a change in the credit rating. Instead, such changes are often based on changes in credit spreads.

⁴⁶ IFRS 13.IE32

Example 10-5: Structured Note⁴⁷

On 1 January 20X7 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 an equity index. No credit enhancements are issued in conjunction with or otherwise related to the contract (i.e., no collateral is posted and there is no third-party guarantee). Entity A designated this note as at fair value through profit or loss. The fair value of the note (i.e., the obligation of Entity A) during 20X7 is measured using an expected present value technique. Changes in fair value are as follows:

- (a) *Fair value at 1 January 20X7* – The expected cash flows used in the expected present value technique are discounted at the risk-free rate using the government bond curve at 1 January 20X7, plus the current market observable AA corporate bond spread to government bonds, if non-performance risk is not already reflected in the cash flows, adjusted (either up or down) for Entity A's specific credit risk (i.e., resulting in a credit-adjusted risk-free rate). Therefore, the fair value of Entity A's obligation at initial recognition takes into account non-performance risk, including that entity's credit risk, which presumably is reflected in the proceeds.
- (b) *Fair value at 31 March 20X7* – During March 20X7 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 government bond curve at 31 March 20X7, plus the current market observable AA corporate bond spread to government bonds, if non-performance risk is not already reflected in the cash flows, adjusted for Entity A's specific credit risk (i.e., resulting in a credit-adjusted risk-free rate). Entity A's specific credit risk is unchanged from initial recognition. Therefore, the fair value of Entity A's obligation changes as a result of changes in credit spreads generally. Changes in credit spreads reflect current market participant assumptions about changes in non-performance risk generally, changes in liquidity risk and the compensation required for assuming those risks.
- (c) *Fair value at 30 June 20X7* – As at 30 June 20X7 there have been no changes to the AA corporate bond spreads. However, on the basis of structured note issues corroborated with other qualitative information, Entity A determines that its own specific creditworthiness 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 government bond yield curve at 30 June 20X7, plus the current market observable AA corporate bond spread to government bonds (unchanged from 31 March 20X7), if non-performance risk is not already reflected in the cash flows, adjusted for Entity A's specific credit risk (i.e., resulting in a credit-adjusted risk-free rate). Therefore, the fair value of the obligation of Entity A changes as a result of the change in its own specific credit risk within the AA corporate bond spread.

⁴⁷ IFRS 13.IE34

The assumption in the standard that the non-performance risk related to a liability is the same before and after its transfer is not intended to reflect reality. In most cases, the reporting entity and the market participant transferee will have different credit standings. However, this assumption is important when measuring fair value under IFRS 13 for the following reasons:⁴⁸

- ▶ If the transaction results in changes to the non-performance risk associated with the liability, the market participant taking on the obligation would not enter into the transaction without reflecting that change in the price.
- ▶ IFRS 13 gives the following examples; a creditor would not generally permit a debtor to transfer its obligation to another party of lower credit standing, nor would a transferee of higher credit standing be willing to assume the obligation using the same terms negotiated by the transferor if those terms reflect the transferor's lower credit standing.
- ▶ If IFRS 13 did not specify the credit standing of the entity taking on the obligation, there could be fundamentally different fair values for a liability depending on an entity's assumptions about the characteristics of the market participant transferee.
- ▶ Those who might hold the entity's liability as an asset would consider the effect of the entity's credit risk and other risk factors when pricing those assets (see section 10.2.1 above)

IFRS 13's requirements regarding non-performance risk, when measuring fair value for liabilities, are consistent with the existing fair value measurement guidance already in IFRSs. IAS 39 and IFRS 9 both referred to making adjustments for credit risk if market participants would reflect that risk when pricing a financial instrument. However, the IASB acknowledged that there was inconsistent application of that principle for two reasons: first, IAS 39 and IFRS 9 referred to credit risk generally and did not specifically refer to the reporting entity's own credit risk; second, there were different interpretations about how an entity's own credit risk should be reflected in the fair value of a liability using the settlement notion, under the previous definition of fair value, because it was unlikely that the counterparty would accept a different amount as settlement of the obligation if the entity's credit standing changed.⁴⁹ As such, the adoption of IFRS 13 may result in a change for some entities in this regard.

In developing IFRS 13, there was some debate among constituents about the usefulness of including non-performance risk after initial recognition because this may lead to counter-intuitive and potentially confusing reporting (i.e., gains for credit deterioration and losses for credit improvements). However, in the IASB's view, this does not affect how to measure fair value, but rather whether an IFRS should require fair value measurement subsequent to initial recognition, which is outside the scope of IFRS 13. The standard is clear that a measurement that does not consider the effect of an entity's non-performance risk is not a fair value measurement.⁵⁰

10.3.1 Liabilities issued with third-party credit enhancements

As discussed in section 10.3 above, IFRS 13 requires entities to measure the fair value of a liability issued with an inseparable third-party credit enhancement from

⁴⁸ IFRS 13.BC94

⁴⁹ IFRS 13.BC92-93

⁵⁰ IFRS 13.BC95

the issuer's perspective, i.e., considering the issuer's credit risk rather than that of the third-party providing the credit enhancement. This would apply in situations where a credit enhancement (or guarantee) is purchased by an issuer, then combined with a liability, and issued as a combined security to an investor. IFRS 13's requirements are based on the fact that the third-party credit enhancement does not relieve the issuer of its ultimate obligation under the liability. Generally, if the issuer fails to meet its payment obligations to the investor, the guarantor has an obligation to make the payments on the issuer's behalf and the issuer has an obligation to the guarantor. By issuing debt combined with a credit enhancement, the issuer is able to market its debt more easily and can either reduce the interest rate paid to the investor or receive higher proceeds when the debt is issued.

IFRS 13 requires the fair value measurement of a liability to follow the unit of account of the liability for financial reporting purposes. It anticipates that there may be instances where, even though it may be inseparable, the credit enhancement may need to be bifurcated (i.e., separately recognised) for financial reporting purposes. However, this assumes that: (i) the unit of account is clear in other standards, which may not be the case; and (ii) that standards (such as IAS 39 or IFRS 9) would permit or require bifurcation when a credit enhancement is inseparable.

As discussed in Figure 3 below, if the unit of account for the liability excludes the credit enhancement, the fair value of the liability measured from the issuer's perspective in accordance with IFRS 13, will not equal its fair value as a guaranteed liability held by another party as an asset. The fair value of the asset held by the investor takes into consideration the credit standing of the guarantor. However, under the guarantee, any payments made by the guarantor will result in a transfer of the issuer's debt obligation from the investor to the guarantor. That is, the amount owed by the issuer does not change; the issuer must now pay the guarantor instead of the investor. Therefore, as discussed in section 10.2.1, if the fair value of a third-party guaranteed liability is measured based on the fair value of the corresponding asset, it would need to be adjusted.⁵¹

⁵¹ IFRS 13.BC96-98

Figure 3: Liabilities with credit enhancements

	Issuer's perspective (i.e., the obligor)	Perspective of the entity that holds the corresponding asset
Credit enhancement provided by the issuer (e.g., collateral or master netting agreement)		
Separate unit of account?	Dependent on the relevant IFRS (e.g., IAS 39 or IFRS 9). Depending on the nature of the credit enhancement, it may be recognised (e.g., collateral recognised as an asset in the financial statements of the issuer) or unrecognised (e.g., a master netting agreement).	Dependent on the relevant IFRS (e.g., IAS 39 or IFRS 9) and the nature of the credit enhancement.
Considered in the fair value measurement?	Generally, yes. The fair value measurement of a liability takes into consideration the credit standing of the issuer. The effect may differ depending on the terms of the related credit enhancement.	Possibly. If the credit enhancement is not accounted for separately, the fair value of the corresponding asset would take into consideration the effect of the related credit enhancement.
Credit enhancement provided by a third-party (e.g., a financial guarantee)		
Separate unit of account?	Dependent on the relevant IFRS (e.g., IAS 39 or IFRS 9). Likely to be a separate unit of account.	Dependent on the relevant IFRS (e.g., IAS 39 or IFRS 9) and the nature of the credit enhancement.
Considered in the fair value measurement?	Generally, no. If the credit enhancement is accounted for separately from the liability, the issuer would take into account its own credit standing and not that of the third party guarantor when measuring the fair value of the liability.	Possibly. If the credit enhancement is not accounted for separately, the fair value of the corresponding asset would take into consideration the effect of the related third-party credit enhancement.

10.3.1.A Do IFRS 13's requirements regarding third-party credit enhancements in a fair value measurement apply to liabilities other than debt?

The requirements in IFRS 13 for liabilities issued with third-party credit enhancements apply to all liabilities that are measured or disclosed at fair value on a recurring basis. Although the requirements would not affect financial liabilities that are subsequently measured at amortised cost in accordance with IAS 39 or IFRS 9 after their initial recognition, they would apply to the disclosure of those liabilities' fair value as required by IFRS 7.

While an issuer's accounting for guaranteed debt may be the most common application of this guidance, the clarification with respect to the unit of account for certain types of credit enhancements could affect other liabilities, including

derivative instruments measured at fair value in accordance with IAS 39 or IFRS 9. Many OTC derivative contracts are subject to credit support requirements under an ISDA Master Agreement between the derivative counterparties. The application of this guidance to OTC derivatives will depend on the nature of the credit support provided. For example, while credit support is typically provided through the posting of collateral, in certain industries posting a letter of credit (LOC) for the benefit of a derivative counterparty is not uncommon.

In those instances where a LOC is posted for the benefit of a derivative counterparty, we believe the requirement in IFRS 13.44 (see the extract from IFRS 13 in section 10.3) would generally apply, i.e., considering the issuer's credit risk rather than that of the third-party providing the LOC. If an entity defaults on its derivative contracts, the bank issuing the LOC will pay the counterparty and the entity's obligation merely transfers from the original counterparty to the issuing bank. In other words, the entity will have a continuing obligation, even in the event it defaults on the derivative. As such, the entity's non-performance risk (not that of the bank providing the LOC) would be considered in determining the fair value of the derivative liability. We believe this generally would apply even if the LOC was deemed separable from the derivative contract. In our view, including the effect of separable credit enhancements while excluding the effect of inseparable credit enhancements would contradict the principles of IFRS 13.

10.3.2 Does IFRS 13 require an entity to consider the effects of both counterparty credit risk and its own credit risk when valuing its derivative transactions?

IFRS 13 addresses the issue of credit risk both explicitly and implicitly. As discussed in section 10.3, in relation to an entity's own credit risk in the valuation of liabilities, the guidance is explicit; the fair value of a liability should reflect the effect of non-performance risk, which includes own credit risk.

The standard's requirements are less explicit regarding counterparty credit risk. IFRS 13 requires the fair value of an asset or liability to be measured based on market participant assumptions. Because market participants consider counterparty credit risk in pricing a derivative contract, an entity's valuation methodology should incorporate counterparty risk in its measurement of fair value.

10.3.3 How should an entity incorporate its own credit risk into the valuation of its derivative contracts?

IFRS 13 requires the fair value measurement of a liability reflect non-performance risk, which would include an entity's own credit risk. As such, when valuing its derivative liability positions, an entity should incorporate the effect of its own credit standing. The valuation methodology used to measure common types of derivatives such as swaps and forwards that could have either positive (asset) or negative (liability) values over their lives, should also incorporate the effect of own credit risk.

In situations where an entity has a master netting agreement or credit support annex (CSA) with a counterparty, the entity may consider the credit risk of its derivative instruments with that counterparty on a net basis if it qualifies to use the measurement exception noted in section 2.5.2 (see Chapter 11 for more detail on applying the measurement exception for financial instruments with offsetting credit risks).

A variety of methods can be used to determine a credit valuation adjustment (CVA). To incorporate own credit risk into their derivative valuation methodologies, some entities' approaches attempt to mirror their approach for measuring counterparty credit risk. This is appropriate if the entity has an acceptable methodology to quantify counterparty credit risk. Generally, entities can determine expected credit losses using concepts such as maximum credit exposure and probabilities of default. While the degree of sophistication and complexity may differ by entity and by the size and nature of the derivative portfolio, any inputs used under any methodology should be consistent with assumptions market participants would use.

10.3.4 Does the existence of master netting agreements and/or CSAs eliminate the need to consider an entity's own credit risk when measuring the fair value of derivative liabilities?

IFRS 13 is clear that non-performance risk should be considered from the perspective of the liability being measured, not the entity obligated under the liability. As such, non-performance risk may differ for various liabilities of the same entity. This difference may result from the specific terms of the liability (e.g., seniority or priority in the event of liquidation) or from specific credit enhancements related to the liability (e.g., collateral).

Bilateral collateral arrangements, master netting agreements and other credit enhancement or risk mitigation tools will reduce the credit exposure associated with a liability (or asset) and should be considered in determining the fair value of the liability. Although these agreements reduce credit exposure, they typically do not eliminate the exposure completely. For example, most CSAs do not require collateral to be posted until a certain threshold has been reached, and once reached require collateral only for the exposure in excess of the threshold. Therefore, while the existence of master netting agreements or CSAs mitigates the effect of own credit risk on the fair value of a liability, their presence alone would not enable an entity to ignore its own credit risk. Entities should assess their credit exposure to a specific liability when determining how their own credit risk would affect its fair value.

10.4 Restrictions preventing the transfer of a liability or an entity's own equity

Extract from IFRS 13

45. When measuring the fair value of a liability or an entity's own equity instrument, an entity shall not include a separate input or an adjustment to other inputs relating to the existence of a restriction that prevents the transfer of the item. The effect of a restriction that prevents the transfer of a liability or an entity's own equity instrument is either implicitly or explicitly included in the other inputs to the fair value measurement.
46. For example, at the transaction date, both the creditor and the obligor accepted the transaction price for the liability with full knowledge that the obligation includes a restriction that prevents its transfer. As a result of the restriction being included in the transaction price, a separate input or an adjustment to an existing input is not required at the transaction date to reflect the effect of the restriction on transfer. Similarly, a separate input or an adjustment to an existing input is not required at subsequent measurement dates to reflect the effect of the restriction on transfer.

A liability or an entity's own equity may be subject to restrictions that prevent the transfer of the item. When measuring the fair value of a liability or equity instrument, IFRS 13 does not allow an entity to include a separate input (or an adjustment to other inputs) for such restrictions. This is because the effect of the restriction is either implicitly or explicitly included in other inputs to the fair value measurement. The standard gives the example of both a creditor and an obligor accepting a transaction price for a liability with full knowledge that the obligation includes a restriction that prevents its transfer. In this case, further adjustment would be inappropriate as the restriction is implicitly included in the price. In Example 10-3 above, the fair value of the decommissioning liability was not adjusted for the existence of a restriction because that restriction was contemplated in developing the inputs to the valuation techniques used to measure fair value.

IFRS 13.46 states that no separate adjustment for lack of transferability is necessary for either the initial or subsequent fair value measurement of a liability; this differs from the treatment of asset restrictions. IFRS 13 considers liability restrictions and asset restrictions differently because:

- Restrictions on the transfer of a liability relate to the performance of the obligation (i.e., the entity is legally obliged to satisfy the obligation and needs to do something to be relieved of the obligation), whereas restrictions on the transfer of an asset relate to the marketability of the asset.
- Unlike assets, virtually all liabilities include a restriction preventing their transfer. As a result, the effect of a restriction preventing the transfer of a liability would, in theory, be consistent for all liabilities.

The guidance also appears to assume that the effect of a restriction on the fair value of a liability remains constant over the life of the liability. Therefore, no additional adjustments are required in subsequent measurements if the effect of the restriction was already captured in the initial pricing of the liability. Unlike restrictions on assets, which typically expire and whose effect on fair value changes over time, restrictions on liabilities usually remain throughout the life of the obligation.

The Basis for Conclusions to IFRS 13 states that, if an entity is aware that a restriction on transfer is not already reflected in the price (or in the other inputs used in the measurement), it would adjust the price or inputs to reflect the existence of the restriction.⁵² However, in our view this would be rare because nearly all liabilities include a restriction and, when measuring fair value, market participants are assumed by IFRS 13 to be sufficiently knowledgeable about the liability to be transferred.

⁵² IFRS 13.BC99-100

10.5 Financial liability with a demand feature

Extract from IFRS 13

47. 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.

IFRS 13's requirement that the fair value of a financial liability with a demand feature should not be less than the amount payable on demand is consistent with the existing requirement in IAS 39. In many cases, the observed market price for these financial liabilities would be the demand amount, i.e., the price at which they are originated between the customer and the deposit-taker. Recognising such a financial liability at less than the demand amount may give rise to an immediate gain on the origination of the deposit, which the IASB believes is inappropriate.⁵³

⁵³ IFRS 13.BC102-103

11 Financial Assets and Liabilities with offsetting positions

Extract from IFRS 13

48. An entity that holds a group of financial assets and financial liabilities is exposed to market risks (as defined in IFRS 7) and to the credit risk (as defined in IFRS 7) of each of the counterparties. If the entity manages that group of financial assets and financial liabilities on the basis of its net exposure to either market risks or credit risk, the entity is permitted to apply an exception to this IFRS for measuring fair value. That exception permits an entity to measure the fair value of a group of financial assets and financial liabilities on the basis of the price that would be received to sell a net long position (ie an asset) for a particular risk exposure or paid to transfer a net short position (ie a liability) for a particular risk exposure in an orderly transaction between market participants at the measurement date under current market conditions. Accordingly, an entity shall measure the fair value of the group of financial assets and financial liabilities consistently with how market participants would price the net risk exposure at the measurement date.

IFRS 13 specifies that the concepts of 'highest and best use' and 'valuation premise' are not relevant when measuring the fair value of financial instruments. Therefore, the fair value of financial assets and financial liabilities is based on the unit of account prescribed by the IFRS that requires (or permits) the fair value measurement, which is generally the individual financial instrument. However, IFRS 13 provides a measurement exception that allows an entity to determine the fair value of a group of financial assets and liabilities with offsetting risks based on the sale or transfer of its *net* exposure to a particular risk (or risks), if certain criteria are met. This measurement approach is an exception to the principles of fair value because it represents an entity-specific measure (i.e., an entity's net risk exposure is a function of the other financial instruments specifically held by that entity and its unique risk preferences).

It may be possible for entities to offset multiple risks (e.g., both market and credit risks) within the same portfolio. In addition, since the focus is on offsetting risks, entities may offset credit and market risks stemming from a group of financial instruments at different levels of aggregation. For example, under IFRS 13, management could continue its existing practice of offsetting credit risk at the counterparty level (e.g., based on its portfolio of interest rate swaps with a particular counterparty) while offsetting market risks on a more aggregated portfolio basis (e.g., based on its portfolio of interest rate swaps with all counterparties), provided all of the criteria in section 11.1 below are met.

This guidance is largely consistent with current practice under IFRS when determining valuation adjustments for derivative instruments related to bid-ask spreads and credit risk. However, on adoption of IFRS 13, entities will need to ensure they have met all of the required criteria.

11.1 Criteria for using the portfolio approach for offsetting positions

Extract from IFRS 13

49. An entity is permitted to use the exception in paragraph 48 only if the entity does all the following:
- (a) manages the group of financial assets and financial liabilities on the basis of the entity's net exposure to a particular market risk (or risks) or to the credit risk of a particular counterparty in accordance with the entity's documented risk management or investment strategy;
 - (b) provides information on that basis about the group of financial assets and financial liabilities to the entity's key management personnel, as defined in IAS 24 *Related Party Disclosures*; and
 - (c) is required or has elected to measure those financial assets and financial liabilities at fair value in the statement of financial position at the end of each reporting period.
50. The exception in paragraph 48 does not pertain to financial statement presentation. In some cases the basis for the presentation of financial instruments in the statement of financial position differs from the basis for the measurement of financial instruments, for example, if an IFRS does not require or permit financial instruments to be presented on a net basis. In such cases an entity may need to allocate the portfolio-level adjustments (see paragraphs 53-56) to the individual assets or liabilities that make up the group of financial assets and financial liabilities managed on the basis of the entity's net risk exposure. An entity shall perform such allocations on a reasonable and consistent basis using a methodology appropriate in the circumstances.
51. An entity shall make an accounting policy decision in accordance with IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors* to use the exception in paragraph 48. An entity that uses the exception shall apply that accounting policy, including its policy for allocating bid-ask adjustments (see paragraphs 53-55) and credit adjustments (see paragraph 56), if applicable, consistently from period to period for a particular portfolio.
52. The exception in paragraph 48 applies only to financial assets and financial liabilities within the scope of IAS 39 *Financial Instruments: Recognition and Measurement* or IFRS 9 *Financial Instruments*.

Entities that hold a group of financial assets and liabilities are generally exposed to market risks (e.g., interest rate risk, currency risk or other price risk) and to the credit risk of each of its counterparties. IFRS 13 allows entities to make an accounting policy choice (see section 11.1.1 below) to measure the fair value of a group of financial assets and liabilities based on the price that would be received to sell a net long position or transfer a net short position for a particular risk exposure (i.e., a portfolio approach).

In order to use the portfolio approach, an entity is required to meet *all* of the following criteria, both initially and on an ongoing basis:

- ▶ The entity manages the group of financial assets and financial liabilities on the basis of its net exposure to a particular market risk(s) or credit risk, in accordance with its documented risk management or investment strategy.
- ▶ The entity provides information based on the group of financial assets and financial liabilities to its key management personnel.
- ▶ The entity measures (either by requirement or by choice) the financial assets and financial liabilities at fair value in the balance sheet at each reporting date.

The measurement exception for offsetting positions only applies to financial assets and financial liabilities within the scope of IAS 39 or IFRS 9. Also, as indicated by these criteria, the portfolio approach applies only to financial instruments with offsetting risks. As such, a group of financial instruments comprised of only financial assets (e.g., a portfolio of loans) would not qualify for the exception and would need to be valued in a manner consistent with its unit of account.

However, an entity need not maintain a static portfolio to use the measurement exception, i.e., the entity could have assets and liabilities within the portfolio that are traded.

While the measurement exception only applies to financial assets and financial liabilities within the scope of IAS 39 or IFRS 9, we do not believe it was the Boards' intention to exclude contracts to buy or sell a non-financial item (e.g., physically settled commodity derivative contracts) that are within the scope of IAS 39 and IFRS 9 (and that are measured at fair value) from the scope of the measurement exception. If a contract to buy or sell a non-financial item is within the scope of IAS 39 or IFRS 9, those standards treat that contract as if it were a financial instrument. Therefore, provided the above criteria in IFRS 13 are met, the measurement exception could be applied to such contracts.

At the time of writing, the IASB had tentatively agreed, at their September 2012 meeting, to amend IFRS 13 to clarify that all financial instruments within the scope of IAS 39 or IFRS 9 were eligible for the measurement exception, which could include physically settled commodity derivative contracts.⁵⁴

11.1.1 Accounting policy considerations

As noted above, the use of the portfolio approach is an accounting policy decision, which must be made in accordance with IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors* that must include an entity's policy regarding measurement assumptions – i.e., for both allocating bid-ask adjustments and credit adjustments (see section 11.2 below).

An entity can choose to use the portfolio approach on a portfolio-by-portfolio basis. In addition, if entities choose this policy for a particular portfolio, they are not required to apply the portfolio approach to all of the risks of the financial assets and liabilities that make up the particular group. For example, an entity could choose to measure only the credit risk associated with a group of financial instruments on a net basis, but not the group's exposure to market risk.

An entity may also decide to apply the portfolio approach to only certain market risks related to the group. For example, an entity that is exposed to both interest

⁵⁴ *IASB Update – September 2012 and Agenda paper 11, Annual Improvements – 2011-2013 Cycle, IFRS 13 Fair Value Measurement: scope of paragraph 52 (portfolio exception), IASB Meeting, September 2012*

rate and foreign currency risk in a portfolio of financial assets and liabilities could choose to measure only its interest rate risk exposure on a net basis.

The accounting policy decision can be changed if an entity's risk exposure preferences change, for example, a change in strategy to have less offsetting positions. In that case, the entity can decide not to use the exception, but instead, to measure the fair value of its financial instruments on an individual instrument basis. We generally expect that an entity's use of the portfolio approach would be consistent from period to period as changes in risk management policies are typically not common.⁵⁵

11.1.2 Presentation considerations

IFRS 13 is clear that applying the portfolio approach for measurement purposes does not affect financial statement presentation. For example, an entity may manage a group of financial assets and liabilities based on the net exposure(s) for internal risk management or investment strategy purposes but be unable to present those instruments on a net basis in the statement of financial position because it does not have a positive intention and ability to settle those instruments on a net basis, as is required by IAS 32.

If the requirements for presentation of financial instruments in the statement of financial position differ from the basis for the measurement, an entity may need to allocate the portfolio-level adjustments (see section 11.2 below) to the individual assets or liabilities that make up the portfolio. Entities may also need to allocate portfolio-level adjustments for disclosure purposes when items in the group would be categorised within different levels of the fair value hierarchy (see Chapter 15 for additional discussion on the allocation of portfolio-level adjustments related to the fair value hierarchy disclosures).

IFRS 13 does not prescribe any methodology for allocating portfolio-level adjustments; instead, it states that the allocation should be performed in a reasonable and consistent manner that is appropriate in the circumstances.

11.1.3 Is there a minimum level of offset required to use the portfolio approach?

While there are explicit criteria that an entity must meet in order to use the portfolio approach, IFRS 13 does not specify any minimum level of offset within the group of financial instruments. For example, if an entity has positions with offsetting credit risk to a particular counterparty, we believe use of the portfolio approach is appropriate even if the extent of offset is minimal (provided that the entity has in place a legally enforceable agreement, as discussed in section 11.2.2 below, that provides for offsetting upon default and all the other required criteria are met). To illustrate, even if the gross credit exposure was CU 100,000 (long) and CU 5,000 (short), upon counterparty default the entity would be exposed to a credit loss of only CU 95,000 under the terms of its master netting agreement.

With respect to market risk, considering the degree of offset may require additional judgement. Entities should assess the appropriateness of using the portfolio approach based on the nature of the portfolio being managed (e.g., derivative vs cash instruments) and its documented risk management policies (or investment strategies). An entity should use the portfolio approach in a manner consistent with the IASB's basis for providing the measurement exception, and not in a manner to circumvent other principles within the standard.

⁵⁵ IFRS 13.BC121

11.1.4 Can Level 1 instruments be included in a portfolio of financial instruments with offsetting risks when calculating the net exposure to a particular market risk?

It is our understanding that Level 1 instruments can be included when using the exception to value financial instruments with offsetting risks. As noted in the example provided in IFRS 13.54, an entity is allowed to consider the effect of holding futures contracts when evaluating its net exposure to a particular market risk, such as interest rate risk. We understand that some constituents believe that the requirement in IFRS 13 to measure instruments that trade in active markets based on PxQ does not apply to the measurement of the net exposure when the portfolio exception is used, since the net exposure does not trade in an active market. As such, these constituents argue that the measurement of the net exposure and the allocation of this value back to the instruments that comprise the group are not constrained by the price at which the individual instruments trade in active markets. Others believe that although Level 1 instruments, such as futures contracts, may be considered when calculating an entity's net exposure to a particular market risk, the quoted price (unadjusted) for these Level 1 instruments should be used when allocating the fair value to the individual units of account for presentation and disclosure purposes, to comply with IFRS 13's requirement to measure Level 1 instruments at PxQ. However, depending on the extent of Level 1 instruments in the group, it may not always be possible to allocate the fair value determined for the net exposure back to the individual instruments in a manner that results in the each of these instruments being recorded at PxQ. For this reason, there are constituents who believe that the use of the portfolio exception should never result in the measurement of Level 1 instruments at an amount other than PxQ. That is, the determination of the fair value of the net exposure is constrained by the requirement that all Level 1 instruments within the group are recorded at a value based on PxQ.

As discussed in section 4.2 above, we understand the IASB did not intend for the portfolio exception to change existing practice under IFRS or override the requirement in IFRS 13 to measure Level 1 instruments at PxQ or the prohibition on block discounts.

11.2 Measuring fair value for offsetting positions

If the portfolio approach is used to measure an entity's net exposure to a particular market risk, the net risk exposure becomes the unit of measurement. That is, the entity's net exposure to a particular market risk (e.g., the net long or short euro interest rate exposure within a specified maturity bucket) represents the asset or liability being measured.

In applying the portfolio approach, an entity must assume an orderly transaction between market participants to sell or transfer the net risk exposure at the measurement date under current market conditions. The fair value of the portfolio is measured on the basis of the price that would be received to sell a net long position (i.e., an asset) for a particular risk exposure or transfer a net short position (i.e., a liability) for a particular risk exposure. That is, the objective of the valuation is to determine the price that market participants would pay (or receive) in a single transaction for the entire net risk exposure, as defined. Some argue that, as a result, an adjustment based on the size of the net exposure could be considered in the valuation if market participants would incorporate such an adjustment when

transacting for the net exposure. Since the unit of measurement is the net exposure, size is considered a characteristic of the asset (net long position) or liability (net short position) being measured, not a characteristic of the entity's specific holdings. Many have interpreted the equivalent requirements in US GAAP in this way. Others believe that the portfolio exception does not override the unit of account guidance provided in IAS 39 or IFRS 9 and, therefore, any premiums or discounts that are inconsistent with that unit of account, i.e., the individual financial instruments within the portfolio, must be excluded. This would include any premiums or discounts related to the size of the portfolio. As discussed in section 4.2 above, we understand the IASB did not intend for the portfolio exception to override the requirement in IFRS 13 to measure Level 1 instruments at PxQ or the prohibition on block discounts.

When measuring fair value using the portfolio approach, IFRS 13 also requires that the market risks be substantially the same (see section 11.2.1 below) and that the fair value measurement must take into consideration any exposure to the credit risk of a particular counterparty (see section 11.2.2 below).

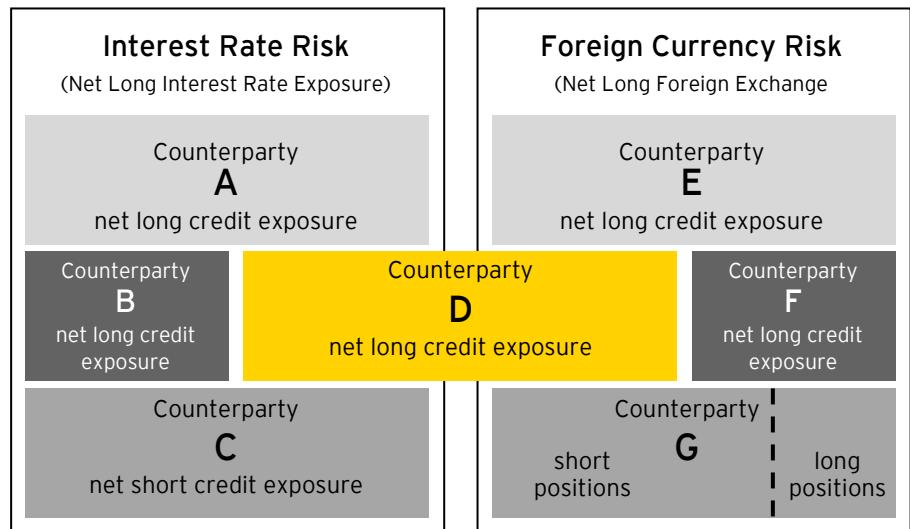
It is also important to note that, when applying the portfolio approach, entities may offset credit and market risks at different levels of aggregation. This approach is consistent with risk management practices employed by many entities. Such an approach may be required because it is unlikely that all of the financial assets and liabilities giving rise to the net exposure for a particular market risk will be with the same counterparty. The example below illustrates this concept.

Example 11-1: Calculating net exposure

Entity XYZ holds a portfolio of long and short derivative positions (USD interest rate swaps and USD/JPY foreign currency forwards) with various counterparties, as follows:

- Counterparties A, B and C: only interest rate swaps
- Counterparty D: interest rate swaps and foreign currency forwards
- Counterparties E, F and G: only foreign currency forwards

Entity XYZ has executed master netting agreements in respect of credit risk with each of its counterparties except counterparty G. In addition, the agreement in place with counterparty D can be applied across products.



Using the measurement exception, Entity XYZ may consider its credit risk exposure to each counterparty except counterparty G on a net basis (i.e., net long credit exposure to Counterparty A, net short credit exposure to Counterparty C, etc.).

At the same time, the entity may consider its net long exposure to USD interest rate risk from its portfolio of derivatives with counterparties A, B, C and D. The entity may also consider its net long exposure to foreign currency risk (Japanese yen risk) from its portfolio of derivatives with counterparties D, E, F and G.

11.2.1 Exposure to market risks

Extract from IFRS 13

53. When using the exception in paragraph 48 to measure the fair value of a group of financial assets and financial liabilities managed on the basis of the entity's net exposure to a particular market risk (or risks), the entity shall apply the price within the bid-ask spread that is most representative of fair value in the circumstances to the entity's net exposure to those market risks (see paragraphs 70 and 71).
54. When using the exception in paragraph 48, an entity shall ensure that the market risk (or risks) to which the entity is exposed within that group of financial assets and financial liabilities is substantially the same. For example, an entity would not combine the interest rate risk associated with a financial asset with the commodity price risk associated with a financial liability because doing so would not mitigate the entity's exposure to interest rate risk or commodity price risk. When using the exception in paragraph 48, any basis risk resulting from the market risk parameters not being identical shall be taken into account in the fair value measurement of the financial assets and financial liabilities within the group.
55. Similarly, the duration of the entity's exposure to a particular market risk (or risks) arising from the financial assets and financial liabilities shall be substantially the same. For example, an entity that uses a 12-month futures contract against the cash flows associated with 12 months' worth of interest rate risk exposure on a five-year financial instrument within a group made up of only those financial assets and financial liabilities measures the fair value of the exposure to 12-month interest rate risk on a net basis and the remaining interest rate risk exposure (ie years 2-5) on a gross basis.

11.2.2 Exposure to the credit risk of a particular counterparty

Extract from IFRS 13

56. When using the exception in paragraph 48 to measure the fair value of a group of financial assets and financial liabilities entered into with a particular counterparty, the entity shall include the effect of the entity's net exposure to the credit risk of that counterparty or the counterparty's net exposure to the credit risk of the entity in the fair value measurement when market participants would take into account any existing arrangements that mitigate credit risk exposure in the event of default (eg a master netting agreement with the counterparty or an agreement that requires the exchange of collateral on the basis of each party's net exposure to the credit risk of the other party). The fair value measurement shall reflect market participants' expectations about the likelihood that such an arrangement would be legally enforceable in the event of default.

In some cases, an entity may enter into an arrangement to mitigate the credit risk exposure in the event of default, for example, a master netting agreement with the counterparty or the exchange of collateral on the basis of each party's net exposure to the credit risk of the other party.

An entity is not required to prove that such agreements will be 'legally enforceable' in all jurisdictions to use the measurement exception. Instead, an entity should consider market participant expectations about the likelihood that such arrangements would be legally enforceable in the event of default when valuing the net credit exposure.

12 Fair value at initial recognition

Extract from IFRS 13

57. When an asset is acquired or a liability is assumed in an exchange transaction for that asset or liability, the transaction price is 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 is the price that would be received to sell the asset or paid to transfer the liability (an exit price). 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.
58. In many cases the transaction price will equal the fair value (eg that might be the case when on the transaction date the transaction to buy an asset takes place in the market in which the asset would be sold).
59. When determining whether fair value at initial recognition equals the transaction price, an entity shall take into account factors specific to the transaction and to the asset or liability. Paragraph B4 describes situations in which the transaction price might not represent the fair value of an asset or a liability at initial recognition.
60. If another IFRS requires or permits an entity to measure an asset or a liability initially at fair value and the transaction price differs from fair value, the entity shall recognise the resulting gain or loss in profit or loss unless that IFRS specifies otherwise.
- B4. When determining whether fair value at initial recognition equals the transaction price, an entity shall take into account factors specific to the transaction and to the asset or liability. For example, the transaction price might not represent the fair value of an asset or a liability at initial recognition if any of the following conditions exist:
- (a) The transaction is between related parties, although the price in a related party transaction may be used as an input into a fair value measurement if the entity has evidence that the transaction was entered into at market terms.
 - (b) The transaction takes place 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 (eg in a business combination), the transaction includes unstated rights and privileges that are measured separately in accordance with another IFRS, or the transaction price includes transaction costs.
 - (d) The market in which the transaction takes place is different from the principal market (or most advantageous market). For example, those markets might be different if the entity is a dealer that enters into transactions with customers in the retail market, but the principal (or most advantageous) market for the exit transaction is with other dealers in the dealer market.

12.1 Exit price vs entry price

IFRS 13 defines fair value as the price that would be received to sell the asset or paid to transfer the liability; this is an exit price notion. When an entity acquires an asset, or assumes a liability, the price paid (or the transaction price) is an entry 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. This distinction is significant and can have important implications on the initial recognition of assets and liabilities at fair value. However, IFRS 13 acknowledges that, in many cases, an entry price may equal an exit price (e.g., when the transaction takes place in the entity's principal market); since one party is selling an asset, that transaction is also an exit transaction.

12.1.1 Assessing whether the transaction price equals fair value at initial recognition

Prior to the issuance of IFRS 13, it was common for entities to use the transaction price as fair value of an asset or liability on its initial recognition. IFRS 13 does acknowledge that in many situations, an entry price may equal an exit price, it does not presume that these prices are equal. Therefore, an entity must determine whether the transaction price represents the fair value of an asset or liability at initial recognition.

IFRS 13.B4 provides certain factors that an entity should consider in making this determination. For example, a transaction price may not represent fair value if 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. This may be the case with a complex financial instrument where the transaction price includes a fee for structuring the transaction or when an entity acquires a block and the transaction price includes a block discount. Another factor to consider is whether the market in which an entity acquired the asset (or assumed the liability) is different from the principal (or most advantageous) market in which the entity will sell the asset (or transfer the liability). For example, a securities dealer may acquire an asset in the retail market, but sell it in the inter-dealer market. However, the fair value measurement should consider the fact that, while the inter-dealer price (i.e., the exit price in a hypothetical transaction) may differ from the retail price (i.e., transaction price), another dealer would also expect to earn a profit on the transaction. Accordingly, a pricing model's value should incorporate assumptions regarding the appropriate profit margin that market participants (i.e., other dealers) would demand when estimating the instrument's fair value at inception.

In addition, the measurement of fair value in accordance with IFRS 13 should take into consideration market participant assumptions about risk. Adjustments for uncertainty associated with a valuation technique or certain inputs used to measure fair value are required if market participants would incorporate such risk adjustments when pricing the asset or liability. A measurement (e.g., a "mark-to-model" measurement) that ignores these market participant adjustments for risk is not representative of fair value.

While helpful in identifying the factors entities should consider in assessing whether a transaction price would equal fair value, the examples provided in the standard are not intended to be exhaustive.

12.2 Day one gains and losses

IFRS 13's measurement framework applies to initial fair value measurements, if permitted or required by another IFRS. At initial recognition, if the measurement of fair value in accordance with IFRS 13 and the transaction price differ, the entity recognises the resulting gain or loss in profit or loss unless the related IFRS (i.e., the IFRS that permits or requires the initial measurement at fair value) specifies otherwise.

As noted in Example 12-1 below, IAS 39 and IFRS 9 have specific requirements with regard to the recognition of inception (or 'day one') gains and losses for financial instruments within the scope of those standards. In developing IFRS 13, the IASB did not change the recognition threshold in those standards in relation to day one gains or losses. However, IAS 39 and IFRS 9 were both amended to clarify that an entity: (i) measures the fair value of financial instruments at initial recognition in accordance with IFRS 13; and then (ii) considers the requirements of IAS 39 or IFRS 9 in determining whether (and when) the resulting difference (if any) between fair value at initial recognition and the transaction price is recognised.⁵⁶

12.2.1 Day one losses for over-the-counter derivative transactions

The definition of fair value as an exit price affects the accounting by retail customers as much as financial institutions (i.e., dealers). For example, retail customers whose entry and exit market for a financial asset (or financial liability) measured at fair value is with a wholesaler (e.g., a dealer) could experience a day one loss, because the price at which a wholesaler would sell a financial asset to a retail customer would generally exceed the price a wholesaler would pay to acquire that financial asset from a retail customer (this difference in price is commonly referred to as the bid-ask spread in many financial markets).

The following example from IFRS 13 discusses how an interest rate swap at initial recognition may be measured differently by a retail counterparty (i.e., an end-user) and a dealer.

⁵⁶ IFRS 13.BC138

Example 12-1 Interest rate swap at initial recognition⁵⁷

Entity A (a retail counterparty) enters into an interest rate swap in a retail market with Entity B (a dealer) for no initial consideration (i.e., the transaction price is zero). Entity A can access only the retail market. Entity B can access both the retail market (i.e., with retail counterparties) and the dealer market (i.e., with dealer counterparties).

From the perspective of Entity A, the retail market in which it initially entered into the swap 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 dealer counterparty in that retail market. In that case, the transaction price (zero) would represent the fair value of the swap to Entity A at initial recognition, i.e., the price that Entity A would receive to sell or pay to transfer the swap in a transaction with a dealer counterparty in the retail market (i.e., an exit price). That price would not be adjusted for any incremental (transaction) costs that would be charged by that dealer counterparty.

From the perspective of Entity B, the dealer market (not the retail market) 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 dealer in that market. Because the market in which Entity B initially entered into the swap 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. If the fair value differs from the transaction price (zero), Entity B applies IAS 39 or IFRS 9 to determine whether it recognises that difference as a gain or loss at initial recognition.

This example seems to indicate that a retail counterparty may not have any gain or loss at initial recognition because the retail counterparty would likely be presumed to transact both at inception and on disposal (i.e., a hypothetical exit) in the same principal market (i.e., the retail market with securities dealers). However, this example does not address the bid-ask spread.

The bid-ask spread is the difference between the price a prospective dealer is willing to pay for an instrument (the bid price) and the price at which the dealer would sell that same instrument (the ask price), allowing the dealer to earn a profit for its role as a market-maker in the over-the-counter marketplace. The bid-ask spread may differ by dealer, as well as by the market and type of instrument that is being transacted.

IFRS 13 requires that instruments that trade in markets with bid-ask spreads (e.g., a dealer market) be measured at the price within the bid-ask spread that is most representative of fair value in the circumstances (pricing within the bid-ask spread is discussed further in section 14.3 below). Therefore, an inception loss could be experienced by the retail counterparty due to a difference in the price within the bid-ask spread that the retail counterparty could hypothetically exit the instrument and the price within the bid-ask spread that the retail counterparty actually transacted.

⁵⁷ IFRS 13.IE24-26

The IASB has acknowledged that the fair value of an interest rate swap may differ from its transaction price because of the bid-ask spread, even when the entry and exit markets for the swap are identical.⁵⁸ In addition to the bid-ask spread, retail counterparties may recognise additional losses or expenses at the inception of derivative contracts. For example, if the transaction price for a complex derivative includes a structuring fee, the retail counterparty would likely recognise a loss when measuring the fair value of the derivative. Because the transaction price includes the price for the derivative instrument, as well as the fee paid by the retail counterparty to the dealer for structuring the transaction, the unit of account represented by the transaction price differs from the unit of account for the instrument being measured, as discussed in IFRS 13.B4(c).

12.2.2 Day one gains and losses when entry and exit markets for the transaction are deemed to be the same

IFRS 13 contains no explicit prohibitions on the recognition of day one gains or losses, even in situations where the entry and exit markets are the same. For example, it may be acceptable in certain situations for a dealer to recognise a day one gain or loss on a transaction where the entry and exit markets are deemed to be the same (e.g., inter-dealer market). A difference in the price within the bid-ask spread at which a dealer could exit a transaction versus where it entered the transaction could be one reason to record an inception gain or loss. IFRS 13 clarifies that the exit price within the bid-ask spread that is most representative of fair value in the circumstances should be used to measure fair value, regardless of where in the fair value hierarchy the input falls (pricing within the bid-ask spread is discussed further in section 14.3 below).

Notwithstanding the guidance in IFRS 13, IAS 39 and IFRS 9 provide specific requirements in relation to the recognition of any day one gains or losses, for example, where fair value is not measured using a quoted price in an active market (without adjustment) recognition of day one gains or losses is generally prohibited.⁵⁹

12.3 Related party transactions

As discussed in Chapter 6, the definition of market participants is clear that buyers and sellers for the item being measured are not related parties (as defined in IAS 24). That is, the hypothetical transaction used to determine fair value in IFRS 13 is assumed to take place between market participants that are independent from one another. However, IFRS 13 indicates that the price in a related party transaction may be used as an input into a fair value measurement if there is evidence the transaction was entered into at market terms. The Boards believe such an approach is consistent with the requirements of IAS 24. As with disclosures made in accordance with IAS 24, evidence to support that a related party transaction was executed at market terms may be difficult to substantiate absent corroborating market data from transactions between independent parties.

⁵⁸ IFRS 13.BC165

⁵⁹ Refer to Chapter 49 of our publication *International GAAP*® 2012, Ernst & Young, Wiley

13 Valuation techniques

Extract from IFRS 13

61. An entity shall use valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximising the use of relevant observable inputs and minimising the use of unobservable inputs.
62. The objective of using a valuation technique is to estimate the price at which an orderly transaction to sell the asset or to transfer the liability would take place between market participants at the measurement date under current market conditions. Three widely used valuation techniques are the market approach, the cost approach and the income approach. The main aspects of those approaches are summarised in paragraphs B5-B11. An entity shall use valuation techniques consistent with one or more of those approaches to measure fair value.
63. In some cases a single valuation technique will be appropriate (eg when valuing an asset or a liability using quoted prices in an active market for identical assets or liabilities). In other cases, multiple valuation techniques will be appropriate (eg that might be the case when valuing a cash-generating unit). If multiple valuation techniques are used to measure fair value, the results (ie respective indications of fair value) shall be evaluated considering the reasonableness of the range of values indicated by those results. A fair value measurement is the point within that range that is most representative of fair value in the circumstances.
64. If the transaction price is fair value at initial recognition and a valuation technique that uses unobservable inputs will be used to measure fair value in subsequent periods, the valuation technique shall be calibrated so that at initial recognition the result of the valuation technique equals the transaction price. Calibration ensures that the valuation technique reflects current market conditions, and it helps an entity to determine whether an adjustment to the valuation technique is necessary (eg there might be a characteristic of the asset or liability that is not captured by the valuation technique). After initial recognition, when measuring fair value using a valuation technique or techniques that use unobservable inputs, an entity shall ensure that those valuation techniques reflect observable market data (eg the price for a similar asset or liability) at the measurement date.

Extract from IFRS 13

65. Valuation techniques used to measure fair value shall be applied consistently. However, a change in a valuation technique or its application (eg a change in its weighting when multiple valuation techniques are used or a change in an adjustment applied to a valuation technique) 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, any of the following events take place:
- (a) new markets develop;
 - (b) new information becomes available;
 - (c) information previously used is no longer available;
 - (d) valuation techniques improve; or
 - (e) market conditions change.
66. Revisions resulting from a change in the valuation technique or its application shall be accounted for as a change in accounting estimate in accordance with IAS 8. However, the disclosures in IAS 8 for a change in accounting estimate are not required for revisions resulting from a change in a valuation technique or its application.

There are two key distinctions between the way existing IFRSs consider valuation techniques and the approach in IFRS 13. On adoption of the standard, these distinctions, in and of themselves, may not change current practice. However, they will require management to reconsider their methods of measuring fair value.

First, IFRS 13's requirements for valuation techniques apply to all methods of measuring fair value. Traditionally, references to valuation techniques in IFRS have indicated a lack of market-based information with which to value an asset or liability. Valuation techniques as discussed in IFRS 13, are broader and, importantly, include market-based approaches.

Second, IFRS 13 does not prioritise the use of one valuation technique over another, unlike existing IFRSs, or require the use of only one technique (with the exception of the requirement to measure identical financial instruments that trade in active markets at PxQ). Instead, the standard establishes a hierarchy for the inputs used in those valuation techniques, requiring an entity to maximise observable inputs and minimise the use of unobservable inputs (the fair value hierarchy is discussed further in Chapter 15). In some instances, the approach in IFRS 13 may be consistent with existing guidance in IFRS. For example, the best indication of fair value is still a quoted price in an active market. However, since IFRS 13 indicates that multiple techniques should be used when appropriate and sufficient data is available, judgement will be needed to select the techniques that are appropriate in the circumstances.

13.1 Selecting appropriate valuation techniques

IFRS 13 recognises three valuation approaches to measure fair value:

- *Market approach*: based on market transactions involving identical or similar assets or liabilities
- *Income approach*: based on future amounts (e.g., cash flows or income and expenses) that are converted (discounted) to a single present amount

- ▶ *Cost approach*: based on the amount required to replace the service capacity of an asset (frequently referred to as current replacement cost)

IFRS 13 requires that an entity use valuation techniques that are consistent with one or more of the above valuation approaches (these valuation approaches are discussed in more detail in sections 13.2 - 13.4 below). These approaches are consistent with generally accepted valuation methodologies used outside financial reporting. Not all of the approaches will be applicable to all types of assets or liabilities. However, when measuring the fair value of an asset or liability, IFRS 13 requires an entity to use valuation techniques that are appropriate in the circumstances *and* for which sufficient data is available. As a result, the use of multiple valuation techniques may be required more frequently than in current practice.

The determination of the appropriate technique(s) to be applied requires significant judgement, sufficient knowledge of the asset or liability and an adequate level of expertise regarding the valuation techniques. Within the application of a given approach, there may be a number of possible valuation techniques. For instance, there are a number of different techniques used to value intangible assets under the income approach (such as the multi-period excess earnings method and the relief-from-royalty method) depending on the nature of the asset.

As noted above, the fair value hierarchy does not prioritise the valuation techniques to be used; instead, it prioritises the inputs used in the application of these techniques. As such, the selection of the valuation technique(s) to apply should consider the exit market (i.e., the principal (or most advantageous) market) for the asset or liability and use valuation inputs that are consistent with the nature of the item being measured. Regardless of the technique(s) used, the objective of a fair value measurement remains the same, that is, an exit price under current market conditions from the perspective of market participants.

Selection, application, and evaluation of the valuation techniques can be complex. As such, the reporting entity may need assistance from valuation professionals.

13.1.1 Single vs multiple valuation techniques

The standard does not contain a hierarchy of valuation techniques because particular valuation techniques may be more appropriate in some circumstances than in others.

Selecting a single valuation technique may be appropriate in some circumstances, for example, when measuring a financial asset or liability using a quoted price in an active market. However, in other situations, more than one valuation technique may be deemed appropriate and multiple approaches should be applied. For example, it may be appropriate to use multiple valuation techniques when measuring fair value less costs of disposal for a cash-generating unit to test for impairment.

The nature of the characteristics of the asset or liability being measured and the availability of observable market prices may contribute to the number of valuation techniques used in a fair value analysis. For example, the fair value of a business is often estimated by giving consideration to multiple valuation approaches; such as an income approach that derives value from the present value of the expected future cash flows specific to the business and a market approach that derives value from market data (such as EBITDA or revenue multiples) based on observed

transactions for comparable assets. On the other hand, financial assets that frequently trade in active markets are often valued using only a market approach given the availability and relevance of observable data.

Even when the use of a single approach is deemed appropriate, entities should be aware of changing circumstances that could indicate using multiple approaches may be more appropriate. For example, this might be the case if there is a significant decrease in the volume and level of activity for an asset or liability in relation to normal market activity. Observable transactions that once formed the basis for the fair value estimate may cease to exist altogether or may not be determinative of fair value and therefore require an adjustment to the fair value measurement (this is discussed further in section 7.3 above). As such, the use of multiple valuation techniques may be more appropriate.

13.1.2 Using multiple valuation techniques to measure fair value

When the use of multiple valuation techniques is considered appropriate, their application is likely to result in a range of possible values. IFRS 13 requires that management evaluate the reasonableness of the range and select the point within the range that is *most representative* of fair value in the circumstances.

As with the selection of the valuation techniques, the evaluation of the results of multiple techniques requires significant judgement. The merits of each valuation technique applied, and the underlying assumptions embedded in each of the techniques will need to be considered. Evaluation of the range does not necessarily require the approaches to be calibrated to one another (i.e., the results from different approaches do not have to be equal). The objective is to find the point in the range that most reflects the price to sell an asset or transfer a liability between market participants.

If the results from different valuation techniques are similar, the issue of weighting multiple value indications becomes less important since the assigned weights will not significantly alter the fair value estimate. However, when indications of value are disparate, entities should seek to understand why significant differences exist and what assumptions might contribute to the variance. IFRS 13.B40 indicates that, when evaluating results from multiple valuation approaches, a wide range of fair value measurements may be an indication that further analysis is needed. For example, divergent results between a market approach and an income approach may indicate a misapplication of one or both of the techniques, which would likely necessitate additional analysis.

The standard gives two examples that illustrate situations where the use of multiple valuation techniques is appropriate and, when used, how different indications of value are assessed.

First, an entity may determine that a technique uses assumptions that are not consistent with market participant assumptions and therefore is not representative of fair value. This is illustrated in Example 13.1 below, where the entity eliminates use of the cost approach because it determines a market participant would not be able to construct the asset itself.

Example 13-1: Multiple valuation techniques – software asset⁶⁰

An entity acquires a group of assets. The asset group includes an income-producing software asset internally developed for licensing to customers and its complementary assets (including a related database with which the software asset is used) and the associated liabilities. To allocate the cost of the group to the individual assets acquired, the entity measures the fair value of the software asset. The entity determines that the software asset would provide maximum value to market participants through its use in combination with other assets or with other assets and liabilities (i.e., its complementary assets and the associated liabilities). There is no evidence to suggest that the current use of the software asset is not its highest and best use. Therefore, the highest and best use of the software asset is its current use (In this case, the licensing of the software asset, in and of itself, does not indicate that the fair value of the asset would be maximised through its use by market participants on a stand-alone basis).

The entity determines that, in addition to the income approach, sufficient data may 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) 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 (licence fees from customers) over its economic life. The fair value indicated by that approach is CU 15,000,000.
- (b) The cost approach is applied by estimating the amount that currently would be required to construct a substitute software asset of comparable utility (i.e., taking into account functional and economic obsolescence). The fair value indicated by that approach is CU10,000,000.

Through its application of the cost approach, the entity determines that market participants would not be able to construct a substitute software asset of comparable utility. Some characteristics of the software asset are unique, having been developed using proprietary information, and cannot be readily replicated. The entity determines that the fair value of the software asset is CU15,000,000, as indicated by the income approach.

Second, as is illustrated in Example 13.2 below, an entity considers the possible range of fair value measures and considers what is most representative of fair value by taking into consideration that:

- ▶ One valuation technique may be more representative of fair value than others
- ▶ Inputs used in one valuation technique may be more readily observable in the marketplace or require fewer adjustments (inputs are discussed further in Chapter 14)
- ▶ The resulting range in estimates using one valuation technique may be narrower than the resulting range from other valuation techniques
- ▶ Divergent results from the application of the market and income approaches would indicate that additional analysis is required, as one technique may have

⁶⁰ IFRS 13.IE15-17

been misapplied, or the quality of inputs used in one technique may be less reliable

Example 13-2: Multiple valuation techniques - machine held and used⁶¹

An entity acquires a machine in a business combination. The machine will be held and used in its operations. The machine was originally purchased by the acquired entity from an outside vendor and, before the business combination, was customised by the acquired entity for use in its operations. However, the customisation of the machine was not extensive. The acquiring entity determines that the asset would provide maximum value to market participants through its use in combination with other assets or with other assets and liabilities (as installed or otherwise configured for use). There is no evidence to suggest that the current use of the machine is not its highest and best use. Therefore, the highest and best use of the machine is its current use in combination with other assets or with other assets and liabilities.

The entity determines that sufficient data are available to apply the cost approach and, because the customisation 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. Furthermore, information about short-term and intermediate-term lease rates for similar used machinery that otherwise could be used to project an income stream (i.e., lease payments over remaining service lives) is not available. The market and cost approaches are applied as follows:

- (a) The market approach is applied using quoted prices for similar machines adjusted for differences between the machine (as customised) 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). The fair value indicated by that approach ranges from CU 40,000 to CU 48,000.
- (b) The cost approach is applied by estimating the amount that would be required currently to construct a substitute (customised) machine of comparable utility. The estimate takes into account the condition of the machine and the environment in which it operates, including physical wear and tear (i.e., physical deterioration), improvements in technology (i.e., functional obsolescence), conditions external to the condition of the machine such as a decline in the market demand for similar machines (i.e., economic obsolescence) and installation costs. The fair value indicated by that approach ranges from CU 40,000 to CU 52,000.

⁶¹ IFRS 13.IE11-14

Example 13-2: Multiple valuation techniques – machine held and used
continued

The entity determines that the higher end of the range indicated by the market approach is most representative of fair value and, therefore, ascribes more weight to the results of the market approach. That determination is made on the basis of the relative subjectivity of the inputs, taking into account 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 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

Accordingly, the entity determines that the fair value of the machine is CU 48,000.

If customisation of the machine has been extensive or if there were not sufficient data available to apply the market approach (e.g., because market data reflect transactions for machines used on a stand-alone basis, such as a scrap value for specialised assets, rather than machines used in combination with other assets or with other assets and liabilities), the entity would apply the cost approach. When an asset is used in combination with other assets or with other assets and liabilities, the cost approach assumes the sale of the machine to a market participant buyer with the complementary assets and the associated liabilities. The price received for the sale of the machine (i.e., an exit price) would not be more than either of the following:

- (a) The cost that a market participant buyer would incur to acquire or construct a substitute machine of comparable utility

Or

- (b) The economic benefit that a market participant buyer would derive from the use of the machine

Both Examples 13-1 and 13-2 highlight situations where it was appropriate to use more than one valuation approach to estimate fair value. Although the indication of value from the cost approach is ultimately not given much weight in either example, performing this valuation technique is an important part of the estimation process. Even when a particular valuation technique is given little weight, its application can highlight specific characteristics of the item being measured and may help in assessing the value indications from other techniques.

Determining the point in a range of values that is 'most representative of fair value' can be subjective and requires the use of judgement by management. In addition, although Example 13-2 refers to 'weighting' the results of the valuation techniques used, in our view, this is not meant to imply that an entity must explicitly apply a percentage weighting to the results of each technique to determine fair value. However, this may be appropriate in certain circumstances.

The standard does not prescribe a specific weighting methodology (e.g., explicit assignment of percentages versus qualitative assessment of value indications), so evaluating the techniques applied in an analysis will require judgement based on the merits of each methodology and their respective assumptions.

Identifying a single point within a range is not the same as finding the point within the range that is most representative of fair value. As such, simply assigning arbitrary weights to different indications of value is not appropriate. The weighting of multiple value indications is a process that requires significant judgement and a working knowledge of the different valuation techniques and inputs. Such knowledge is necessary to properly assess the relevance of these methodologies and inputs to the asset or liability being measured. For example, in certain instances, it may be more appropriate to rely primarily on the fair value indicated by the technique that maximises the use of observable inputs and minimises the use of unobservable inputs. In all cases, entities should document how they considered the various indications of value, including how they evaluated qualitative and quantitative factors, in determining fair value.

13.1.3 Valuation adjustments

In certain instances, adjustments to the output from a valuation technique may be required to appropriately determine a fair value measurement in accordance with IFRS 13. An entity makes valuation adjustments if market participants would make the adjustments when pricing an asset or liability (under the market conditions at the measurement date). This includes any adjustments for measurement uncertainty (e.g., a risk premium).

Valuation adjustments may include the following:⁶²

- (a) An adjustment to a valuation technique to take into account a characteristic of an asset or a liability that is not captured by the valuation technique (the need for such an adjustment is typically identified during calibration of the value calculated using the valuation technique with observable market information – see section 13.1.3.A below).
- (b) Applying the point within the bid-ask spread that is most representative of fair value in the circumstances (see section 14.3 below).
- (c) An adjustment to take into account credit risk (e.g., an entity's non-performance risk or the credit risk of the counterparty to a transaction).
- (d) An adjustment to take into account measurement uncertainty (e.g., when there has been a significant decrease in the volume or level of activity when compared with normal market activity for the asset or liability, or similar assets or liabilities, and the entity has determined that the transaction price or quoted price does not represent fair value).

13.1.3.A Adjustments to valuation techniques that use unobservable inputs

Regardless of the valuation technique(s) used, the objective of a fair value measurement remains the same, that is, an exit price under current market conditions from the perspective of market participants. As such, if the transaction price is determined to represent fair value at initial recognition (see Chapter 12 above) and a valuation technique that uses unobservable inputs will be used to measure the fair value of an item in subsequent periods, the valuation technique must be calibrated to ensure the valuation technique reflects current market conditions.

⁶² IFRS 13.BC145

Calibration ensures that a valuation technique incorporates current market conditions. The calibration also helps an entity to determine whether an adjustment to the valuation technique is necessary by identifying potential deficiencies in the valuation model. For example, there might be a characteristic of the asset or liability that is not captured by the valuation technique.

If an entity measures fair value after initial recognition using a valuation technique (or techniques) that uses unobservable inputs, an entity must ensure the valuation technique(s) reflect observable market data (e.g., the price for a similar asset or liability) at the measurement date. That is, it should be calibrated to observable market data, when available.

13.1.4 Making changes to valuation techniques

The standard requires that valuation techniques used to measure fair value be applied on a consistent basis among similar assets or liabilities and across reporting periods. This is not meant to preclude subsequent changes, such as a change in its weighting when multiple valuation techniques are used or a change in an adjustment applied to a valuation technique.

An entity can make a change to a valuation technique or its application (or a change in the relative importance of one technique over another), provided that change results in a measurement that is equally representative or more representative of fair value in the circumstances.

IFRS 13.65 provides the following examples of circumstances that may trigger a change in valuation technique or relative weights assigned to valuation techniques:

- (a) New markets develop
- (b) New information becomes available
- (c) Information previously used is no longer available
- (d) Valuation techniques improve

Or

- (e) Market conditions change

In addition, a change in the exit market, characteristics of market participants that would transact for the asset or liability, or the highest and best use of an asset by market participants could also warrant a change in valuation techniques in certain circumstances.

Changes to fair value resulting from a change in the valuation technique or its application are accounted for as a change in accounting estimate in accordance with IAS 8. However, IFRS 13 states that the disclosures in IAS 8 for a change in accounting estimate are not required for such changes. Instead, information would be disclosed in accordance with IFRS 13 (see section 19.3.5 for further discussion). If a valuation technique is applied in error, the correction of the technique would be accounted as a correction of an error in accordance with IAS 8.

13.2 Market Approach

Extract from IFRS 13

- B5. The market approach uses prices and other relevant information generated by market transactions involving identical or comparable (ie similar) assets, liabilities or a group of assets and liabilities, such as a business.
- B6. For example, valuation techniques consistent with the market approach often use market multiples derived from a set of comparables. Multiples might be in ranges with a different multiple for each comparable. The selection of the appropriate multiple within the range requires judgement, considering qualitative and quantitative factors specific to the measurement.
- B7. Valuation techniques consistent with the market approach include matrix pricing. Matrix pricing is a mathematical technique used principally to value some types of financial instruments, such as debt securities, without relying exclusively on quoted prices for the specific securities, but rather relying on the securities' relationship to other benchmark quoted securities.

Valuation techniques consistent with the market approach use prices and other market data derived from observed transactions for the same or similar assets, for example, revenue, or EBITDA multiples. Multiples might be in ranges with a different multiple for each comparable asset or liability. The selection of the appropriate multiple within the range requires judgement, considering qualitative and quantitative factors specific to the measurement.

Another example of a market approach is matrix pricing. Matrix pricing is a mathematical technique used principally to value certain types of financial instruments, such as debt securities, where specific instruments (e.g., cusips) may not trade frequently. The method derives an estimated price of an instrument using transaction prices and other relevant market information for benchmark instruments with similar features (e.g., coupon, maturity or credit rating).

13.3 Cost Approach

Extract from IFRS 13

- B8. The cost approach reflects the amount that would be required currently to replace the service capacity of an asset (often referred to as current replacement cost).
- B9. From the perspective of a market participant seller, the price that would be received for the asset is based on the cost to a market participant buyer to acquire or construct a substitute asset of comparable utility, adjusted for obsolescence. That is because a market participant buyer would not pay more for an asset than the amount for which it could replace the service capacity of that asset. 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 (using specified service lives). In many cases the current replacement cost method is used to measure the fair value of tangible assets that are used in combination with other assets or with other assets and liabilities.

The cost approach (or current replacement cost) is typically used to measure the fair value of tangible assets, such as plant or equipment.

From the perspective of a market participant seller, the price that would be received for the asset is based on the cost to a market participant buyer to acquire or construct a substitute asset of comparable utility, adjusted for obsolescence.

Obsolescence is broader than depreciation, whether for financial reporting or tax purposes. According to the standard, obsolescence encompasses the following characteristics:

- Physical deterioration
- Functional (technological) obsolescence
- Economic (external) obsolescence.

Physical deterioration and functional obsolescence are factors specific to the asset. Physical deterioration refers to wear, tear or abuse. For example, machines in a factory might deteriorate physically due to high production volumes or a lack of maintenance. Something is functionally obsolete when it does not function in the manner originally intended (excluding any physical deterioration). For example, layout of the machines in the factory may make their use, in combination, more labour intensive, increasing the cost of those machines to the entity. Functional obsolescence also includes the impact of technological change, for example, if newer, more efficient and less labour intensive models were available, demand for the existing machines might decline, along with the price for the existing machines in the market.

Economic obsolescence arises from factors external to the asset. An asset may be less desirable or its economic life may reduce due to factors such as regulatory changes or excess supply. Consider the machines in the factory; assume that, after the entity had purchased its machines, the supplier had flooded the market with identical machines. If demand was not as high as the supplier had anticipated, it could result in an oversupply and the supplier may wish to reduce the price in order to clear the excess stock.

13.4 Income Approach

Extract from IFRS 13

B10. The income approach converts future amounts (eg cash flows or income and expenses) to a single current (ie discounted) amount. When the income approach is used, the fair value measurement reflects current market expectations about those future amounts.

B11. Those valuation techniques include, for example, the following:

- (a) present value techniques (see paragraphs B12-B30);
- (b) option pricing models, such as the Black-Scholes-Merton formula or a binomial model (ie a lattice model), that incorporate present value techniques and reflect both the time value and the intrinsic value of an option; and
- (c) the multi-period excess earnings method, which is used to measure the fair value of some intangible assets.

A fair value measurement using the income approach will reflect current market expectations about those future cash flows or income and expenses.

IFRS 13.B11 provides a number of examples of valuation techniques that are consistent with the income approach. However, the standard does not limit the valuation techniques that are consistent with the income approach to these examples; an entity may consider other valuation techniques.

The standard provides some application guidance, but only in relation to present value techniques (see Chapter 20 for further discussion regarding this application guidance).

14 Inputs to valuation techniques

Extract from IFRS 13

67. Valuation techniques used to measure fair value shall maximise the use of relevant observable inputs and minimise the use of unobservable inputs.
68. Examples of markets in which inputs might be observable for some assets and liabilities (eg financial instruments) include exchange markets, dealer markets, brokered markets and principal-to-principal markets (see paragraph B34).
69. An entity shall select inputs that are consistent with the characteristics of the asset or liability that market participants would take into account in a transaction for the asset or liability (see paragraphs 11 and 12). In some cases those characteristics result in the application of an adjustment, such as a premium or discount (eg a control premium or non-controlling interest discount). However, a fair value measurement shall not incorporate a premium or discount that is inconsistent with the unit of account in the IFRS that requires or permits the fair value measurement (see paragraphs 13 and 14). Premiums or discounts that reflect size as a characteristic of the entity's holding (specifically, a blockage factor that adjusts the quoted price of an asset or a liability because the market's normal daily trading volume is not sufficient to absorb the quantity held by the entity, as described in paragraph 80) rather than as a characteristic of the asset or liability (eg a control premium when measuring the fair value of a controlling interest) are not permitted in a fair value measurement. In all cases, if there is a quoted price in an active market (ie a Level 1 input) for an asset or a liability, an entity shall use that price without adjustment when measuring fair value, except as specified in paragraph 79.
- B34. Examples of markets in which inputs might be observable for some assets and liabilities (eg financial instruments) include the following:
- (a) *Exchange markets*. In an exchange market, closing prices are both readily available and generally representative of fair value. An example of such a market is the London Stock Exchange.
 - (b) *Dealer markets*. 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 at which the dealer is willing to buy and the price at which the dealer is willing to sell, respectively) are more readily available than closing prices. Over-the-counter markets (for which prices are publicly reported) are dealer markets. Dealer markets also exist for some other assets and liabilities, including some financial instruments, commodities and physical assets (eg used equipment).

Extract from IFRS 13 continued

- (c) *Brokered markets.* 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 markets.* In a principal-to-principal market, transactions, both originations and resales, are negotiated independently with no intermediary. Little information about those transactions may be made available publicly.

14.1 General principles

When selecting the inputs to use in a valuation technique, IFRS 13 requires that they:

- ▶ Are consistent with the characteristics of the asset or liability that market participants would take into account (see section 4.3 above)
- ▶ Exclude premiums or discounts that reflect size as a characteristic of the entity's holding, as opposed to a characteristic of the item being measured (e.g., blockage factors)
- ▶ Exclude other premiums or discounts if they are inconsistent with the unit of account (see section 4.2 above for discussions regarding unit of account)

Premiums, discounts and blockage factors are discussed further in section 14.2 below.

In all cases, if there is a quoted price in an active market (i.e., a Level 1 input) for the identical asset or a liability, an entity must use that price without adjustment when measuring fair value. Adjustments to this price are only permitted in certain circumstances, which are discussed in section 15.2.1 below.

Regardless of the valuation techniques used to estimate fair value, IFRS 13 requires that they maximise the use of relevant observable inputs and minimise the use of unobservable inputs. This requirement is consistent with the idea that fair value is a market-based measurement and, therefore, is determined using market-based observable data, to the extent available and relevant.

The standard clarifies that the relevance of market data must be considered when assessing the priority of inputs in the fair value hierarchy. When evaluating the relevance of market data, the number and range of data points should be considered, as well as whether this data is directionally consistent with pricing trends and indications from other more general market information.

Relevant market data reflects the assumptions that market participants would use in pricing the asset or liability being measured. Recent transaction prices for the reference asset or liability (or similar assets and liabilities) are typically considered to represent relevant market data, unless the transaction is determined not to be orderly (see Chapter 7 for a discussion of factors to consider when determining if a transaction is orderly). However, even in situations where a transaction is

considered to be orderly, observable transaction prices from inactive markets may require adjustment to address factors such as timing differences between the transaction date and the measurement date, or differences between the asset being measured and a similar asset that was the subject of the transaction. In those instances where the adjustments to observable data are significant, and are determined using unobservable data, the resulting measurement would be considered a Level 3 measurement.

Whether observable or unobservable, all inputs used in determining fair value should be consistent with a market-based measurement. As such, the use of unobservable inputs is not intended to allow for the inclusion of entity-specific assumptions in a fair value measurement. While IFRS 13 acknowledges that unobservable inputs may sometimes be developed using an entity's own data, the guidance is clear that these inputs should reflect market participant assumptions. When valuing an intangible asset using unobservable inputs, for example, an entity should take into account the intended use of the asset by market participants, even though this may differ from the entity's intended use. The entity may use its own data, without adjustment, if it determines that market participant assumptions are consistent with its own assumptions (see section 18.1 for additional discussion on how a entity's own assumptions may be applied in a fair value measurement).

The term 'input' is used in IFRS 13 to refer broadly to the assumptions that market participants would use when pricing an asset or liability, as opposed to the data entered into a pricing model. This important distinction implies that an adjustment to a pricing model's value (e.g., an adjustment for the risk that a pricing model might not replicate a market price due to the complexity of the instrument being measured) represents an input, which should be evaluated when determining the measurement's category in the fair value hierarchy. For example, when measuring a financial instrument, an adjustment for model risk would be considered an input (most likely a Level 3 input) that, if deemed significant (see section 15.2.1 for further discussion on assessing the significance of inputs) may render the entire fair value estimate a Level 3 measurement.

14.2 Premiums and discounts

IFRS 13 indicates that when measuring fair value, entities should select inputs that: (i) are consistent with the characteristics of the asset or liability being measured; and (ii) would be considered by market participants when pricing the asset or liability. In certain instances, these characteristics could result in a premium or discount being incorporated into the fair value measurement.

Determining whether a premium or discount applies to a particular fair value measurement requires judgement and depends on specific facts and circumstances.

IFRS 13 distinguishes between premiums or discounts that reflect size as a characteristic of the entity's holding (specifically, a blockage factor) and control premiums, discounts for non-controlling interests and discounts for lack of marketability that are related to characteristics of the asset or liability being measured.

Apart from block discounts (discussed in section 14.2.1), IFRS 13 does not provide explicit guidance on the types of premiums or discounts that may be considered, or when they should be applied to a fair value measurement. Instead, the guidance indicates that premiums and discounts (e.g., control premiums or discounts for lack

of marketability) should be incorporated into non-Level 1 fair value measurements if all of the following conditions are met:

- ▶ The application of the premium or discount reflects the characteristics of the asset or liability being measured
- ▶ Market participants, acting in their 'economic best interest' (see section 6.2), would consider these premiums or discounts when pricing the asset or liability
- ▶ The inclusion of the premium or discount is not inconsistent with the unit of account in the IFRS that requires (or permits) the fair value measurement (see section 4.2).

IFRS 13 emphasises that prices of instruments that trade in active markets (i.e., Level 1 measurements) should generally not be adjusted and should be measured based on the quoted price of the individual instrument multiplied by the quantity held (PxQ).

Figure 4: Differentiating between blockage factors and other premiums and discounts

Examples of premiums and discounts	Blockage factor (or block discount)	Control premium	Discount for lack of marketability
Can fair value be adjusted for the premium or discount?	No	Yes, in certain circumstances	Yes, in certain circumstances
In what situations would these arise?	When an entity sells a large holding of instruments such that the market's normal daily trading volume is not sufficient to absorb the entire quantity (i.e., flooding the market). IFRS 13 does not permit an entity to take block discounts into consideration in the measurement of fair value	When an entity transacts for a controlling interest in another entity (and the unit of account is deemed to be the controlling interest and not the individual shares)	When an asset or liability is not readily marketable, for example, where there is no established market of readily-available buyers and sellers or as a result of restrictions
Example	An entity holds a 20% investment in a listed company. The normal daily trading for those shares on the exchange is 1-2%. If the entity were to sell its entire holding, the price per share would be expected to decrease by 30%	An entity transacts for a controlling interest in a private business and determines that the fair value of the business is greater than the aggregate value of the individual shares due to its ability to control the acquired entity	The shares of a private company for which no liquid market exists

Examples of premiums and discounts	Blockage factor (or block discount)	Control premium	Discount for lack of marketability
What does the premium or discount represent?	<p>The difference between the price to sell:</p> <ul style="list-style-type: none"> ▶ The individual asset or liability <p>And</p> <ul style="list-style-type: none"> ▶ An entity's entire holding <p>IFRS 13 does not permit an entity to include such a difference in the measurement of fair value</p>	<p>The difference between the price to sell:</p> <ul style="list-style-type: none"> ▶ The individual shares in the controlled entity <p>And</p> <ul style="list-style-type: none"> ▶ The entire controlling interest 	<p>The difference between the price to sell:</p> <ul style="list-style-type: none"> ▶ An asset or liability does not trade in a liquid market <p>And</p> <ul style="list-style-type: none"> ▶ An identical asset or liability for which a liquid market exists

14.2.1 Blockage factors (or block discounts)

IFRS 13 explicitly prohibits the consideration of blockage factors (or block discounts) in a fair value measurement. While the term blockage factor may be subject to different interpretations, during their deliberations the Boards indicated that they view a blockage factor as an adjustment to the quoted price of an asset or liability because the market's normal trading volume is not sufficient to absorb the quantity held by a reporting entity.

Regardless of the hierarchy level in which a measurement is categorised, blockage factors are excluded from a fair value measurement because such an adjustment is specific to the size of an entity's holding and its decision to transact in a block. That is, the Boards believe such an adjustment is entity-specific in nature.⁶³ However, the standard clarifies that there is a difference between size being a characteristic of the asset or liability being measured (based on its unit of account) and size being a characteristic of the reporting entity's holding. While any adjustment for the latter is not permitted, the former should be considered if it is consistent with how market participants would price the asset or liability.

The following example illustrates how IFRS 13 distinguishes between size as a characteristic of the item being measured and size as a characteristic of an entity's holding.

⁶³ IFRS 13.BC157

Example 14-1: Blockage factors

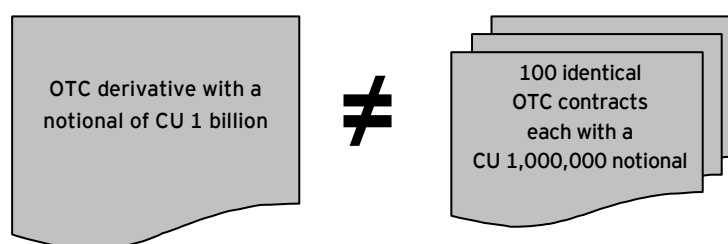
Bank X has one outstanding OTC derivative contract with Dealer A.

The notional amount of this contract is CU 1 billion, which is significantly larger than the market norm for these types of contracts.

Bank Y has 100 identical OTC derivative contracts outstanding with various dealers (whose risks are not offsetting because all the contracts are assets and therefore are not measured using the measurement exception).

Each of the 100 contracts has a notional amount of CU 10,000,000, which is consistent with the market norm for these types of contracts.

Although Bank X and Bank Y have virtually identical market exposures (ignoring credit risk for simplicity), IFRS 13 would allow Bank X to consider a discount for lack of marketability but would preclude Bank Y from applying a similar discount.



For Bank X, the large notional amount (CU 1 billion) is a characteristic of the instrument being measured and would likely be considered by market participants when transacting for the derivative based on its unit of account (the derivative contract). As such, the fair value of the individual derivative should incorporate an adjustment for size if market participants would consider one in pricing the instrument.

In contrast, the unit of account for Bank Y's 100 derivative contracts is the individual OTC contracts, not the aggregate gross exposure stemming from the 100 contracts (i.e., the block). In pricing the individual contracts, market participants would likely not consider a discount associated with the size of the contracts, since the notional amount for each contract is consistent with the market norm. In accordance with IFRS 13, Bank Y would be prohibited from applying a discount based on the size of its entire holding (i.e., the 100 contracts) as this would represent a block discount that cannot be considered in a fair value measurement.

As discussed in section 4.2 above, the unit of account is determined by the relevant IFRS that permits or requires an asset or liability to be measured at fair value, unless IFRS 13 states otherwise. In some cases, the unit of account may be clear, for example, the unit of account for financial instruments in the scope of IAS 39 or IFRS 9 is typically the individual instrument. However, it may be less clear in other standards, for example, the unit of account for a cash-generating unit when testing non-financial assets for impairment in accordance with IAS 36.

This guidance could change practice for entities that have previously included adjustments for blockage factors when determining fair value measurements for financial instruments using Level 2 and Level 3 inputs (that is, where adjustments considered the size of an entity's holding in comparison to current trading volumes). It could also change practice for those entities that previously estimated

fair value at initial recognition using transaction prices that included of a block discount.

14.3 Pricing within the bid-ask spread

Extract from IFRS 13

70. If an asset or a liability measured at fair value has a bid price and an ask price (eg an input from 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 the input is categorised within the fair value hierarchy (ie Level 1, 2 or 3; see paragraphs 72-90). The use of bid prices for asset positions and ask prices for liability positions is permitted, but is not required.
71. This IFRS does not preclude the use of mid-market pricing or other pricing conventions that are used by market participants as a practical expedient for fair value measurements within a bid-ask spread.

The bid price represents the price at which a dealer or market maker is willing to buy an asset (or dispose of a liability). The 'ask price' (or offer price) represents the price at which a dealer or market maker is willing to sell an asset (or assume a liability). The spread between these two prices represents the profit a dealer requires for making a market in a particular security (i.e., providing two-way liquidity).

The use of bid prices to measure assets and ask prices to measure liabilities is permitted, but not required. Instead, for assets and liabilities that are bought and sold in markets where prices are quoted using a bid-ask spread (e.g., over-the-counter markets), the entity must use the price within the bid-ask spread that is *most representative* of fair value in the circumstances to measure fair value. In making this assessment, entities should evaluate their recent transaction history to support where in the bid-ask spread they are able to exit their positions. For some entities this could result in valuing assets at the bid price and liabilities at the ask price, but in other instances, judgement is required to determine the point in the bid-ask spread that is most indicative of fair value. The use of the price within the bid-ask spread that is most representative of fair value applies regardless of whether the input (i.e., the bid or ask price) is observable or not (i.e., regardless of its categorisation in the fair value hierarchy – see Chapter 15 for further discussion).

Entities need to be consistent in their application of this concept. It would not be appropriate for an entity to measure similar assets at different prices within the bid-ask spread, without evidence indicating that the exit prices for those assets would be at different points within the bid-ask spread.

14.3.1 Mid-market pricing

As a practical expedient, IFRS 13 allows for the use of mid-market pricing, or other pricing conventions that are used by market participants, when measuring fair value within the bid-ask spread. Use of a mid-market pricing convention results in a valuation of an asset or liability at the mid-point of the bid-ask spread.

The guidance does not limit or restrict the use of mid-market pricing to specific types of instruments or entities. Nevertheless, we believe that entities that use this practical expedient should establish, and consistently apply, an accounting policy

with respect to mid-market pricing. Disclosure of this policy choice is also recommended.

14.3.2 What does the bid-ask spread include?

The commentary in the Basis for Conclusions acknowledges that the existing guidance in IAS 39.AG70 only includes transaction costs in the bid-ask spread. The Boards chose not to specify what is included in the bid-ask spread, except for transaction costs. However, they did make it clear that, in their view, the bid-ask spread does not include adjustments for counterparty credit risk.⁶⁴

The IASB has not provided any clarity regarding the interaction between the guidance in IFRS 13 on transaction costs (i.e., transaction costs are not considered an attribute of the asset or liability and, accordingly, are excluded from fair value measurements) and the guidance on the use of prices within the bid-ask spread. If transaction costs are included in the bid-ask spread, measuring an asset at the bid price would include certain future transaction costs in the fair value measurement for the asset.

Given the lack of any specific guidance on this issue, there may be some diversity in practice between entities with respect to how transaction costs are considered. However, we would expect an entity to apply a consistent approach to all of its own fair value measurements.

14.4 Risk premiums

Extract from IFRS 13

88. Assumptions about risk include the risk inherent in a particular valuation technique used to measure fair value (such as a pricing model) and the risk inherent in the inputs to the valuation technique. A measurement that does not include an adjustment for risk would not represent a fair value measurement if market participants would include one when pricing the asset or liability. For example, it might be necessary to include a risk adjustment when there is significant measurement uncertainty (eg when there has been a significant decrease in the volume or level of activity when compared with normal market activity for the asset or liability, or similar assets or liabilities, and the entity has determined that the transaction price or quoted price does not represent fair value, as described in paragraphs B37-B47).

B39. This IFRS does not prescribe a methodology for making significant adjustments to transactions or quoted prices. See paragraphs 61-66 and B5-B11 for a discussion of the use of valuation techniques when measuring fair value. Regardless of the valuation technique used, an entity shall include appropriate risk adjustments, including a risk premium reflecting the amount that market participants would demand as compensation for the uncertainty inherent in the cash flows of an asset or a liability (see paragraph B17). Otherwise, the measurement does not faithfully represent fair value. In some cases determining the appropriate risk adjustment might be difficult. However, the degree of difficulty alone is not a sufficient basis on which to exclude a risk adjustment. The risk adjustment shall be reflective of an orderly transaction between market participants at the measurement date under current market conditions.

⁶⁴ IFRS 13.BC164

IFRS 13 defines a risk premium as “compensation sought by risk-averse market participants for bearing the uncertainty inherent in the cash flows of an asset or a liability”.⁶⁵ Regardless of the valuation technique(s) used, a fair value measurement is intended to represent an exit price and, as such, should include a risk premium that reflects the compensation market participants would demand for bearing the uncertainty inherent in the cash flows of an asset or liability. While this risk premium should reflect compensation required in an orderly transaction (not a forced or distressed sale), it should also capture market participant assumptions regarding risk under current market conditions. Example 7-1 discussed in section 7.3.2 illustrates that this risk adjustment may include assumptions about liquidity and uncertainty based on relevant market data.

IFRS 13 explicitly states that “[a] fair value measurement should include a risk premium reflecting the amount market participants would demand as compensation for the uncertainty inherent 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 reason to exclude a risk premium”.⁶⁶

The objective of a risk premium is often misunderstood. Many incorrectly assume that a risk premium is unnecessary when fair value is determined using probability-weighted cash flows. That is, they believe it is appropriate to discount probability-weighted cash flows using a risk-free rate under the assumption that all uncertainty is captured by probability-weighting the cash flows. While expected cash flows (i.e., the probability-weighted average of possible future cash flows) incorporate the uncertainty in the instrument’s cash flows, they do not incorporate the compensation that market participants demand for bearing that uncertainty.⁶⁷ In order to capture this required compensation in the measurement, a market risk premium must be added (either as an adjustment to the discount rate or to the expected cash flows). IFRS 13’s application guidance addresses this point when discussing systematic and unsystematic risk and certainty-equivalent cash flows (see Chapter 20 for additional discussion on how risk premiums are applied in a present value technique).

It is important to note that increased risk associated with an asset generally decreases the fair value of that asset, whereas increased risk associated with a liability generally increases the fair value of that liability (with the exception of non-performance risk). Uncertainty associated with an asset reduces the amount a market participant would pay for the asset. In contrast, all else being equal, compensation for an uncertainty related to a liability results in an increase to the amount that the market participant would expect to receive for assuming the obligation. If that compensation is accounted for in the discount rate, rather than in the cash flows, it would result in an increase in the discount rate used to measure the fair value of an asset. However, it would result in a reduction of the discount rate used in the fair value measurement of the liability (i.e., the discount rate must be lower so that the resulting fair value of the liability is higher).⁶⁸ This concept only applies when measuring the fair value of a liability that does not have a corresponding asset using an income approach. As discussed in section 10.2.1,

⁶⁵ IFRS 13 Appendix A

⁶⁶ IFRS 13.B16

⁶⁷ This concept is noted in IFRS 13.B25-B29.

⁶⁸ IFRS 13.BC91

when a quoted price for the transfer of an identical or similar liability or entity's own equity instrument is held by another party as an asset, the fair value of this liability or own equity instrument should be determined from the perspective of the market participant that holds the identical item as an asset.

14.5 Broker quotes and pricing services

Extract from IFRS 13

B45. This IFRS does not preclude the use of quoted prices provided by third parties, such as pricing services or brokers, if an entity has determined that the quoted prices provided by those parties are developed in accordance with this IFRS.

B46. If there has been a significant decrease in the volume or level of activity for the asset or liability, an entity shall evaluate whether the quoted prices provided by third parties are developed using current information that reflects orderly transactions or a valuation technique that reflects market participant assumptions (including assumptions about risk). In weighting a quoted price as an input to a fair value measurement, an entity places less weight (when compared with other indications of fair value that reflect the results of transactions) on quotes that do not reflect the result of transactions.

B47. Furthermore, the nature of a quote (eg whether the quote is an indicative price or a binding offer) shall be taken into account when weighting the available evidence, with more weight given to quotes provided by third parties that represent binding offers.

When quoted prices from brokers or pricing services are used to measure fair value, it is the entity's responsibility to understand the source and nature of this information to accurately assess its relevance. When there has been a significant decrease in the volume or level of activity for the asset or liability, management should evaluate whether the prices received from brokers or pricing services are based on current information from orderly transactions or valuation techniques that appropriately reflect market participant assumptions regarding risk. IFRS 13 states that entities should place less reliance on third-party quotes that are not based on transactions, compared with other value indications that are based on market transactions.

When information from brokers and pricing services is based on transaction data, entities should assess whether, and to what extent, the observed prices are a result of orderly transactions when determining the weight to place on these data points, compared with other value indications (see section 7.2 for additional information on the factors an entity may consider when assessing whether transactions are orderly). Facts and circumstances will determine the weight that an entity should place on a transaction price, including:

- ▶ The comparability of the transaction to the asset or liability being measured at fair value
- ▶ The proximity of the transaction to the measurement date
- ▶ The size of the transaction
- ▶ The nature of the quote (e.g., binding vs indicative quote) and the number of quotes received

Refer to section 15.2.3 for additional discussion on fair value hierarchy considerations when using quoted prices from brokers and pricing services.

15 The fair value hierarchy

Extract from IFRS 13

72. To increase consistency and comparability in fair value measurements and related disclosures, this IFRS establishes a fair value hierarchy that categorises into three levels (see paragraphs 76-90) the inputs to valuation techniques used to measure fair value. The fair value hierarchy gives the highest priority to quoted prices (unadjusted) in active markets for identical assets or liabilities (Level 1 inputs) and the lowest priority to unobservable inputs (Level 3 inputs).
73. In some cases, the inputs used to measure the fair value of an asset or a liability might be categorised within different levels of the fair value hierarchy. In those cases, the fair value measurement is categorised in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement. Assessing the significance of a particular input to the entire measurement requires judgement, taking into account factors specific to the asset or liability. Adjustments to arrive at measurements based on fair value, such as costs to sell when measuring fair value less costs to sell, shall not be taken into account when determining the level of the fair value hierarchy within which a fair value measurement is categorised.
74. The availability of relevant inputs and their relative subjectivity might affect the selection of appropriate valuation techniques (see paragraph 61). However, the fair value hierarchy prioritises the inputs to valuation techniques, not the valuation techniques used to measure fair value. For example, a fair value measurement developed using a present value technique might be categorised within Level 2 or Level 3, depending on the inputs that are significant to the entire measurement and the level of the fair value hierarchy within which those inputs are categorised.
75. If an observable input requires an adjustment using an unobservable input and that adjustment results in a significantly higher or lower fair value measurement, the resulting measurement would be categorised within Level 3 of the fair value hierarchy. For example, if a market participant would take into account the effect of a restriction on the sale of an asset when estimating the price for the asset, an entity would adjust the quoted price to reflect the effect of that restriction. If that quoted price is a Level 2 input and the adjustment is an unobservable input that is significant to the entire measurement, the measurement would be categorised within Level 3 of the fair value hierarchy.

Application of the hierarchy requires an entity to prioritise observable inputs over those that are unobservable when measuring fair value. In addition, for disclosures, it provides a framework for users to consider the relative subjectivity of the fair value measurements made by the reporting entity.

15.1 The fair value hierarchy

The fair value hierarchy classifies the inputs used to measure fair value into three levels, which are described in Figure 5 below.

Figure 5: Fair value hierarchy

	Level 1	Level 2	Level 3
Definition ⁶⁹	Quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date	Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly or indirectly	Unobservable inputs for the asset or liability
Example	The price for a financial asset or financial liability for the identical asset is traded on an active market (e.g., London Stock Exchange)	Interest rates and yield curves observable at commonly quoted intervals, implied volatilities, and credit spreads	Projected cash flows used in a discounted cash flow calculation

Valuation techniques used to measure fair value must maximise the use of relevant observable inputs and minimise the use of unobservable inputs. The best indication of fair value is a quoted price in an active market (i.e., “a market in which transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis”).⁷⁰

The fair value hierarchy focuses on prioritising the inputs used in valuation techniques, not the techniques themselves. While the availability of inputs might affect the valuation technique(s) selected to measure fair value, as discussed in Chapter 13, IFRS 13 does not prioritise the use of one technique over another (with the exception of the requirement to measure identical financial instruments that trade in active markets at PxQ). The determination of the valuation technique(s) to be used requires significant judgement and will be dependent on the specific characteristics of the asset or liability being measured and the principal (or most advantageous) market in which market participants would transact for the asset or liability.

Although the valuation techniques themselves are not subject to the fair value hierarchy, a risk adjustment that market participants would demand to compensate for a risk inherent in a particular valuation technique (e.g., a model adjustment) is considered an input that must be assessed within the fair value hierarchy. As discussed in sections 15.2 and 15.5 below, if this type of risk adjustment is included, it should be considered when categorising the fair value measurement within the fair value hierarchy.

⁶⁹ IFRS 13 Appendix A

⁷⁰ IFRS 13 Appendix A

15.2 Categorisation within the fair value hierarchy

IFRS 13 distinguishes between where in the fair value hierarchy an individual input to a valuation technique may fall as compared to where the entire measurement is categorised for disclosure purposes.

Inputs used in a valuation technique may fall into different levels of the fair value hierarchy. However, for disclosure purposes, the fair value measurement must be categorised in its entirety (i.e., the fair value measure for the asset or liability or the group of assets and/or liability, depending on the unit of account) within the hierarchy. That categorisation may be obvious when only a single input is used, for example, when measuring fair value using a quoted price in an active market, without adjustment. However, an asset or liability that is not traded in an active market with a quoted price will often require more than one input to determine its fair value. For example, an over-the-counter option on a traded equity security measured at fair value using an option pricing model requires the following market-based inputs: (i) expected volatility; (ii) expected dividend yield; and (iii) the risk-free rate of interest.

IFRS 13 clarifies that the hierarchy categorisation of a fair value measurement in its entirety is determined based on the lowest level input that is significant to the entire measurement. The standard also makes it clear that adjustments to arrive at measurements based on fair value (e.g., 'costs to sell' when measuring fair value less costs to sell) are not to be taken into account in this determination. In the over-the-counter equity option example, assume that the risk-free interest rate and the dividend yield were determined to be Level 2 inputs, but the expected volatility was determined to be a Level 3 input. If expected volatility was determined to be significant to the overall value of the option, the entire measurement would be classified as Level 3.

If an observable input requires an adjustment using an unobservable input and that adjustment results in a significantly higher or lower fair value measurement, the resulting fair value measurement would be categorised within Level 3 of the hierarchy. Consider a restricted security. While the quoted price for the unrestricted security may be observable, if Level 3 inputs are needed to determine the effect of the restriction on the instrument's fair value, and this effect is significant to the measurement, the asset would be categorised in Level 3 of the fair value hierarchy. In addition, as discussed in Chapter 7, in certain situations adjustments to a transaction price in an inactive market may be required. If these adjustments are based on unobservable inputs and significant to the measurement, the item would be categorised in Level 3.

It is important to understand that the determination of the hierarchy level in which the fair value measure falls (and therefore the category in which it will be disclosed - see section 19.3.3) is based on the fair value measurement for the specific item being measured, which will be dependent on the unit of account for the asset or liability. This may create practical challenges in relation to fair value measurements for non-financial assets and financial assets and liabilities with offsetting risk measured using the measurement exception discussed in Chapter 11. For example, in situations where the unit of account for a non-financial asset is the individual item, but the valuation premise is in combination with other assets (or other assets and liabilities), the value of the asset group would need to be attributed to the individual assets or liabilities or to the various instruments within each level of the fair value hierarchy. For example, consider Example 9-3 in section 9.2.2. The unit of account for the vines and the land was the specified by IAS 41 and IAS 16,

respectively. However, their highest and best use was in combination, together and with other assets. The value of that group would need to be attributed to each of the assets, including both the vines and land, as the fair value of these individual assets should be categorised within the fair value hierarchy.

15.2.1 Assessing the significance of inputs

IFRS 13 does not provide specific guidance on how entities should evaluate the significance of individual inputs. This determination will require judgement and consideration of factors specific to the asset or liability (or group of assets and liabilities) being measured. In some cases, the use of sensitivity analysis or stress testing might be appropriate approaches to assess the effects of unobservable inputs on a fair value measure. In situations where more than one unobservable input is used in a fair value measure, the assessment of significance should be considered based on the aggregate effect of all the unobservable inputs.

While IFRS 13 does not provide specific guidance on assessing the significance of inputs, as noted in section 15.2, the standard considers significance in relation to 'the entire measurement'. In our view, this requires the assessment to consider the fair value measure itself, rather than any resulting change in fair value, regardless of whether that change is recognised (i.e., in profit or loss or other comprehensive income) or unrecognised. For example, assume an investment property is measured at fair value at the end of each reporting period. In the current reporting period the fair value of the investment property reduces by CU 200,000 to CU 500,000. The significance of any inputs to the fair value measurement would be assessed by reference to the CU 500,000, even though CU 200,000 is the amount that will be recognised in profit or loss.

Entities should have a documented policy with respect to their approach to determining the significance of unobservable inputs on its fair value measurements and apply that policy consistently. This is important in light of the disclosure requirements in IFRS 13, particularly for fair value measurements categorised within Level 3 of the fair value hierarchy (see section 19.3).

15.2.2 Transfers between levels within the fair value hierarchy

For assets or liabilities that are measured at fair value (or measurements based on fair value) at the end of each reporting period, their categorisation within the fair value hierarchy may change over time. This might be the case if the market for a particular asset or liability that was previously considered active (Level 1) becomes inactive (Level 2 or Level 3) or, if significant inputs used in a valuation technique that were previously unobservable (Level 3) become observable (Level 2) given transactions that were observed around the measurement date. Such changes in categorisation within the hierarchy are referred to in IFRS 13 as transfers between levels within the fair value hierarchy.

An entity is required to select, and consistently apply, a policy for determining when transfers between levels of the fair value hierarchy are deemed to have occurred, that is, the timing of recognising transfers. This policy must be the same for transfers into and out of the levels. Examples of policies for determining the timing of transfers include:

- ▶ The date of the event or change in circumstances that caused the transfer
- ▶ The beginning of the reporting period

Or

- ▶ The end of the reporting period

The standard requires an entity to disclose this policy (see section 19.2). In addition, the selected timing (i.e., when transfers are deemed to have occurred) has a direct impact on the information an entity needs to collate in order to meet the disclosure requirements in IFRS 13 – specifically those required by paragraphs 93(c) and 93(e)(iv) of IFRS 13 – for both transfers between Levels 1 and 2 and transfers into and out of Level 3 (these disclosure requirements are discussed in section 19.3.2).

15.2.3 Information provided by third-party pricing services or brokers

Extract from IFRS 13

B45. This IFRS does not preclude the use of quoted prices provided by third parties, such as pricing services or brokers, if an entity has determined that the quoted prices provided by those parties are developed in accordance with this IFRS.

B46. If there has been a significant decrease in the volume or level of activity for the asset or liability, an entity shall evaluate whether the quoted prices provided by third parties are developed using current information that reflects orderly transactions or a valuation technique that reflects market participant assumptions (including assumptions about risk). In weighting a quoted price as an input to a fair value measurement, an entity places less weight (when compared with other indications of fair value that reflect the results of transactions) on quotes that do not reflect the result of transactions.

B47. Furthermore, the nature of a quote (eg whether the quote is an indicative price or a binding offer) shall be taken into account when weighting the available evidence, with more weight given to quotes provided by third parties that represent binding offers.

IFRS 13 does not preclude the use of quoted prices provided by third parties, such as pricing services or brokers, provided those quoted prices are developed in accordance with the standard. Quoted prices provided by third parties represent an important source of information in estimating fair value for many entities. While not precluded, the standard makes it clear that the use of broker quotes, third-party pricing services, or a third-party valuation specialist does not alleviate management's responsibility for the fair value measurements (and the related disclosures) that will be included in its financial statements.

It is important for entities to understand the source of information received from brokers and pricing services, particularly when there has been a significant decrease in the volume or level of activity for the asset or liability, as management needs to assess the relevance of these quotes. This is discussed further in section 7.3.

As discussed in section 14.5, an entity should evaluate whether quotes from brokers and pricing services are based on current information that reflects orderly transactions or were determined using valuation techniques that appropriately reflect market participant assumptions regarding risk. Entities should place less weight on third-party quotes that are not based on transactions compared to fair value indications that are based on market transactions.

Determining the level in which assets and liabilities are categorised in the fair value hierarchy for disclosure purposes often requires judgement. Information provided by third-party pricing services or brokers could represent Level 1, Level 2 or Level 3 inputs depending on the source of the information and the type of instrument being measured. For example, pricing services may provide quoted market prices (e.g., closing price) for financial instruments traded in active markets. These prices are Level 1 measurements.

Alternatively, a pricing service may provide an entity with consensus pricing information (e.g., information obtained by polling dealers for indications of mid-market prices for a particular asset class). In our view, the non-binding nature of consensus pricing would generally result in its classification as Level 3 information, assuming no additional corroborating evidence.

Pricing services may also use valuation models to estimate values for certain instruments. For example, pricing services may use matrix pricing to determine the value of many fixed-income securities. The hierarchy level in which these instruments would be categorised depends on the observability of the valuation model's inputs. Therefore, entities that use pricing services should understand the data sources and valuation methods used to derive those third-party quotes. This information will determine where the entity's instruments would be categorised in the fair value hierarchy.

Similarly, the level within the hierarchy in which a broker quote is categorised depends on the nature of the quote. In certain brokered markets, firm quotes are disclosed and an entity has the ability to 'hit' or execute a transaction at the quoted price. Depending on the level of activity in these markets, those quotes may be categorised as Level 1 or Level 2. However, when an entity has to solicit a quote from a broker, the quotes are often non-binding and may include a disclaimer that releases the broker from being held to that price in an actual transaction. In our view, on their own, non-binding quotes would generally represent a Level 3 input. In addition, when the quote includes explanatory language or a disclaimer, the entity should assess whether the quote represents fair value (exit price) or whether an adjustment is needed.

If an entity uses multiple quotes within a narrow range when measuring fair value, it will likely provide stronger evidence of fair value than a single quote or quotes that are widely dispersed. However, the number of quotes should not, in and of itself, affect the categorisation within the fair value hierarchy. An entity would still need to consider the nature of those quotes. For example, in our view multiple Level 3 inputs, within a reasonable range, would not result in a Level 2 measurement without additional observable corroborating evidence.

15.2.4 Categorisation of over-the-counter derivative instruments

Depending on the observability of the inputs used, fair value measurements of over-the-counter derivatives would likely be within either Level 2 or Level 3 of the fair value hierarchy.

Although these instruments may trade in active markets, quoted prices for the identical asset or liability will often not be available when measuring fair value subsequently. For example, consider a 10-year plain vanilla interest-rate swap entered into on 1 January 20X9. While there may be quoted prices for 10-year swaps, when measuring the fair value of the swap on 31 March 20X9, the subject instrument would represent a 9.75 year swap for which quoted prices are generally not available. As a result, most over-the-counter derivative contracts are valued based on inputs to models.

16 Level 1 inputs

Extract from IFRS 13

76. Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date.
77. A quoted price in an active market provides the most reliable evidence of fair value and shall be used without adjustment to measure fair value whenever available, except as specified in paragraph 79.
78. A Level 1 input will be available for many financial assets and financial liabilities, some of which might be exchanged in multiple active markets (eg 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; and
 - (b) whether the entity can enter into a transaction for the asset or liability at the price in that market at the measurement date.
79. An entity shall not make an adjustment to a Level 1 input except in the following circumstances:
- (a) when an entity holds a large number of similar (but not identical) assets or liabilities (eg debt securities) that are measured at fair value and a quoted price in an active market is available but not readily accessible for each of those assets or liabilities individually (ie given the large number of similar assets or liabilities held by the entity, it would be difficult to obtain pricing information for each individual asset or liability at the measurement date). In that case, as a practical expedient, an entity may measure fair value using an alternative pricing method that does not rely exclusively on quoted prices (eg matrix pricing). However, the use of an alternative pricing method results in a fair value measurement categorised within a lower level of the fair value hierarchy.
 - (b) when a quoted price in an active market does not represent fair value at the measurement date. That might be the case if, for example, significant events (such as transactions in a principal-to-principal market, trades in a brokered market or announcements) take place after the close of a market but before the measurement date. An entity shall 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 results in a fair value measurement categorised within a lower level of the fair value hierarchy.

Extract from IFRS 13 *continued*

- (c) when measuring the fair value of a liability or an entity's own equity instrument using the quoted price for the identical item traded as an asset in an active market and that price needs to be adjusted for factors specific to the item or the asset (see paragraph 39). If no adjustment to the quoted price of the asset is required, the result is a fair value measurement categorised within Level 1 of the fair value hierarchy. However, any adjustment to the quoted price of the asset results in a fair value measurement categorised within a lower level of the fair value hierarchy.
80. If an entity holds a position in a single asset or liability (including a position comprising a large number of identical assets or liabilities, such as a holding of financial instruments) and the asset or liability is traded in an active market, the fair value of the asset or liability shall be measured within Level 1 as the product of the quoted price for the individual asset or liability and the quantity held by the entity. That is the case 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.

16.1 Use of Level 1 inputs

As a general principle, IFRS 13 mandates the use of quoted prices in active markets for identical assets and liabilities whenever available. With limited exceptions, quoted prices in active markets should not be adjusted when determining the fair value of identical assets and liabilities, as the IASB believes these prices provide the most reliable evidence of fair value. The exceptions to this principle are discussed in sections 16.1.1, 16.2 and 16.3 (also see section 11.1.4).

Level 1 inputs are most commonly associated with financial instruments, for example, shares that are actively traded on a stock exchange. It may be that an asset or liability is traded in multiple active markets, for example shares that are listed on more than one stock exchange. In light of this, the standard emphasises the need, within Level 1, to determine both the principal (or most advantageous) market (see Chapter 5) and whether the entity can enter into a transaction for the asset or liability at the price in that market at the measurement date (see Chapter 7).

As discussed in section 15.2, if no adjustment is made to a Level 1 input, the result is the entire fair value measurement being categorised within Level 1 of the fair value hierarchy. However, any adjustment made to a Level 1 input or use of the practical expedient in IFRS 13.79(a) would result in categorisation within a lower level of the fair value hierarchy. If the adjustment uses significant unobservable inputs, it would need to be categorised within Level 3.

16.1.1 Level 1 liabilities and instruments classified in an entity's own equity

Quoted prices in active markets for identical liabilities and instruments classified as an entity's own equity are Level 1 measurements. These instruments would likewise be categorised in Level 1 when a quoted price exists for the identical instrument traded as an asset in an active market, and no adjustment to the quoted price is required.

The fair value of corporate debt issued by a reporting entity, for example, would be a Level 1 measurement if the asset corresponding to the issuer's liability (i.e., the corporate bond) trades in an active market and no adjustment is made to the

quoted price. While the liability itself is not transferred in an active market, the IASB concluded that Level 1 classification is appropriate when the identical instrument trades as an asset in an active market.

If an adjustment to the corresponding asset's price is required to address differences between the asset and the liability or equity instrument (as discussed in Chapter 10), the adjusted price would not be a Level 1 measurement. For example, an adjustment to the quoted price of an asset that includes the effect of a third-party credit enhancement would be warranted when measuring the fair value of the liability. In this case, the corresponding asset and the liability would be deemed to have different units of account (as discussed in section 10.3.1).

16.2 Alternative pricing methods

When an entity holds a large number of similar assets and liabilities for which quoted prices exist, but are not easily accessible, IFRS 13 allows for the use of alternative pricing methods (e.g., matrix pricing) as a practical expedient. The IASB provided this practical expedient to ease the administrative burden associated with obtaining quoted prices for each individual instrument. However, if the practical expedient is used, the resulting fair value measurement would not be considered a Level 1 measurement.

16.3 Quoted prices in active markets that are not representative of fair value

IFRS 13 recognises that in certain situations a quoted price in an active market might not represent the fair value of an asset or liability, such as when significant events occur on the measurement date, but after the close of trading. In these situations, entities would adjust the quoted price to incorporate this new information into the fair value measurement. However, if the quoted price is adjusted, the resulting fair value measurement would no longer be considered a Level 1 measurement.

An entity's valuation policies and procedures should address how these 'after-hour' events will be identified and assessed. Controls should be put in place to ensure that any adjustments made to quoted prices are appropriate under IFRS 13 and are applied in a consistent manner.

16.4 Unit of account

Although the unit of account is generally determined in accordance with other IFRSs, IFRS 13 addresses the unit of account for Level 1 assets and liabilities. IFRS 13.80 states that if "an entity holds a position in a single asset or liability (including a position comprising a large number of identical assets or liabilities, such as a holding of financial instruments) and the asset or liability is traded in an active market, the fair value of the asset or liability shall be measured within Level 1 as the product of the quoted price for the individual asset or liability and the quantity held by the entity." By dictating that fair value must be determined based on PxQ, IFRS 13 effectively prescribes the unit of account as the individual asset or liability in these situations.

17 Level 2 inputs

Extract from IFRS 13

81. 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.
82. 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.
 - (c) inputs other than quoted prices that are observable for the asset or liability, for example:
 - (i) interest rates and yield curves observable at commonly quoted intervals;
 - (ii) implied volatilities; and
 - (iii) credit spreads.
 - (d) market-corroborated inputs.
83. Adjustments to Level 2 inputs will vary depending on factors specific to the asset or liability. Those factors include the following:
 - (a) the condition or location of the asset;
 - (b) the extent to which inputs relate to items that are comparable to the asset or liability (including those factors described in paragraph 39); and
 - (c) the volume or level of activity in the markets within which the inputs are observed.
84. An adjustment to a Level 2 input that is significant to the entire measurement might result in a fair value measurement categorised within Level 3 of the fair value hierarchy if the adjustment uses significant unobservable inputs.
85. Paragraph B35 describes the use of Level 2 inputs for particular assets and liabilities.

17.1 Level 2 inputs

Level 2 inputs include quoted prices (in non-active markets or in active markets for similar assets or liabilities), observable inputs other than quoted prices and inputs that are not directly observable but are corroborated by observable market data.

The inclusion of market-corroborated inputs is significant because it expands the scope of Level 2 inputs beyond those directly observable for the asset or liability. Inputs determined through mathematical or statistical techniques, such as correlation or regression, may be categorised as Level 2 if the inputs into, and/(or) the results from, these techniques can be corroborated with observable market data.

IFRS 13 requires that a Level 2 input be observable (either directly or indirectly through corroboration with market data) for substantially the full contractual term of the asset or liability being measured. Therefore, a long-term input extrapolated

from short-term observable market data (e.g., a 30-year yield extrapolated from the observable 5-, 10- and 15-year points on the yield curve) would generally not be considered a Level 2 input.

17.2 Examples of Level 2 inputs

IFRS 13.B35's application guidance provides a number of examples of Level 2 inputs for specific assets or liabilities:

Figure 6: Examples of Level 2 inputs⁷¹

Asset or Liability	Example of a Level 2 Input
Receive-fixed, pay-variable interest rate swap based on the London Interbank Offered Rate (LIBOR) swap rate	The LIBOR swap rate if that rate is observable at commonly quoted intervals for substantially the full term of the swap.
Receive-fixed, pay-variable interest rate swap based on a yield curve denominated in a foreign currency	The swap rate based on a yield curve denominated in a foreign currency that is observable at commonly quoted intervals for substantially the full term of the swap. This would be a Level 2 input 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.
Receive-fixed, pay-variable interest rate swap based on a specific bank's prime rate	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.
Three-year option on exchange-traded shares	<p>The implied volatility for the shares derived through extrapolation to year 3 if both of the following conditions exist:</p> <ul style="list-style-type: none"> (i) Prices for one-year and two-year options on the shares are observable (ii) The extrapolated implied volatility of a three-year option is corroborated by observable market data for substantially the full term of the option <p>In this situation, the implied volatility could be derived by extrapolating from the implied volatility of the one-year 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-year and two-year implied volatilities is established.</p>

⁷¹ Refer to Appendix 1 in our publication, *Classification of financial instruments within IFRS 7 of the fair value hierarchy* (October 2009), for additional examples of financial instruments that may be classified in Level 2 of the fair value hierarchy

Asset or Liability	Example of a Level 2 Input
Licensing arrangement	For a licensing arrangement that is acquired in a business combination and was recently negotiated with an unrelated party by the acquired entity (the party to the licensing arrangement), a Level 2 input would be the royalty rate in the contract with the unrelated party at inception of the arrangement.
Finished goods inventory at a retail outlet	For finished goods inventory that is acquired in a business combination, a Level 2 input would be either a price to customers in a retail market or a price to retailers in a wholesale market, adjusted for differences between the condition and location of the inventory item and the comparable (i.e., 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 will 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.
Building held and used	The price per square metre for the building (a valuation multiple) derived from observable market data, e.g., multiples derived from prices in observed transactions involving comparable (i.e., similar) buildings in similar locations.
Cash-generating unit	A valuation multiple (e.g., a multiple of earnings or revenue or a similar performance measure) derived from observable market data, e.g., multiples derived from prices in observed transactions involving comparable (i.e., similar) businesses, taking into account operational, market, financial and non-financial factors.

17.3 Market corroborated inputs

Level 2 inputs, as discussed in section 17.1, include market-corroborated inputs. That is, inputs that are not directly observable for the asset or liability, but, instead, are corroborated by observable market data through correlation or other statistical techniques.

IFRS 13 does not provide any detailed guidance regarding the application of statistical techniques, such as regression or correlation, when attempting to corroborate inputs to observable market data (Level 2) inputs. However, the lack of any specific guidance or 'bright lines' for evaluating the validity of a statistical inference by the IASB should not be construed to imply that the mere use of a statistical analysis (such as linear regression) would be deemed valid and appropriate to support Level 2 classification (or a fair value measurement for that matter). Any statistical analysis that is relied on for financial reporting purposes should be evaluated for its predictive validity. That is, the statistical technique

should support the hypothesis that the observable input has predictive value with respect to the unobservable input.

In Example 9-2 in section 9.1.2, for the three-year option on exchange-traded shares, the implied volatility derived through extrapolation has been categorised as a Level 2 input because the input was corroborated (through correlation) to an implied volatility based on an observable option price of a comparable entity. In this example, the determination of an appropriate proxy (i.e., a comparable entity) is a critical component in supporting that the implied volatility of the actual option being measured is a market-corroborated input.

In practice, identifying an appropriate benchmark or proxy requires judgement that should appropriately incorporate both qualitative and quantitative factors. For example, when valuing equity-based instruments (e.g., equity options), an entity should consider the industry, nature of the business, size, leverage and other factors that would qualitatively support the expectation that the benchmarks are sufficiently comparable with the subject entity. Qualitative considerations may differ depending on the type of input being analysed or the type of instrument being measured (e.g., a foreign exchange option versus an equity option).

In addition to the qualitative considerations discussed above, quantitative measures are used to validate a statistical analysis. For example, if a regression analysis is used as a means of corroborating non-observable market data, the results of the analysis can be assessed based on statistical measures.

17.4 Making adjustments to a Level 2 input

The standard acknowledges that, unlike a Level 1 input, adjustments to Level 2 inputs may be more common, but will vary depending on the factors specific to the asset or liability.

There are a number of reasons why an entity may need to make adjustments to Level 2 inputs. Adjustments to observable data from inactive markets (see Chapter 7), for example, might be required for timing differences between the transaction date and the measurement date, or differences between the asset being measured and a similar asset that was the subject of the transaction. In addition, factors such as the condition or location of an asset should also be considered when determining whether adjustments to Level 2 inputs are warranted.

If the Level 2 input relates to an asset or liability that is similar, but not identical to the asset or liability being measured, the entity would need to consider what adjustments may be required to capture differences between the item being measured and the reference asset or liability. For example, do they have different characteristics, such as credit quality of the issuer in the case of a bond? Adjustments may be needed for differences between the two.

If an adjustment to a Level 2 input is significant to the entire fair value measurement, it may affect the fair value measurement's categorisation within the fair value hierarchy for disclosure purposes. If the adjustment uses significant unobservable inputs, it would need to be categorised within Level 3 of the hierarchy.

17.5 Recently observed prices in an inactive market

Valuation technique(s) used to measure fair value must maximise the use of *relevant* observable inputs and minimise the use of unobservable inputs. While recently observed transactions for the same (or similar) items often provide useful information for measuring fair value, transactions or quoted prices in inactive markets are not necessarily indicative of fair value. A significant decrease in the volume or level of activity for the asset or liability may increase the chances of this. However, transaction data should not be ignored, unless the transaction is determined to be disorderly (see Chapter 7).

The relevance of observable data, including last transaction prices, must be considered when assessing the weight this information should be given when estimating fair value and whether adjustments are needed (as discussed in section 17.4). Adjustments to observed transaction prices may be warranted in some situations, particularly when the observed transaction is for a similar but not identical instrument. Therefore, it is important to understand the characteristics of the item being measured compared with an item being used as a benchmark.

When few, if any, transactions can be observed for an asset or liability, an index may provide relevant pricing information if the underlying risks of the index are similar to the item being measured. While the index price may provide general information about market participant assumptions regarding certain risk features of the asset or liability, adjustments are often required to account for specific characteristics of the instrument being measured or the market in which the instrument would trade (e.g., liquidity considerations). While this information may not be determinative for the particular instrument being measured, it can serve to either support or contest an entity's determination regarding the relevance of observable data in markets that are not active.

IFRS 13 does not prescribe a methodology for applying adjustments to observable transactions or quoted prices when estimating fair value. Judgement is needed when evaluating the relevance of observable market data and determining what (if any) adjustments should be made to this information. However, the application of this judgement must be within the confines of the stated objective of a fair value measurement within the IFRS 13 framework. Since fair value is intended to represent the exit price in a transaction between market participants in the current market, an entity's intent to hold the asset due to current market conditions, or any entity-specific needs, is not relevant to a fair value measurement and is not a valid reason to adjust observable market data.

18 Level 3 inputs

Extract from IFRS 13

86. Level 3 inputs are unobservable inputs for the asset or liability.
87. Unobservable inputs shall be used to measure fair value to the extent that relevant observable inputs are not available, thereby allowing for situations in which there is little, if any, market activity for the asset or liability at the measurement date. However, the fair value measurement objective remains the same, ie an exit price at the measurement date from the perspective of a market participant that holds the asset or owes the liability. Therefore, unobservable inputs shall reflect the assumptions that market participants would use when pricing the asset or liability, including assumptions about risk.
88. Assumptions about risk include the risk inherent in a particular valuation technique used to measure fair value (such as a pricing model) and the risk inherent in the inputs to the valuation technique. A measurement that does not include an adjustment for risk would not represent a fair value measurement if market participants would include one when pricing the asset or liability. For example, it might be necessary to include a risk adjustment when there is significant measurement uncertainty (eg when there has been a significant decrease in the volume or level of activity when compared with normal market activity for the asset or liability, or similar assets or liabilities, and the entity has determined that the transaction price or quoted price does not represent fair value, as described in paragraphs B37-B47).
89. An entity shall develop unobservable inputs using the best information available in the circumstances, which might include the entity's own data. In developing unobservable inputs, an entity may begin with its own data, but it shall adjust those data if reasonably available information indicates that other market participants would use different data or there is something particular to the entity that is not available to other market participants (eg an entity-specific synergy). An entity need not undertake exhaustive efforts to obtain information about market participant assumptions. However, an entity shall take into account all information about market participant assumptions that is reasonably available. Unobservable inputs developed in the manner described above are considered market participant assumptions and meet the objective of a fair value measurement.
90. Paragraph B36 describes the use of Level 3 inputs for particular assets and liabilities.

18.1 Use of level 3 inputs

A number of IFRSs permit or require the use of fair value measurements regardless of the level of market activity for the asset or liability as at the measurement date (e.g., the initial measurement of intangible assets acquired in a business combination). As such, IFRS 13 allows for the use of unobservable inputs to measure fair value in situations where observable inputs are not available. In these cases, the IASB recognises that the best information available with which to develop unobservable inputs may be an entity's own data. However, IFRS 13 is

clear that while an entity may begin with its own data, this data should be adjusted if:

- ▶ Reasonably available information indicates that other market participants would use different data

Or

- ▶ There is something particular to the entity that is not available to other market participants (e.g., an entity-specific synergy)

For example, when measuring the fair value of an investment property, we would expect that a reporting entity with a unique tax position would consider the typical market participant tax rate in its analysis. While this example is simplistic and is meant only to illustrate a concept, in practice significant judgement will be required when evaluating what information about unobservable inputs or market data may be reasonably available.

It is important to note that an entity is not required to undertake exhaustive efforts to obtain information about market participant assumptions when pricing an asset or liability. Nor is an entity required to establish the absence of contrary data. As a result, in those situations where information about market participant assumptions does not exist or is not reasonably available, a fair value measurement may be based primarily on the reporting entity's own data.

Even in situations where an entity's own data is used, the objective of the fair value measurement remains the same; an exit price from the perspective of a market participant that holds the asset or owes the liability. As such, unobservable inputs should reflect the assumptions that market participants would use, which includes the risk inherent in a particular valuation technique (such as a pricing model) and the risk inherent in the inputs. As discussed in section 6.2 above, if a market participant would consider those risks in pricing an asset or liability, an entity must include that risk adjustment; otherwise the result would not be a fair value measurement. When classifying the entire fair value measurement within the fair value hierarchy, an entity would need to consider the significance of the model adjustment as well as the observability of the data supporting the adjustment.

18.2 Examples of level 3 inputs

IFRS 13.B36's application guidance provides a number of examples of Level 3 inputs for specific assets or liabilities, as outlined in Figure 7 below.

Figure 7: Examples of Level 3 inputs⁷²

Asset or Liability	Example of a Level 3 Input
Long-dated currency swap	An interest rate in a specified currency that is 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.
Three-year option on exchange-traded shares	Historical volatility, i.e., the volatility for the shares derived from the shares' historical prices. Historical volatility typically does not represent current market participants' expectations about future volatility, even if it is the only information available to price an option.
Interest rate swap	An adjustment to a mid-market consensus (non-binding) price for the swap developed using data that are not directly observable and cannot otherwise be corroborated by observable market data.
Decommissioning liability assumed in a business combination	A current estimate using the entity's own data about the future cash outflows to be paid to fulfil the obligation (including market participants' expectations about the costs of fulfilling the obligation and the compensation that a market participant would require for taking on the obligation to dismantle the asset) if there is no reasonably available information 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, e.g., a current risk-free interest rate or a credit-adjusted risk-free rate if the effect of the entity's credit standing on the fair value of the liability is reflected in the discount rate rather than in the estimate of future cash outflows.
Cash-generating unit	A financial forecast (e.g., of cash flows or profit or loss) developed using the entity's own data if there is no reasonably available information that indicates that market participants would use different assumptions.

⁷² Refer to Appendix 1 in our publication, *Classification of financial instruments within IFRS 7 of the fair value hierarchy* (October 2009), for additional examples of financial instruments that may be classified in Level 3 of the fair value hierarchy.

19 Disclosures

The disclosure requirements in IFRS 13 apply to fair value measurements recognised in the statement of financial position, after initial recognition, and disclosures of fair value (i.e., those items that are not measured at fair value in the statement of financial position, but whose fair value is required to be disclosed). However, as discussed in section 2.2.4, IFRS 13 provides a scope exception in relation to disclosures for:

- ▶ Plan assets measured at fair value in accordance with IAS 19
- ▶ Retirement benefit plan investments measured at fair value in accordance with IAS 26
- ▶ Assets for which recoverable amount is fair value less costs of disposal in accordance with IAS 36

In addition to these scope exceptions, the IASB also decided not to require the IFRS 13 disclosures for items that are recognised at fair value only at initial recognition. Disclosure requirements in relation to fair value measurements at initial recognition are covered by the standard that is applicable to that asset or liability. For example, IFRS 3 requires disclosure of the fair value measurement of assets acquired and liabilities assumed in a business combination.

19.1 Disclosure objectives

Extract from IFRS 13

91. An entity shall disclose information that helps users of its financial statements assess both of the following:
- (a) for assets and liabilities that are measured at fair value on a recurring or non-recurring basis in the statement of financial position after initial recognition, the valuation techniques and inputs used to develop those measurements.
 - (b) for recurring fair value measurements using significant unobservable inputs (Level 3), the effect of the measurements on profit or loss or other comprehensive income for the period.
92. To meet the objectives in paragraph 91, an entity shall consider all the following:
- (a) the level of detail necessary to satisfy the disclosure requirements;
 - (b) how much emphasis to place on each of the various requirements;
 - (c) how much aggregation or disaggregation to undertake; and
 - (d) whether users of financial statements need additional information to evaluate the quantitative information disclosed.

If the disclosures provided in accordance with this IFRS and other IFRSs are insufficient to meet the objectives in paragraph 91, an entity shall disclose additional information necessary to meet those objectives.

Extract from IFRS 13 continued

94. An entity shall determine appropriate classes of assets and liabilities on the basis of the following:

- (a) the nature, characteristics and risks of the asset or liability; and
- (b) the level of the fair value hierarchy within which the fair value measurement is categorised.

The number of classes may need to be greater for fair value measurements categorised within Level 3 of the fair value hierarchy because those measurements have a greater degree of uncertainty and subjectivity. Determining appropriate classes of assets and liabilities for which disclosures about fair value measurements should be provided requires judgement. A class of assets and liabilities will often require greater disaggregation than the line items presented in the statement of financial position. However, an entity shall provide information sufficient to permit reconciliation to the line items presented in the statement of financial position. If another IFRS specifies the class for an asset or a liability, an entity may use that class in providing the disclosures required in this IFRS if that class meets the requirements in this paragraph.

99. An entity shall present the quantitative disclosures required by this IFRS in a tabular format unless another format is more appropriate.

IFRS 13 requires a number of disclosures designed to provide users of financial statements with additional transparency regarding:

- ▶ The extent to which fair value is used to measure assets and liabilities
- ▶ The valuation techniques, inputs and assumptions used in measuring fair value
- ▶ The effect of Level 3 fair value measurements on profit or loss (or other comprehensive income)

The standard establishes a set of broad disclosure objectives and provides the minimum disclosures an entity must make (see sections 19.2 - 19.5 for discussion regarding the minimum disclosure requirements in IFRS 13).

After providing the minimum disclosures required by IFRS 13 and other standards, such as IAS 1 *Presentation of Financial Statements* or IAS 34 *Interim Financial Reporting*, an entity must assess whether its disclosures are sufficient to meet the disclosure objectives in IFRS 13. If not, the additional information needed in order to meet those objectives must be disclosed. This assessment requires judgement and will depend on the specific facts and circumstances of the entity and the needs of the users of its financial statements.

An entity might, for example, disclose the nature of the item being measured at fair value, including the characteristics of the item being measured that are taken into account in the determination of relevant inputs. In addition, when describing the valuation techniques and inputs used in measuring items classified in Levels 2 and 3, the entity might disclose how third-party information such as broker quotes, pricing services, net asset values and relevant market data was taken into account when measuring fair value.

IFRS 13 includes the following example to illustrate the type of additional information an entity might disclose based on the considerations outlined in IFRS 13.92. These additional disclosures are intended to help financial statement users better understand and evaluate the quantitative information provided by the entity (e.g., the quantitative information the entity disclosed regarding the valuation of its residential mortgage-backed securities holdings).

Example 19-1: Valuation techniques and inputs⁷³

An entity might disclose some or all the following to comply with paragraph 92 of the IFRS:

- (a) The nature of the item being measured at fair value, including the characteristics of the item being measured that are taken into account in the determination of relevant inputs. For example, for residential mortgage-backed securities, an entity might disclose the following:
 - (i) The types of underlying loans (e.g., prime loans or sub-prime loans)
 - (ii) Collateral
 - (iii) Guarantees or other credit enhancements
 - (iv) Seniority level of the tranches of securities
 - (v) The year of issue
 - (vi) The weighted-average coupon rate of the underlying loans and the securities
 - (vii) The weighted-average maturity of the underlying loans and the securities
 - (viii) The geographical concentration of the underlying loans
 - (ix) Information about the credit ratings of the securities.
- (b) How third-party information such as broker quotes, pricing services, net asset values and relevant market data was taken into account when measuring fair value.

19.1.1 Format of disclosures

IFRS 13's requirements with regard to the format of disclosures, are limited to the presentation of quantitative information. An entity is required to use a tabular format to present the quantitative disclosures required by IFRS 13, unless another format is more appropriate. This requirement is consistent with the existing requirements in IFRS 7(2012).27B.

19.1.2 Level of disaggregation

IFRS 13 requires disclosures to be presented by class of asset or liability (the definition of a class of asset or liability is discussed in section 19.1.2.A). Unlike certain other IFRSs, IFRS 13 does not specify the level of aggregation or disaggregation an entity must use when complying with its disclosure requirements. Instead, as discussed below, it simply provides the basis for making this determination. As such, the appropriate class of assets and liabilities may depend on the entity's specific facts and circumstances and the needs of users of its financial statements.

⁷³ IFRS 13.IE64

According to the standard, a class of assets and liabilities will often require greater disaggregation than the line items presented in the statement of financial position. Therefore, an entity must present information in sufficient detail to permit reconciliation back to the statement of financial position. Such a reconciliation could be presented through the use of subtotals that correspond to line items disclosed in the statement of financial position. However, other approaches may be acceptable.

19.1.2.A Determining appropriate classes of assets and liabilities for disclosure

Determining appropriate classes of assets and liabilities requires judgement. An entity bases this determination on the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy within which the fair value measurement is categorised (see section 15.2 for further discussion). In addition, the standard specifies that the number of classes may need to be greater for fair value measurements categorised within Level 3 of the fair value hierarchy because they have a greater degree of uncertainty and subjectivity.

Other IFRSs may specify classes for asset or liability. For example, IAS 16 and IAS 38 *Intangible Assets* require disclosures by class of property, plant and equipment or intangible respectively. If another IFRS specifies the class for an asset or a liability and that class meets the requirements for determining a class in accordance with IFRS 13, an entity may use that class in providing IFRS 13's required disclosures.

The determination of a class includes considering the fair value measurement's categorisation within the fair value hierarchy as noted above with respect to Level 3 measurements. IFRS 13 requires disclosure of this categorisation for each class of asset or liability (see sections 19.3 -19.4). While an entity takes the fair value categorisation into consideration when determining a class, this does not mean that assets or liabilities within a single class cannot be categorised within different levels of the hierarchy. For example, assume an entity has grouped all its buildings within one class in accordance with IAS 16 and measures all of those buildings using the revaluation approach in that standard. Further assume that the fair value measurements of some buildings are categorised in Level 2, while others are categorised within Level 3, based on the availability of observable inputs used in the fair value measurement. In and of itself, the assets' categorisation within two levels of the hierarchy does not necessarily mean the entity would need to further disaggregate the IAS 16 class of buildings into two classes for disclosure in accordance with IFRS 13. However, it may be appropriate to do that if the differing categorisation indicated the buildings categorised in Level 2 were different in their nature, characteristics or risks compared to those categorised in Level 3.

19.1.3 Differentiating between 'recurring' and 'non-recurring'

IFRS 13 has different disclosure requirements for those fair value measurements that are recognised (rather than just disclosed), depending on whether those measurements are recurring or non-recurring in nature (see section 19.3). Therefore, it is important to understand the distinction:

- ▶ *Recurring* fair value measurements are those that another IFRS requires or permits to be recognised in the statement of financial position at the end of each reporting period. For example, the fair value of a financial asset classified as fair value through profit or loss in accordance with IAS 39 would need to be measured at the end each reporting period.

- ▶ *Non-recurring* fair value measurements are those that another IFRS requires or permits to be recognised in the statement of financial position in particular circumstances. For example, IFRS 5 requires an entity to measure an asset held for sale at the lower of its carrying amount and fair value less costs to sell. Since the asset's fair value less costs to sell is only recognised in the statement of financial position when it is lower than its carrying amount, that fair value measurement is non-recurring.

19.2 Accounting policy disclosures

Extract from IFRS 13

95. An entity shall disclose and consistently follow its policy for determining when transfers between levels of the fair value hierarchy are deemed to have occurred in accordance with paragraph 93(c) and (e)(iv). The policy about the timing of recognising transfers shall be the same for transfers into the levels as for transfers out of the levels. Examples of policies for determining the timing of transfers include the following:
- (a) the date of the event or change in circumstances that caused the transfer.
 - (b) the beginning of the reporting period.
 - (c) the end of the reporting period.
96. If an entity makes an accounting policy decision to use the exception in paragraph 48, it shall disclose that fact.

In general, the requirements to disclose an entity's accounting policies will be addressed by the standard that requires or permits an item to be measured at fair value. In addition, IAS 8's disclosure requirement would address any changes to an entity's accounting policies. In addition to these, IFRS 13 requires the disclosure of two policies.

First, if an entity makes an accounting policy decision to use the exception in relation to the measurement of fair value for financial assets and financial liabilities with offsetting positions, it must disclose that fact (see section Chapter 11 for further discussion regarding the measurement exception and criteria for selecting this accounting policy choice).

Second, an entity must disclose its policy for determining when transfers between levels of the fair value hierarchy are deemed to have occurred (see section 15.2.2 for further discussion regarding this policy choice).

As discussed at 13.1.4 above, changes to fair value resulting from a change in the valuation technique or its application are accounted for as a change in accounting estimate in accordance with IAS 8 (unless the valuation technique is applied in error, would be accounted for as a correction of an error in accordance with IAS 8). However, information would be disclosed in accordance with IFRS 13, not IAS 8; specifically, that there has been a change in valuation technique and the reasons for the change (see section 19.3.5 for further discussion).

19.3 Disclosures for recognised fair value measurements

Extract from IFRS 13

93. To meet the objectives in paragraph 91, an entity shall disclose, at a minimum, the following information for each class of assets and liabilities (see paragraph 94 for information on determining appropriate classes of assets and liabilities) measured at fair value (including measurements based on fair value within the scope of this IFRS) in the statement of financial position after initial recognition:
- (a) for recurring and non-recurring fair value measurements, the fair value measurement at the end of the reporting period, and for non-recurring fair value measurements, the reasons for the measurement. Recurring fair value measurements of assets or liabilities are those that other IFRSs require or permit in the statement of financial position at the end of each reporting period. Non-recurring fair value measurements of assets or liabilities are those that other IFRSs require or permit in the statement of financial position in particular circumstances (eg when an entity measures an asset held for sale at fair value less costs to sell in accordance with IFRS 5 Non-current Assets Held for Sale and Discontinued Operations because the asset's fair value less costs to sell is lower than its carrying amount).
 - (b) for recurring and non-recurring fair value measurements, the level of the fair value hierarchy within which the fair value measurements are categorised in their entirety (Level 1, 2 or 3).
 - (c) for assets and liabilities held at the end of the reporting period that are measured at fair value on a recurring basis, the amounts of any transfers between Level 1 and Level 2 of the fair value hierarchy, the reasons for those transfers and the entity's policy for determining when transfers between levels are deemed to have occurred (see paragraph 95). Transfers into each level shall be disclosed and discussed separately from transfers out of each level.
 - (d) for recurring and non-recurring fair value measurements categorised within Level 2 and Level 3 of the fair value hierarchy, a description of the valuation technique(s) and the inputs used in the fair value measurement. If there has been a change in valuation technique (eg changing from a market approach to an income approach or the use of an additional valuation technique), the entity shall disclose that change and the reason(s) for making it. For fair value measurements categorised within Level 3 of the fair value hierarchy, an entity shall provide quantitative information about the significant unobservable inputs used in the fair value measurement. An entity is not required to create quantitative information to comply with this disclosure requirement if quantitative unobservable inputs are not developed by the entity when measuring fair value (eg when an entity uses prices from prior transactions or third-party pricing information without adjustment). However, when providing this disclosure an entity cannot ignore quantitative unobservable inputs that are significant to the fair value measurement and are reasonably available to the entity.

Extract from IFRS 13 *continued*

- (e) for recurring fair value measurements categorised within Level 3 of the fair value hierarchy, a reconciliation from the opening balances to the closing balances, disclosing separately changes during the period attributable to the following:
 - (i) total gains or losses for the period recognised in profit or loss, and the line item(s) in profit or loss in which those gains or losses are recognised.
 - (ii) total gains or losses for the period recognised in other comprehensive income, and the line item(s) in other comprehensive income in which those gains or losses are recognised.
 - (iii) purchases, sales, issues and settlements (each of those types of changes disclosed separately).
 - (iv) the amounts of any transfers into or out of Level 3 of the fair value hierarchy, the reasons for those transfers and the entity's policy for determining when transfers between levels are deemed to have occurred (see paragraph 95). Transfers into Level 3 shall be disclosed and discussed separately from transfers out of Level 3.
- (f) for recurring fair value measurements categorised within Level 3 of the fair value hierarchy, the amount of the total gains or losses for the period in (e)(i) included in profit or loss that is attributable to the change in unrealised gains or losses relating to those assets and liabilities held at the end of the reporting period, and the line item(s) in profit or loss in which those unrealised gains or losses are recognised.
- (g) for recurring and non-recurring fair value measurements categorised within Level 3 of the fair value hierarchy, a description of the valuation processes used by the entity (including, for example, how an entity decides its valuation policies and procedures and analyses changes in fair value measurements from period to period).
- (h) for recurring fair value measurements categorised within Level 3 of the fair value hierarchy:
 - (i) for all such measurements, a narrative description of the sensitivity of the fair value measurement to changes in unobservable inputs if a change in those inputs to a different amount might result in a significantly higher or lower fair value measurement. If there are interrelationships between those inputs and other unobservable inputs used in the fair value measurement, an entity shall also provide a description of those interrelationships and of how they might magnify or mitigate the effect of changes in the unobservable inputs on the fair value measurement. To comply with that disclosure requirement, the narrative description of the sensitivity to changes in unobservable inputs shall include, at a minimum, the unobservable inputs disclosed when complying with (d).

Extract from IFRS 13 continued

- (ii) for financial assets and financial liabilities, if changing one or more of the unobservable inputs to reflect reasonably possible alternative assumptions would change fair value significantly, an entity shall state that fact and disclose the effect of those changes. The entity shall disclose how the effect of a change to reflect a reasonably possible alternative assumption was calculated. For that purpose, significance shall be judged with respect to profit or loss, and total assets or total liabilities, or, when changes in fair value are recognised in other comprehensive income, total equity.
- (i) for recurring and non-recurring fair value measurements, if the highest and best use of a non-financial asset differs from its current use, an entity shall disclose that fact and why the non-financial asset is being used in a manner that differs from its highest and best use.

IFRS 13.93 establishes the minimum disclosure requirements for fair value measurements (and those based on fair value) that are *recognised* in the statement of financial position after initial recognition. The requirements vary depending on whether the fair value measurements are recurring or non-recurring and their categorisation within the fair value hierarchy (i.e., Level 1, 2, or 3 – see Chapter 15 above for further discussion regarding the fair value hierarchy).

Irrespective of the frequency at which the measurements are made, the disclosures under IFRS 13 are intended to provide financial statement users with additional insight into the relative subjectivity of various fair value measurements and enhance their ability to broadly assess an entity's quality of earnings.

19.3.1 Disclosures for recognised recurring fair value measurements

The disclosure requirements in IFRS 13.93 (see the extract above) apply to all fair value measurements that are recognised in the financial statements on a recurring basis. Given the increased subjectivity, IFRS 13 requires additional disclosures for fair value measurements categorised in Level 3 of the fair value hierarchy than for those categorised in Levels 1 or 2. These additional disclosure requirements for Level 3 fair value measurements are discussed in sections 19.3.5 – 19.3.8.

19.3.2 Disclosures for recognised non-recurring fair value measurements

Certain disclosure requirements in IFRS 13 do not apply to fair value measurements that are non-recurring in nature (e.g., revalued property, plant and equipment). Specifically, the following disclosures are *not* required for non-recurring recognised fair value measurements:

- ▶ Information about any transfers between Level 1 and Level 2 of the fair value hierarchy
- ▶ A reconciliation of the opening balances to the closing balances for Level 3 measurements (also referred to as the Level 3 roll-forward)
- ▶ A narrative description of the sensitivity of Level 3 fair value measurements to changes in unobservable inputs
- ▶ For financial assets and financial liabilities, quantitative sensitivity analysis for Level 3 fair value measurements.

Information regarding transfers between hierarchy levels and the Level 3 reconciliation do not lend themselves to non-recurring measurements and, therefore, are not required. While discussing the sensitivity of Level 3 measurements to changes in unobservable inputs might provide financial statement users with some information about how the selection of these inputs affects non-recurring valuations, the Boards ultimately decided that this information is most relevant for recurring measurements.

However, entities are required to disclose the reason for any non-recurring fair value measurements made subsequent to the initial recognition of an asset or liability. For example, the entity may intend to sell or otherwise dispose of it, thereby resulting in the need for its measurement at fair value less costs to sell based on the requirements of IFRS 5, if lower than the asset's cost.

While it is obvious for recurring measurements, determining the periods in which the fair value disclosures should be made for non-recurring measurements is less clear. For example, assume a listed entity revalues a building in accordance with IAS 16 at the end of its second quarter and appropriately increases the carrying value of the asset to its then fair value. In its interim financial statements, the entity would make all of the disclosures required by IFRS 13 for non-recurring fair value measurements. During the second half of the financial year, the entity depreciates the asset, reducing the carrying amount below its fair value. While the carrying value of the asset at the end of the financial year is no longer at fair value, the asset was revalued to fair value during the year. Therefore, in its annual financial statements, the entity would again disclose the information required by IFRS 13 for non-recurring fair value measurements. While not explicit in IFRS 13, we believe this approach is consistent with the interim and annual disclosure requirements for assets subsequently measured under the revaluation model in IAS 34 and IAS 16.

In these situations, we recommend that the disclosures clearly indicate that the fair value information presented is not current but rather as at the date fair value was measured. Entities should also indicate when the carrying amount of the asset no longer equals its fair value.

19.3.3 Fair value hierarchy classification

IFRS 13 requires entities to disclose the fair value hierarchy level in which each fair value measurement is categorised. As noted in section 15.2, the classification of an asset or liability in the fair value hierarchy is based on the lowest level input that is significant to the fair value measurement in its entirety. Although the hierarchy disclosure is presented by class of asset or liability, it is important to understand that the determination of the hierarchy level in which a fair value measurement falls (and therefore the category in which it will be disclosed) is based on the fair value measurement for the specific item being measured and, as such, is driven by the unit of account for the asset or liability.

For example, in situations where the unit of account for a financial instrument is the individual item, but the measurement exception for financial instruments is used (as discussed in Chapter 11), entities may need to allocate portfolio-level adjustments to the various instruments that make up the net exposure for purposes of hierarchy classification.

This may seem inconsistent to certain constituents given the discussion in Chapter 11 about the consideration of size as a characteristic of the net risk exposure when the measurement exception for financial instruments is used. However, the IASB and FASB staff have indicated that the determination of the net

risk exposure as the unit of measurement applies only for measurement considerations and was not intended to change current practice with respect to disclosures. As such, the entire net exposure would not be categorised in a single level of the fair value hierarchy (e.g., Level 2), unless all of the individual items that make up the net exposure would fall into that level.

To illustrate, consider an individual derivative that is valued using the measurement exception as part of a group of derivative instruments with offsetting credit risk (due to the existence of a legally enforceable netting agreement). Assuming the portfolio included instruments that on their own must be categorised in different levels of the fair value hierarchy (i.e., Level 2 and Level 3), for disclosure purposes, the portfolio-level adjustment for credit risk (considering the effect of master netting agreements) may need to be attributed to the individual derivative transactions within the portfolio or to the group of transactions that fall within each of the levels of the hierarchy. This example assumes that the portfolio-level adjustment for credit risk is based on observable market data. If the portfolio-level adjustment was determined using unobservable inputs, the significance of the adjustment to the measurement of the individual derivative instruments would need to be considered in order to determine if classification in Level 2 or Level 3 was appropriate.

The following example from IFRS 13 illustrates how an entity might disclose, in tabular format, the fair value hierarchy category for each class of assets and liabilities measured at fair value at the end of each reporting period.

Example 19-2: Disclosure of assets measured at fair value and their categorisation in the fair value hierarchy⁷⁴

Description	Fair value measurements at the end of the reporting period using				
	31/12/X9	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total gains (losses)
Recurring fair value measurements					
Trading equity securities^(a):					
Real estate industry	93	70	23		
Oil and gas industry	45	45			
Other	15	15			
Total trading equity securities	<u>153</u>	<u>130</u>	<u>23</u>		
Other equity securities^(a):					
Financial services industry	150	150			
Healthcare industry	163	110		53	
Energy industry	32			32	
Private equity fund investments ^(b)	25			25	
Other	15	15			
Total other equity securities	<u>385</u>	<u>275</u>		<u>110</u>	
Debt securities:					
Residential mortgage-backed securities	149		24	125	
Commercial mortgage-backed securities	50			50	
Collateralised debt obligations	35			35	
Risk-free government securities	85	85			
Corporate bonds	93	9	84		
Total debt securities	<u>412</u>	<u>94</u>	<u>108</u>	<u>210</u>	
Hedge fund investments:					
Equity long/short	55		55		
Global opportunities	35		35		
High-yield debt securities	90			90	
Total hedge fund investments	<u>180</u>		<u>90</u>	<u>90</u>	
Derivatives:					
Interest rate contracts	57		57		
Foreign exchange contracts	43		43		
Credit contracts	38			38	
Commodity futures contracts	78	78			
Commodity forward contracts	20		20		
Total derivatives	<u>236</u>	<u>78</u>	<u>120</u>	<u>38</u>	

⁷⁴ IFRS 13.IE60

Example 19-2: Disclosure of assets measured at fair value and their categorisation in the fair value hierarchy *continued*

Description	Fair value measurements at the end of the reporting period using				Total gains (losses)
	31/12/X9	Quoted prices in active markets for identical assets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	
Investment properties:					
Commercial - Asia	31			31	
Commercial - Europe	27			27	
Total investment properties	58			58	
Total recurring fair value measurements	1,424	577	341	506	
Non-recurring fair value measurements					
Assets held for sale ^(c)	26		26		(15)
Total non-recurring fair value measurements	26		26		(15)

- (a) On the basis of its analysis of the nature, characteristics and risks of the securities, the entity has determined that presenting them by industry is appropriate.
- (b) On the basis of its analysis of the nature, characteristics and risks of the investments, the entity has determined that presenting them as a single class is appropriate.
- (c) In accordance with IFRS 5, assets held for sale with a carrying amount of CU35,000,000 were written down to their fair value of CU26,000,000, less costs to sell of CU6,000,000 (or CU20,000,000), resulting in a loss of CU15,000,000, which was included in profit or loss for the period.

(Note: A similar table would be presented for liabilities unless another format is deemed more appropriate by the entity.)

In the above example, the gain or loss recognised during the period for assets and liabilities measured at fair value on a non-recurring basis is separately disclosed and discussed in the notes to the financial statements.

19.3.4 Transfers between hierarchy levels for recurring fair value measurements

IFRS 13 requires companies to disclose information regarding all transfers between fair value hierarchy levels (i.e., situations where an asset or liability was classified within a different level in the fair value hierarchy in the previous reporting period). However, this disclosure applies only to assets and liabilities held at the end of the reporting period which are measured at fair value on a recurring basis. Information regarding transfers into or out of Level 3 is captured in the Level 3 reconciliation (discussed in section 19.3.6) as these amounts are needed to roll forward Level 3 balances from the beginning to the end of the period being disclosed. The amounts of any transfers between Level 1 and Level 2 of the fair value hierarchy are also required to be disclosed. Regardless of the hierarchy levels involved, transfers into each level of the hierarchy are disclosed separately from transfers out of each level. That is, all transfers are required to be presented on a gross basis by hierarchy level, whether included in the Level 3 reconciliation or disclosed separately.

For all transfer amounts disclosed, an entity is required to discuss the reasons why the measurement was reclassified within the fair value hierarchy (i.e., transferred between hierarchy levels). Reasons might include the market for a particular asset or liability previously considered active (Level 1) becoming inactive (Level 2 or Level 3), or significant inputs used in a valuation technique that were previously unobservable (Level 3) becoming observable (Level 2) given transactions that were observed around the measurement date.

As discussed in sections 15.2.2 and 19.2, IFRS 13 also requires that entities disclose and consistently follow their policy for determining when transfers between fair value hierarchy levels are deemed to have occurred. That is, an entity's policy about the timing of recognising transfers into the hierarchy levels should be the same as the policy for recognising transfers out, and this policy should be used consistently from period to period. IFRS 13.95 includes the following examples of potential policies: the actual date of the event or change in circumstances that caused the transfer, the beginning of the reporting period or the end of the reporting period. In practice, some variation of these approaches may also be used by entities. For example, some entities may use an intra-period approach using a transfer amount based on the fair value as at the month-end in which the transfer occurred, as opposed to the actual date within the month. The following illustrative example demonstrates the differences between the three methods noted above.

Example 19-3: Comparison of policies for recognising transfers

Assume an entity acquires an asset at 31 December 20X7 for CU 1,000 that was categorised in Level 2 of the fair value hierarchy at year end 20X7 and throughout Q1 20X8. At the end of Q1 20X8, the fair value of the asset based on market observable information was CU 950, and, as such, the asset was excluded from the Level 3 reconciliation. During Q2 20X8, observable market information was no longer available, so the entity categorised the asset in Level 3 at the end of Q2 20X8. During Q2 20X8, the fair value of the asset decreased from CU 950 to CU 750, with CU 50 of the change in fair value arising subsequent to the time when market observable information was no longer available.

Under the three approaches described above, the Level 3 reconciliation for Q2 20X8 would be as follows:

	Transferred to Level 3 at:		
	Beginning of the period	Actual date	End of the period
Beginning fair value	-	-	-
Purchases, issuances and settlements	-	-	-
Transfers in	CU 950	CU 800	CU 750
Total losses	CU (200)	CU (50)	-
Ending fair value	CU 750	CU 750	CU 750

As previously noted, the disclosures under IFRS 13 are intended to provide information that enables users to identify the effects of fair value measurements that are more subjective in nature on reported earnings, and thereby enhance financial statement users' ability to make their own assessment regarding earnings quality. We believe that this objective is best met by considering the level of observability associated with the fair value measurement made at the end of the

reporting period (i.e., the observability of the inputs used to determine fair value on the last day in the period). As such, while no specific approach is required under IFRS, we believe a beginning-of-period approach for recognising transfers provides greater transparency on the effect that unobservable inputs have on fair value measurements and reported earnings. Under this view, all changes in fair value that arise during the reporting period of the transfer are disclosed as a component of the Level 3 reconciliation.

While the 'actual date' approach more precisely captures the date on which a change in the observability of inputs occurred, its application can be more operationally complex. In addition, in our view, it does not necessarily provide more decision-useful information than the beginning-of-period approach. This is because, for a given period, the intra-period approach results in an allocation of the fair value changes between hierarchy levels that is inconsistent with the actual categorisation of the item as at the end of the reporting period. As such, the intra-period approach implies that a portion of the earnings recognised during the period is of a higher (or lower) quality solely because there was observable information regarding the value of the instrument at some point during the period.

To further illustrate this point, assume an entity acquires an investment in a private company in Q1 for CU 1,000. In the middle of Q2, the company completes an initial public offering that values the investment at CU 1,500. At the end of Q2, the fair value of the investment is CU2,200 based on a quoted market price. Under the intra-period approach for the six-month period ended Q2, CU 500 would be included as an unrealised gain in the Level 3 reconciliation, despite the fact that the entire CU 1,200 unrealised gain recognised during the six-month period is supported by observable market information (i.e., a quoted price less cash paid).

Of the three alternatives, we believe the end-of-period approach is the least effective in achieving IFRS 13's disclosure objectives. Under this approach, the Level 3 reconciliation would not reflect any unrealised gains or losses for items that move from Level 2 to Level 3 during the reporting period.

19.3.5 Disclosure of valuation techniques and inputs

Entities are required to describe the valuation techniques and inputs used to measure the fair value of items categorised in Level 2 or Level 3 of the fair value hierarchy. In addition, entities are required to disclose instances where there has been a change in the valuation technique(s) used during the period, and the reason for making the change. As discussed in section 19.3.5.A, the standard also requires quantitative information about the significant unobservable inputs to be disclosed for Level 3 fair value measurements.

Importantly, the disclosures related to valuation techniques and inputs (including the requirement to disclose quantitative information about unobservable inputs) apply to both recurring and non-recurring fair value measurements.

19.3.5.A Significant unobservable inputs for Level 3 fair value measurements

For Level 3 measurements, IFRS 13 specifically requires that entities provide quantitative information about the significant unobservable inputs used in the fair value measurement. For example, an entity with asset-backed securities categorised in Level 3 would be required to quantitatively disclose the inputs used in its valuation models related to prepayment speed, probability of default, loss

given default and discount rate (assuming these inputs were all unobservable and deemed to be significant to the valuation).

Consistent with all of the disclosures in IFRS 13, entities are required to present this information separately for each class of assets or liabilities based on the nature, characteristics and risks of their Level 3 measurements. As such, we expect that entities will likely disclose both the range and weighted average of the unobservable inputs used across a particular class of Level 3 assets or liabilities. In addition, entities should assess whether the level of disaggregation at which this information is provided results in meaningful information to users, consistent with the objectives of IFRS 13.

In some situations significant unobservable inputs may not be developed by the reporting entity itself, such as when an entity uses third-party pricing information without adjustment. In these instances, IFRS 13 states that an entity is not required to create quantitative information to comply with its disclosure requirements. However, when making these disclosures, entities cannot ignore information about significant unobservable inputs that is 'reasonably available'.

Determining whether information is 'reasonably available' will require judgement, and there may be some diversity in practice stemming from differences in entities' access to information and information vendors may be willing or able to provide. If the valuation has been developed, either by the entity or an external valuations expert at the direction of the entity, quantitative information about the significant unobservable inputs would be expected to be reasonably available and should be disclosed. As a result, entities need to ensure that any valuers they use provide them with sufficient information to make the required disclosures.

In contrast, when an entity receives price quotes or other valuation information from a third-party pricing service or broker, the specific unobservable inputs underlying this information may not always be reasonably available to the entity. While determining whether information is reasonably available in these instances will require judgement, we would expect entities to make good-faith efforts to obtain the information needed to meet the disclosure requirements in IFRS 13. In addition, some diversity in practice may stem from differences in entities' access to information and the nature of information that various vendors may be willing or able to provide. However, in all cases, any adjustments made by an entity to the pricing data received from a third party should be disclosed if these adjustments are not based on observable market data and are deemed to be significant to the overall measurement.

The following example from IFRS 13 illustrates the type of information an entity might provide to comply with the requirement to disclose quantitative information about Level 3 fair value measurements.

Example 19-4: Significant unobservable inputs (Level 3)⁷⁵

Quantitative information about fair value measurements using significant unobservable inputs (Level 3)

(CU in millions)	Fair value at 31/12/X9	Valuation technique(s)	Unobservable input	Range (weighted average)		
Other equity securities:						
Healthcare industry	53	Discounted cash flow	Weighted average cost of capital	7%-16% (12.1%)		
			Long-term revenue growth rate	2%-5% (4.2%)		
			Long-term pre-tax operating margin	3%-20% (10.3%)		
			Discount for lack of marketability ^(a)	5%-20% (17%)		
			Control premium ^(a)	10%-30% (20%)		
		Market comparable companies	EBITDA multiple ^(b)	10-13 (11.3)		
			Revenue multiple ^(b)	1.5-2.0 (1.7)		
			Discount for lack of marketability ^(a)	5%-20% (17%)		
			Control premium ^(a)	10%-30% (20%)		
			Energy industry	32	Discounted cash flow	Weighted average cost of capital
Energy industry	32	Discounted cash flow	Long-term revenue growth rate	3%-5.5% (4.2%)		
			Long-term pre-tax operating margin	7.5%-13% (9.2%)		
			Discount for lack of marketability ^(a)	5%-20% (10%)		
			Control premium ^(a)	10%-20% (12%)		
			Market comparable companies	EBITDA multiple ^(b)		6.5-12 (9.5)
		Revenue multiple ^(b)		1.0-3.0 (2.0)		
		Discount for lack of marketability ^(a)		5%-20% (10%)		
		Control premium ^(a)		10%-20% (12%)		
		Private equity fund investments ^(b)		25		Net asset value ^(c)
		Debt securities:				
Residential mortgage-backed securities	125	Discounted cash flow	Constant prepayment rate	3.5%-5.5% (4.5%)		
			Probability of default	5%-50% (10%)		
			Loss severity	40%-100% (60%)		
Commercial mortgage-backed securities	50	Discounted cash flow	Constant prepayment rate	3%-5% (4.1%)		
			Probability of default	2%-25% (5%)		
			Loss severity	10%-50% (20%)		
Collateralised debt obligations	35	Consensus pricing	Offered quotes comparability adjustments (%)	20-45 -10% -+15% (+5%)		
Hedge fund investments:						
High-yield debt securities	90	Net asset value ^(c)	n/a	n/a		

⁷⁵ IFRS 13.IE63

Example 19-4: Significant unobservable inputs (Level 3) *continued*

(CU in millions)	Fair value at 31/12/X9	Valuation technique(s)	Unobservable input	Range (weighted average)
Derivatives:				
Credit contracts	38	Option model	Annualised volatility of credit ^(d)	10%-20%
			Counterparty credit risk ^(e)	0.5%-3.5%
			Own credit risk ^(e)	0.3%-2.0%
Investment properties:				
Commercial - Asia	31	Discounted cash flow	Long-term net operating income margin	18%-32% (20%)
			Cap rate	0.08-0.12 (0.10)
		Market comparable companies	Price per square metre (USD)	\$3,000-\$7,000 (\$4,500)
Commercial - Europe	27	Discounted cash flow	Long-term net operating income margin	15%-25% (18%)
			Cap rate	0.06-0.10 (0.08)
		Market comparable companies	Price per square metre (EUR)	€4,000-€12,000 (€8,500)

- (a) Represents amounts used when the entity has determined that market participants would take into account these premiums and discounts when pricing the investments.
- (b) Represents amounts used when the entity has determined that market participants would use such multiples when pricing the investments.
- (c) The entity has determined that the reported net asset value represents fair value at the end of the reporting period.
- (d) Represents the range of volatility curves used in the valuation analysis that the entity has determined market participants would use when pricing the contracts.
- (e) Represents the range of the credit default swap curves used in the valuation analysis that the entity has determined market participants would use when pricing the contracts.

(Note: A similar table would be presented for liabilities unless another format is deemed more appropriate by the entity.)

19.3.6 Level 3 reconciliation

IFRS 13 requires a reconciliation (also referred to as the Level 3 roll-forward) of the beginning and ending balances for any recurring fair value measurements that utilise significant unobservable inputs (i.e., Level 3 inputs). Therefore, any asset or liability (measured at fair value on a recurring basis) that was determined to be a Level 3 measurement at either the beginning or the end of a reporting period would need to be considered in the Level 3 reconciliation.

To reconcile Level 3 balances for the period presented, entities must present the following information for each class of assets and liabilities:

- ▶ Balance of Level 3 assets or liabilities (as at the beginning of the period)
- ▶ Total gains or losses
- ▶ Purchases, sales, issues and settlements (presented separately)
- ▶ Transfers in and (or) out of Level 3 (presented separately)
- ▶ Balance of Level 3 assets or liabilities (as at the end of the period)

In addition, entities are required to separately present gains or losses included in earnings from those gains or losses recognised in other comprehensive income, and to describe in which line items these gains or losses are reported in profit or loss, or in other comprehensive income. To enhance the ability of financial statement users to assess an entity's quality of earnings, IFRS 13 also requires companies to separately disclose the amount of total gains and losses reported in profit or loss (for the period) that are attributable to changes in unrealised gains and losses for assets and liabilities categorised in Level 3 and are still held at the end of the reporting period. Effectively, this requires an entity to distinguish its unrealised gains and losses from its realised gains and losses for Level 3 measurements.

The following example from IFRS 13 illustrates how an entity could comply with the Level 3 reconciliation requirements.

Example 19-5: Reconciliation of fair value measurements categorised within Level 3 of the fair value hierarchy⁷⁶

Fair value measurements using significant unobservable inputs (Level 3)

(CU in millions)	Other equity securities			Debt securities			Hedge fund investments	Derivatives	Investment properties		Total
	Healthcare industry	Energy industry	Private equity fund	Residential mortgage-backed securities	Commercial mortgage-backed securities	Collateralised debt obligations	High-yield debt securities	Credit contracts	Asia	Europe	
Opening balance	49	28	20	105	39	25	145	30	28	26	495
Transfers into Level 3				(a)(b)60							60
Transfers out of Level 3				(b)(c)(5)							(5)
Total gains or losses for the period											
Included in profit or loss			5	(23)	(5)	(7)	7	5	3	1	(14)
Included in other comprehensive income	3	1									4
Purchases, issues, sales and settlements											
Purchases	1	3			16	17		18			55
Issues											
Sales				(12)			(62)				(74)
Settlements								(15)			(15)
Closing balance	<u>53</u>	<u>32</u>	<u>25</u>	<u>125</u>	<u>50</u>	<u>35</u>	<u>90</u>	<u>38</u>	<u>31</u>	<u>27</u>	<u>506</u>
Change in unrealised gains or losses for the period included in profit or loss for assets held at the end of the reporting period			5	(3)	(5)	(7)	(5)	2	3	1	(9)

- (a) Transferred from Level 2 to Level 3 because of a lack of observable market data, resulting from a decrease in market activity for the securities.
- (b) The entity's policy is to recognise transfers into and transfers out of Level 3 as at the date of the event or change in circumstances that caused the transfer.
- (c) Transferred from Level 3 to Level 2 because observable market data became available for the securities.

(Note: A similar table would be presented for liabilities unless another format is deemed more appropriate by the entity.)

⁷⁶ IFRS 13.IE61

IFRS 13 also provides the following example to illustrate how an entity could comply with the requirements to separately disclose the amount of total gains and losses reported in profit or loss that are attributable to changes in unrealised gains and losses for assets and liabilities categorised in Level 3 and are still held at the end of the reporting period.

Example 19-6: Gains and losses⁷⁷

(CU in millions)	Financial income	Non-financial income
Total gains or losses for the period included in profit or loss	<u>(18)</u>	<u>4</u>
Change in unrealised gains or losses for the period included in profit or loss for assets held at the end of the reporting period	<u>(13)</u>	<u>4</u>

(Note: A similar table would be presented for liabilities unless another format is deemed more appropriate by the entity.)

19.3.7 Disclosure of valuation processes for Level 3 measurements

Entities are required to describe the valuation processes used for fair value measurements categorised within Level 3 of the fair value hierarchy, whether on a recurring or non-recurring basis. The Boards decided to require these disclosures for Level 3 measurements because they believe this information, in conjunction with the other Level 3 disclosures, will help users assess the relative subjectivity of these measurements.

The following example from IFRS 13 illustrates how an entity could comply with the requirements to disclose the valuation processes for its Level 3 fair value measurements.

⁷⁷ IFRS 13.IE62

Example 19-7: Valuation processes⁷⁸

In order to comply with IFRS 13's requirement to disclose a description of the valuation processes used in relation to fair value measurements categorised within Level 3 of the fair value hierarchy, an entity may disclose all of the following:

- (a) For the group within the entity that decides the entity's valuation policies and procedures:
 - (i) Its description
 - (ii) To whom that group reports
 - (iii) The internal reporting procedures in place (e.g., whether and, if so, how pricing, risk management or audit committees discuss and assess the fair value measurements)
- (b) The frequency and methods for calibration, back testing and other testing procedures of pricing models
- (c) The process for analysing changes in fair value measurements from period to period
- (d) How the entity determined that third-party information, such as broker quotes or pricing services, used in the fair value measurement was developed in accordance with the IFRS
- (e) The methods used to develop and substantiate the unobservable inputs used in a fair value measurement

19.3.8 Sensitivity of Level 3 measurements to changes in significant unobservable inputs

IFRS 13 requires entities to provide a narrative description of the sensitivity of recurring Level 3 fair value measurements to changes in the unobservable inputs used, if changing those inputs would significantly affect the fair value measurement. However, except in relation to financial instruments (see section 19.3.8.A) there is no requirement to quantify the extent of the change to the unobservable input, or the quantitative effect of this change on the measurement (i.e., only discuss directional change).

At a minimum, the unobservable inputs quantitatively disclosed based on the requirements described in section 19.3.5 must be addressed in the narrative description. In addition, entities are required to describe any interrelationships between the unobservable inputs and discuss how they might magnify or mitigate the effect of changes on the fair value measurement.

This disclosure, combined with the quantitative disclosure of significant unobservable inputs, is designed to enable financial statement users to understand the directional effect of certain inputs on an item's fair value and to evaluate whether the entity's views about individual unobservable inputs differ from their own. The Boards believe these disclosures can provide meaningful information to users who are not familiar with the pricing models and valuation techniques used to measure a particular class of assets or liabilities (e.g., complex structured instruments).

⁷⁸ IFRS 13.IE65

The following example from IFRS 13 illustrates how an entity could comply with the disclosure requirements related to the sensitivity of Level 3 measurements to changes in significant unobservable inputs.

Example 19-8: Narrative description of sensitivity to significant unobservable inputs⁷⁹

The significant unobservable inputs used in the fair value measurement of the entity's residential mortgage-backed securities are prepayment rates, probability of default and loss severity in the event of default. Significant increases (decreases) in any of those inputs in isolation would result in a significantly lower (higher) fair value measurement. Generally, a change in the assumption used for the probability of default is accompanied by a directionally similar change in the assumption used for the loss severity and a directionally opposite change in the assumption used for prepayment rates.

We note that the above example is fairly general in nature, because no numbers relating to how the unobservable inputs might be changed, or how such a change would affect fair value, are required to be disclosed. However, in making this disclosure we would encourage entities to avoid over-generalisations that may not hold true in all cases.

19.3.8.A Quantitative sensitivity analysis of Level 3 measurements of financial instruments to changes in significant unobservable inputs

In addition to the qualitative sensitivity analysis, IFRS 13 requires quantitative sensitivity analysis for Level 3 fair value measurements of financial assets and financial liabilities (as noted in section 19.3.2 above, this is only for recurring fair value measurements), which is generally consistent with the existing disclosure requirement in IFRS 7.⁸⁰ If changing one or more of the unobservable inputs to reflect reasonably possible alternative assumptions would change fair value significantly, an entity must disclose the fact and the effect of those changes.

The entity must also disclose how the effect of a change to reflect a reasonably possible alternative assumption was calculated. For the purpose of this disclosure requirement, significance is judged with respect to profit or loss, and total assets or total liabilities, or, when changes in fair value are recognised in other comprehensive income and total equity.

19.3.9 Highest and best use

As discussed in Chapter 9, if the highest and best use of a non-financial asset differs from its current use, entities are required to disclose this fact and why the non-financial asset is being used in a manner that differs from its highest and best use. The Boards believe this information is useful to financial statement users who project expected cash flows based on how an asset is actually being used.

⁷⁹ IFRS 13.IE66

⁸⁰ Refer to Chapter 52 of our publication *International GAAP*® 2012, Ernst & Young, Wiley, for illustrative disclosures of sensitivity analysis for financial instruments

19.4 Disclosures for unrecognised fair value measurements

Extract from IFRS 13

97. For each class of assets and liabilities not measured at fair value in the statement of financial position but for which the fair value is disclosed, an entity shall disclose the information required by paragraph 93(b), (d) and (i). However, an entity is not required to provide the quantitative disclosures about significant unobservable inputs used in fair value measurements categorised within Level 3 of the fair value hierarchy required by paragraph 93(d). For such assets and liabilities, an entity does not need to provide the other disclosures required by this IFRS.

For each class of assets and liabilities not measured at fair value in the statement of financial position, but for which the fair value is disclosed (e.g., financial assets carried at amortised cost whose fair values are required to be disclosed in accordance with IFRS 7), entities are required to disclose all of the following:

- (a) The level of the fair value hierarchy within which the fair value measurements are categorised in their entirety (Level 1, 2 or 3)
- (b) If categorised within Level 2 or Level 3 of the fair value hierarchy:
 - (i) A description of the valuation technique(s) used in the fair value measurement
 - (ii) A description of the inputs used in the fair value measurement
 - (iii) If there has been a change in valuation technique (e.g., changing from a market approach to an income approach or the use of an additional valuation technique):
 - The change
 - The reason(s) for making it
- (c) For non-financial assets, if the highest and best use differs from their current use, an entity must disclose that fact and why the non-financial assets are being used in a manner that differs from its highest and best use

None of the other IFRS 13 disclosures are required for assets and liabilities whose fair value is only disclosed. For example, even though certain fair value disclosures are categorised in Level 3, entities are not required to provide quantitative information about the unobservable inputs used in their valuation because these items are not measured at fair value in the statement of financial position.

19.5 Disclosures regarding liabilities issued with an inseparable third-party credit enhancement

Extract from IFRS 13

98. For a liability measured at fair value and issued with an inseparable third-party credit enhancement, an issuer shall disclose the existence of that credit enhancement and whether it is reflected in the fair value measurement of the liability.

IFRS 13 includes an additional disclosure requirement for liabilities measured at fair value that have been issued with an inseparable third-party credit enhancement (refer to 10.3.1 above for further discussion regarding these instruments). The standard requires that an issuer disclose the existence of the third-party credit enhancement and whether it is reflected in the fair value measurement of the liability.

20 Application guidance – Present value techniques

This chapter focuses on the application guidance in IFRS 13 regarding the use of present value techniques to estimate fair value.

Extract from IFRS 13

Present value techniques

B12. Paragraphs B13-B30 describe the use of present value techniques to measure fair value. Those paragraphs focus on a discount rate adjustment technique and an expected cash flow (expected present value) technique. Those paragraphs neither prescribe the use of a single specific present value technique nor limit the use of present value techniques to measure fair value to the techniques discussed. The present value technique used to measure fair value will depend on facts and circumstances specific to the asset or liability being measured (eg whether prices for comparable assets or liabilities can be observed in the market) and the availability of sufficient data.

The components of a present value measurement

B13. Present value (ie an application of the income approach) is a tool used to link future amounts (eg cash flows or values) to a present amount using a discount rate. A fair value measurement of an asset or a liability using a present value technique captures all the following elements from the perspective of market participants at 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 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 and pose neither uncertainty in timing nor risk of default to the holder (ie a risk-free interest rate).
- (d) the price for bearing the uncertainty inherent in the cash flows (ie a risk premium).
- (e) other factors that market participants would take into account in the circumstances.
- (f) for a liability, the non-performance risk relating to that liability, including the entity's (ie the obligor's) own credit risk.

General principles

B14. Present value techniques differ in how they capture the elements in paragraph B13. However, all the following general principles govern the application of any present value technique used to measure fair value:

- (a) Cash flows and discount rates should reflect assumptions that market participants would use when pricing the asset or liability.
- (b) Cash flows and discount rates should take into account only the factors attributable to the asset or liability being measured.

Extract from IFRS 13 continued

- (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. For example, a discount rate that reflects the uncertainty in expectations about future defaults is appropriate if using contractual cash flows of a loan (ie a discount rate adjustment technique). That same rate should not be used if using expected (ie probability-weighted) cash flows (ie an expected present value technique) because the expected cash flows already reflect assumptions about the uncertainty in future defaults; instead, a discount rate that is commensurate with the risk inherent in the expected cash flows should be used.
- (d) Assumptions about cash flows and discount rates should be internally consistent. For example, nominal cash flows, which 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, which 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. Pre-tax cash flows should be discounted at a rate consistent with those cash flows.
- (e) Discount rates should be consistent with the underlying economic factors of the currency in which the cash flows are denominated.

Risk and uncertainty

- B15. A fair value measurement using present value techniques is made under conditions of uncertainty because the cash flows used are estimates rather than known amounts. In many cases both the amount and timing of the cash flows are uncertain. Even contractually fixed amounts, such as the payments on a loan, are uncertain if there is risk of default.
- B16. Market participants generally seek compensation (ie a risk premium) for bearing the uncertainty inherent in the cash flows of an asset or a liability. A fair value measurement should include a risk premium reflecting the amount that market participants would demand as compensation for the uncertainty inherent 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 reason to exclude a risk premium.
- B17. Present value techniques differ in how they adjust for risk and in the type of cash flows they use. For example:
- (a) The discount rate adjustment technique (see paragraphs B18-B22) uses a risk-adjusted discount rate and contractual, promised or most likely cash flows.
 - (b) Method 1 of the expected present value technique (see paragraph B25) uses risk-adjusted expected cash flows and a risk-free rate.
 - (c) Method 2 of the expected present value technique (see paragraph B26) uses expected cash flows that are not risk-adjusted and a discount rate adjusted to include the risk premium that market participants require. That rate is different from the rate used in the discount rate adjustment technique.

20.1 General principles for use of present value techniques

A present value technique is an application of the income approach, which is one of the three valuation approaches prescribed by IFRS 13. Valuation techniques under the income approach, such as present value techniques or option pricing models, convert expected future amounts to a single present amount. That is, a present value technique uses the projected future cash flows of an asset or liability and discounts those cash flows at a rate of return commensurate with the risk(s) associated with those cash flows. Present value techniques, such as discounted cash flow analyses, are frequently used to estimate the fair value of business entities, non-financial assets and non-financial liabilities, but are also useful for valuing financial instruments that do not trade in active markets.

The standard does not prescribe the use of a single specific present value technique, nor does it limit the use of present value techniques to those discussed. The selection of a present value technique will depend on facts and circumstances specific to the asset or liability being measured at fair value and the availability of sufficient data.

The application guidance in IFRS 13 regarding the use of present value techniques specifically focuses on three techniques: a discount rate adjustment technique and two methods of the expected cash flow (expected present value) technique. These approaches are summarised in the following table.

Figure 8: Comparison of present value techniques described in IFRS 13

	Discount rate adjustment technique (see section 20.3)	Expected cash flow technique	
		Method 1 (see section 20.4)	Method 2 (see section 20.4)
Nature of cash flows	Conditional cash flows - may be contractual or promised or the most likely cash flows	Expected cash flows	Expected cash flows
Cash flows based on probability weighting?	No	Yes	Yes
Cash flows adjusted for certainty?	No	Yes - cash risk premium is deducted. Cash flows represent a certainty-equivalent cash flow	No
Cash flows adjusted for other market risk?	No	Yes	Yes - to the extent not already captured in the discount rate
Discount rate adjusted for the uncertainty inherent in the cash flows?	Yes - uses an observed or estimated market rate of return, which includes adjustment for the possible variation in cash flows	No - already captured in the cash flows	No - already captured in the cash flows

	Discount rate adjustment technique	Expected cash flow technique	
	(see section 20.3)	Method 1 (see section 20.4)	Method 2 (see section 20.4)
Discount rate adjusted for the premium a market participant would require to accept the uncertainty?	Yes	No - represents time value of money only (i.e., the risk-free rate is used)	Yes - represents the expected rate of return (i.e., the risk-free rate is adjusted to include the risk premium)

Additional considerations when applying present value techniques to measuring the fair value of a liability and an entity's own equity instrument not held by other parties as assets are discussed in Chapter 10.

20.2 The components of a present value measurement

Present value measurements use future cash flows or values to estimate amounts in the present, using a discount rate. Present value techniques can vary in complexity depending on the facts and circumstances of the item being measured. Nevertheless, for the purpose of measuring fair value in accordance with IFRS 13, the standard requires a present value technique to capture all of the following elements from the perspective of market participants at the measurement date:

- ▶ An estimate of future cash flows for the asset or liability being measured
- ▶ Expectations about the uncertainty inherent in the future cash flows (i.e., the possible variations in the amount and timing of the cash flows)
- ▶ The time value of money – represented by a risk-free interest rate. That is, the rate on risk-free monetary assets that have maturity dates (or durations) that coincide with the period covered by the cash flows and pose neither uncertainty in timing nor risk of default to the holder
- ▶ A risk premium (i.e., the price for bearing the uncertainty inherent in the cash flows)
- ▶ Other factors that market participants would take into account in the circumstances
- ▶ For a liability, the non-performance risk relating to that liability, including the entity's (i.e., the obligor's) own credit risk

Since present value techniques may differ in how they capture these elements, IFRS 13 sets out the following general principles that govern the application of any present value technique used to measure fair value.

(a) Both cash flows and discount rates should:

- ▶ Reflect assumptions that market participants would use when pricing the asset or liability
- ▶ Take into account only the factors attributable to the asset or liability being measured
- ▶ Have internally consistent assumptions

For example, if the cash flows include the effect of inflation (i.e., nominal cash flows), they would be discounted at a rate that includes the effect of inflation, for example, a rate built off the nominal risk-free interest rate. If cash flows exclude the effect of inflation (i.e., real cash flows), they should be discounted at a rate that excludes the effect of inflation. Similarly, post-tax and pre-tax cash flows should be discounted at a rate consistent with those cash flows.

(b) Discount rates should also:

- ▶ Be consistent with the underlying economic factors of the currency in which the cash flows are denominated
- ▶ Reflect assumptions that are consistent with those assumptions inherent in the cash flows
- ▶ This principle is intended to avoid double-counting or omitting the effects of risk factors. For example, a discount rate that reflects non-performance (credit) risk is appropriate if using contractual cash flows of a loan (i.e., a discount rate adjustment technique - see section 20.3). The same rate would not be appropriate when using probability-weighted cash flows (i.e., an expected present value technique - see section 20.4) because the expected cash flows already reflect assumptions about the uncertainty in future defaults.

20.2.1 Time value of money

The objective of a present value technique is to convert future cash flows into a present amount (i.e., a value as at the measurement date). Therefore, time value of money is a fundamental element of any present value technique. A basic principle in finance theory, time value of money holds that “a dollar today is worth more than a dollar tomorrow”, because the dollar today can be invested and earn interest immediately. Therefore, the discount rate in a present value technique must capture, at a minimum, the time value of money. For example, a discount rate equal to the risk-free rate of interest encompasses only the time value element of a present value technique. If the risk-free rate is used as a discount rate, the expected cash flows must be adjusted into certainty-equivalent cash flows to capture any uncertainty associated with the item being measured and the compensation market participants would require for this uncertainty.

20.2.2 Risk and uncertainty in a present value technique

At its core, the concept of value measures expected rewards against the risks of realising those rewards. Present value techniques implicitly contain uncertainty as they generally deal with estimates rather than known amounts. In many cases both the amount and timing of the cash flows are uncertain. The standard notes that even contractually fixed amounts are uncertain if there is risk of default.

Market participants generally require compensation for taking on the uncertainty inherent in the cash flows of an asset or a liability. This compensation is known as a risk premium. IFRS 13 states that in order to faithfully represent fair value, a present value technique should include a risk premium. The standard acknowledges that determining the appropriate risk premium might be difficult. However, the degree of difficulty alone is not a sufficient reason to exclude a risk premium if market participants would demand one.

Depending on the present value technique used, risk may be incorporated in the cash flows or in the discount rate. However, identical risks should not be captured in both the cash flows and the discount rate in the same valuation analysis. For example, if the probability of default and loss given default for a liability are already

incorporated in the discount rate (i.e., a risk-adjusted discount rate), the projected cash flows should not be further adjusted for the expected losses.

The present value techniques discussed in IFRS 13's application guidance differ in how they adjust for risk and in the type of cash flows they use:

- ▶ The discount rate adjustment technique uses a risk-adjusted discount rate and contractual, promised or most likely cash flows (see section 20.3).
- ▶ Method 1 of the expected present value technique uses cash certain equivalent cash flows and a risk-free rate (see section 20.4).
- ▶ Method 2 of the expected present value technique uses expected cash flows that are not risk-adjusted and a discount rate adjusted to include the risk premium that market participants require. That rate is different from the rate used in the discount rate adjustment technique (see section 20.4).

If the risks are accounted for fully and appropriately, the three present value techniques noted above should all produce an identical fair value measurement, regardless of whether risk is captured in the cash flows or the discount rate (see section 20.4.1 for a numerical example illustrating this point).

20.3 Discount rate adjustment technique

Extract from IFRS 13

B18. 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 (eg 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 an observed or estimated market rate for such conditional cash flows (ie a market rate of return).

B19. 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 (eg whether the cash flows are contractual or non-contractual and are likely to respond similarly to changes in economic conditions), as well as other factors (eg 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 (ie using a 'build-up' approach).

B22. When the discount rate adjustment technique is applied to fixed receipts or payments, 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 not fixed receipts or payments, an adjustment to the cash flows may be necessary to achieve comparability with the observed asset or liability from which the discount rate is derived.

The discount rate adjustment technique attempts to capture all of the risk associated with the item being measured in the discount rate and is most commonly used to value assets and liabilities with contractual payments, such as debt instruments. This technique uses a single set of cash flows from the range of possible estimated amounts and discounts those cash flows using a rate that reflects all of the risk related to the cash flows.

According to the standard, the cash flows may be contractual or promised or the 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 is derived from observable rates of return for comparable assets and liabilities that are traded in the market and incorporates the following:
- ▶ The risk-free interest rate
- ▶ Market participants' expectations about possible variations in the amount or timing of the cash flows
- ▶ The price for bearing the uncertainty inherent in these cash flows (or risk premium)
- ▶ Other risk factors specific to the asset or liability

As such, under this technique the cash flows are discounted at an observed or estimated market rate appropriate for such conditional cash flows (that is, a market rate of return).

Although IFRS 13 does not prescribe when a particular present value technique should be used, the extent of market data available for a particular type of asset or liability will influence when use of the discount rate adjustment technique is appropriate. IFRS 13.B19 states that the "discount rate adjustment technique requires an analysis of market data for comparable assets or liabilities". Therefore, certain assets and liabilities may not lend themselves to the use of the discount rate adjustment technique, even though it may be possible to derive discount rates using market data from several comparable items when no single observable rate of return reflects the risk inherent in the item being measured.

The most challenging aspect of applying this technique is the identification of market observable rates of return that appropriately capture the risk inherent in the asset or liability being measured. Understanding the various risk factors associated with certain types of assets and liabilities is not always easy, and quantifying the effect of these factors is even more difficult. However, it may be helpful to deconstruct a discount rate into its component parts to understand what risks are being considered; beginning with the risk-free rate, which represents the time value of money. In addition to the risk-free rate, entities should consider credit or non-performance risk, if the subject asset or liability requires performance in the future (including, but not limited to, a cash payment). For example, in the case of a financial asset, the discount rate would include compensation required by market participants to assume the risk that the counterparty will be unable to fulfil its obligation. Not all discount rates require an explicit adjustment for credit (or non-performance) risk. Equity interests, for example, may assume perpetual residual cash flows from the operations of a business, rather than a contractual future payment. In this case, an additional component of risk is captured through an equity risk premium, instead of a credit risk adjustment. The long-term

incremental rate of return of equity interests over long-term risk-free interest rates may generally represent an identifiable component of risk.

When applying the discount rate adjustment technique, the credit spread (above the risk-free rate) will implicitly include assumptions about probabilities of default and losses given default without requiring an adjustment to the projected cash flows used in the analysis. However, a credit adjusted risk-free rate may not sufficiently capture all the risk related to the subject asset or liability. Depending on facts and circumstances of the item being measured, the observable rate of return should also capture other potential variability with respect to the timing and amount of the cash flows (e.g., potential variability due to prepayment risk for financial instruments such as mortgage backed securities) and the price for bearing such uncertainty (risk premium).

In addition, when assessing discount rates, it is important to keep in mind the exit price objective of a fair value measurement in IFRS 13. Because the discount rate represents the rate of return required by market participants in the current market, it should also incorporate factors such as illiquidity and the current risk appetite of market participants.

20.3.1 Illustrative example of the discount rate adjustment technique

The following example from IFRS 13 illustrates how a build-up approach is applied when using the discount rate adjustment technique.

Example 20-1: Discount rate adjustment technique ⁸¹

Assume that Asset A is a contractual right to receive CU 800 in one year (i.e., there is 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:

Asset B is a contractual right to receive CU 1,200 in one year and has a market price of CU 1,083. Therefore, the implied annual rate of return (i.e., a one-year market rate of return) is 10.8% $[(CU\ 1,200 / CU\ 1,083) - 1]$.

Asset C is a contractual right to receive CU 700 in two years and has a market price of CU 566. Therefore, the implied annual rate of return (i.e., a two-year market rate of return) is 11.2% $[(CU\ 700 / CU\ 566)^{0.5} - 1]$.

All three assets are comparable with respect to risk (i.e., dispersion of possible pay-offs and credit).

(i) Comparability based nature of the cash flows and other factors

On the basis of the timing of the contractual payments to be received for Asset A relative to the timing for Asset B and Asset C (i.e., 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 (CU 800) and the one-year market rate derived from Asset B (10.8%), the fair value of Asset A is CU 722 $[CU\ 800 / 1.108]$.

⁸¹ IFRS 13.B20-21

Example 20-1: Discount rate adjustment technique *continued*

(ii) *Using the build up approach*

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 two-year market rate indicated by Asset C (11.2%) would be adjusted to a one-year market rate using the term structure of the risk-free yield curve. Additional information and analysis might be required to determine whether the risk premiums for one-year and two-year assets are the same. If it is determined that the risk premiums for one-year and two-year assets are not the same, the two-year market rate of return would be further adjusted for that effect.

As evidenced in the example above, using a build-up approach requires that market data for comparable assets be available. In addition, when applying the build-up approach, significant judgement may be required in determining comparability between the item being measured and the available benchmarks, as well as quantifying the appropriate adjustments necessary to account for any differences that may exist between the item being measured and the applicable benchmark (e.g., differences in credit risks, nature and timing of the cash flows, etc.).

20.4 Expected present value technique

Extract from IFRS 13

B23. The expected present value technique uses as a starting point a set of cash flows that represents the probability-weighted average of all possible future cash flows (ie the 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 with the respective probabilities as the weights. Because all possible cash flows are probability-weighted, the resulting expected cash flow is not conditional upon the occurrence of any specified event (unlike the cash flows used in the discount rate adjustment technique).

B24. In making an investment decision, risk-averse market participants would take into account the risk that the actual cash flows may differ from the expected cash flows. Portfolio theory distinguishes between two types of risk:

- (a) unsystematic (diversifiable) risk, which is the risk specific to a particular asset or liability.
- (b) systematic (non-diversifiable) risk, which is the common risk shared by an asset or a liability with the other items in a diversified portfolio.

Portfolio theory holds that in a market in equilibrium, market participants will be compensated only for bearing the systematic risk inherent in the cash flows. (In markets that are inefficient or out of equilibrium, other forms of return or compensation might be available.)

Extract from IFRS 13 continued

B25. Method 1 of the expected present value technique adjusts the expected cash flows of an asset for systematic (ie market) risk by subtracting a cash risk premium (ie risk-adjusted expected cash flows). Those 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 so that a market participant is indifferent to trading a certain cash flow for an expected cash flow. For example, if a market participant was willing to trade an expected cash flow of CU1,200 for a certain cash flow of CU1,000, the CU1,000 is the certainty equivalent of the CU1,200 (ie the CU200 would represent the cash risk premium). In that case the market participant would be indifferent as to the asset held.

B26. In contrast, Method 2 of the expected present value technique adjusts for systematic (ie market) risk by applying 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 (ie an 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 is likely to 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.

B30. 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 judgements applied.

The expected present value technique is typically used in the valuation of business entities, assets and liabilities with contingent or conditional payouts and items for which discount rates cannot be readily implied from observable transactions.

This technique uses, as a starting point, a set of cash flows that represent the probability-weighted average of all possible future cash flows (i.e., the expected cash flows). Unlike the cash flows used in the discount rate adjustment technique (i.e., contractual, promised or most likely amounts), expectations about possible variations in the amount and/or timing of the cash flows are explicitly incorporated in the projection of the expected cash flows themselves rather than solely in the discount rate.

While, in theory, all possible future cash flows are meant to be considered, in practice, a discrete number of scenarios are often used to capture the probability distribution of potential cash flows.

- ▶ The number of possible outcomes to be considered will generally depend on the characteristics of the specific asset or liability being measured. For example, the outcome of a contingency may be binary, therefore, only two possible outcomes need be considered. In contrast, certain complex financial instruments are valued using option pricing models, such as Monte Carlo simulations, that generate thousands of possible outcomes.
- ▶ Estimating the probability distribution of potential outcomes requires judgement and will depend on the nature of the item being measured.

Assuming the entity's use of the asset is consistent with that of market participants, an entity might look to its own historical performance, current and expected market environments (including expectations of volatility) and budgetary considerations to develop expectations about future cash flows and appropriate weightings. However, as discussed in section 16.5, the use of an entity's own data can only be a starting point when measuring fair value. Adjustments may be needed to ensure that the measurement is consistent with market participant assumptions. For example, synergies that can be realised by the entity should not be considered unless they would similarly be realised by market participants.

The concept of a risk premium is just as important under an expected present value technique as it is under the discount rate adjustment technique. The use of probability-weighted cash flows under an expected present value technique does not remove the need to consider a market risk premium when estimating fair value. While 'expected cash flows' capture the uncertainty in the amount and timing of the future cash flows, the probability weighting does not include the compensation market participants would demand for bearing this uncertainty. For example, assume Asset A is a contractual right to receive CU 10,000. Asset B has a payout that is conditional upon the flip of a coin. If 'heads', Asset B pays CU 20,000; if 'tails', it pays nothing. Assuming no risk of default, both assets have an expected value of CU 10,000 (i.e., CU 10,000 x 100% for Asset A, and CU 20,000 x 50% + CU 0 x 50% for Asset B). However, risk-averse market participants would find Asset A more valuable than Asset B, as the cash-certain payout of CU 10,000 for Asset A is less risky than the expected cash flow of CU 10,000 for Asset B.

Although the variability in the cash flows of Asset B has been appropriately captured by probability-weighting all the possible cash flows (i.e., there is no subjectivity involved in the determination of the probability weighting in the simplified example since the payout is based on a coin flip), Asset B's expected value does not capture the compensation market participants would require for bearing the uncertainty in the cash flows. As such, all else being equal, the price for Asset B would be lower than the price for Asset A. That is, the required rate of return for Asset B would be higher than that for Asset A, in order to compensate the holder for the incremental risk in Asset B's cash flows (relative to Asset A).

20.4.1 Expected present value technique – Method 1 and Method 2

The standard describes two methods of the expected present value technique. The key difference between Method 1 and Method 2 is where the market risk premium is captured. However, either method should provide the same fair value measurement, i.e., where the risk premium is treated should have no effect on relative fair values.

- ▶ *Method 1* – the expected cash flows are adjusted for the systematic (market) risk by subtracting a cash risk premium. This results in risk-adjusted expected cash flows that represent a *certainty-equivalent* cash flow. The cash flows are then discounted at a risk-free interest rate.

Because all of the risk factors have been incorporated into the cash flows under Method 1, the discount rate used would only capture the time value of money. That is, use of a risk-free discount rate is appropriate when using this technique, provided that credit risk considerations are not applicable or have already been considered in the cash flows.

A certainty-equivalent cash flow is an expected cash flow adjusted for risk so that a market participant is indifferent to trading a certain cash flow for an expected cash flow. For example, if a market participant was willing to trade an expected cash flow of CU 1,200 for a cash flow that the market participant is certain to receive of CU 1,000, the CU 1,000 is the certainty-equivalent of the CU 1,200 (i.e., the CU 200 would represent the cash risk premium).

- ▶ *Method 2* – adjusts for systematic (market) risk by applying a risk premium to the risk-free interest rate (i.e., the risk premium is captured in the discount rate). As such, the discount rate represents an expected rate of return (i.e., the expected rate associated with probability-weighted cash flows). In Method 2, the expected cash flows are discounted using this rate.

The use of a risk-free discount rate is not appropriate under Method 2, because the expected cash flows, while probability weighted, do not represent a certainty-equivalent cash flow. The standard suggests that models used for pricing risky assets, such as the capital asset pricing model, could be used to estimate the expected rate of return. As discussed in section 20.3 above, the discount rate used in the discount rate adjustment technique also uses a rate of return, but it is related to *conditional* cash flows. A discount rate determined in accordance with the discount rate adjustment technique is likely to be higher than the discount rate used in Method 2, which is an *expected* rate of return relating to *expected* or *probability-weighted* cash flows.

Capturing the risk premium in the cash flows versus the discount rate has no effect on relative fair values under each method. That is, Method 1 and Method 2 should result in the same fair value measurement, all else being equal.

Example 20-2 below illustrates the application of Method 1 and Method 2 when measuring fair value. 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 judgements applied. However, in practice, Method 1 is rarely used because in most cases, to mathematically estimate the cash certainty adjustment, it is necessary to know the market risk premium that would be applied to the discount rate under Method 2.

Example 20-2: Expected present value techniques⁸²

An asset has expected cash flows of CU 780 in one year determined on the basis of the possible cash flows and probabilities shown below. The applicable risk-free interest rate for cash flows with a one-year horizon is 5%, and the systematic risk premium for an asset with the same risk profile is 3%.

Possible cash flows	Probability	Probability-weighted cash flows
CU		CU
500	15%	75
800	60%	480
900	25%	225
Expected cash flows		780

In this simple example, the expected cash flows of CU 780 represent the probability-weighted average of the three possible outcomes. In more realistic situations, there could be many possible outcomes. However, to apply the expected present value technique, it is not always necessary to take into account distributions of all possible cash flows using complex models and techniques. Rather, it might be possible to develop a limited number of discrete scenarios and probabilities that capture the array of possible cash flows. For example, an entity might use realised cash flows for some relevant past period, adjusted for changes in circumstances occurring subsequently (e.g., changes in external factors, including economic or market conditions, industry trends and competition as well as changes in internal factors affecting the entity more specifically), taking into account the assumptions of market participants.

In theory, the present value (i.e., the fair value) of the asset's cash flows is the same whether determined using Method 1 or Method 2, as follows:

Using Method 1, the expected cash flows are adjusted for systematic (i.e., 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 (i.e., the cash risk premium of CU 22) could be determined using the systematic risk premium of 3% ($CU\ 780 - [CU\ 780 \times (1.05 / 1.08)]$), which results in risk-adjusted expected cash flows of CU 758 ($CU\ 780 - CU\ 22$). The CU 758 is the certainty equivalent of CU 780 and is discounted at the risk-free interest rate (5%). The present value (i.e., the fair value) of the asset is CU 722 ($CU\ 758 / 1.05$).

Using Method 2, the expected cash flows are not adjusted for systematic (i.e., 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% (i.e., the 5% risk-free interest rate plus the 3% systematic risk premium). The present value (i.e., the fair value) of the asset is CU 722 ($CU\ 780 / 1.08$).

Below, we expand the example from IFRS 13 to include the discount rate adjustment technique (described in section 20.2). The following example shows how all three techniques converge to the same fair value measurement, while highlighting the difference in the discount rates applied under each approach.

⁸² IFRS 13.B27-B29

Example 20-3: Comparison of present value techniques

An entity is estimating the fair value of an asset that will expire in one year and has determined that the probability distribution of the future cash flows is as follows.

Possible cash flows	Probability	Probability-weighted cash flows
CU 500	15%	CU 75
CU 800	60%	CU 480
CU 900	25%	CU 225
Expected cash flows		CU 780

Assume that the risk-free interest rate is 5% and the risk premium is 3%. The table below shows that all three present value techniques yield identical results

Method	Contractual cash flows	Most likely cash flows	Expected cash flows	Certainty-equivalent adjustment	Certainty-equivalent cash flows	Discount rate	Present value
Discount rate adjustment technique	N/A	CU 800	N/A	N/A	N/A	10.8%	CU 722
EPV Method 1 - Adjust expected cash flows for risk premium	N/A	N/A	CU 780	CU (22)	CU 758	5.0%	CU 722
EPV Method 2 - Adjust discount rate for risk premium	N/A	N/A	CU 780	N/A	N/A	8.0%	CU 722

Example 20-3: Comparison of present value techniques *continued*

Method	Fair value	Calculation
Discount rate adjustment technique	CU 722	= Most likely cash flow / (1 + risk-free rate + adjustment for cash flow uncertainty + risk premium)
EPV Method 1	CU 722	= (Expected cash flow - certainty-equivalent adjustment ^(a)) / (1 + risk-free rate)
EPV Method 2	CU 722	= Expected cash flow / (1 + risk-free rate + risk premium)

(a) Certainty-equivalent adjustment = Expected cash flow - [Expected cash flow x (1 + risk-free rate) / (1 + risk-free rate + risk premium)]

The three techniques differ in the manner in which the risks in the cash flows are captured, but not the level of the risk inherent in those cash flows. In the discount rate adjustment technique, the most likely cash flow (CU 800) is discounted at a rate that reflects all the risk inherent in the investment (i.e., time value of money, possible variations in the amount of cash flows, risk premium).

Method 1 of the expected present value technique incorporates asset-specific and systematic uncertainty directly into the cash flows (certainty-equivalent cash flow of CU 758) and therefore uses the risk-free rate for discounting, as all the risks associated with the investment are incorporated in the cash flows. The adjustment to the cash flows for systematic risk is based on the 3% risk premium.

Instead of using the risk premium to estimate a certainty-equivalent cash flow, Method 2 of the expected present value technique incorporates the risk premium in the discount rate. The difference between the discount rate in Method 1 and Method 2 is the market risk premium.

21 Effective date and transition

21.1 Effective Date and transitional requirements

IFRS 13 applies to annual periods beginning on or after 1 January 2013. An entity may early adopt the standard, provided this fact is disclosed.⁸³

The standard must be applied prospectively from the beginning of the annual period in which it is initially applied. If we assume an entity has a 30 June balance date and does not early adopt the standard. The date of initial application date would be 1 July 2013. Any fair value measurements and disclosures (and those based on fair value) that occur on or after 1 July 2013 would be measured in accordance with IFRS 13. Any changes to fair value resulting from the initial application of IFRS 13 would be recognised during the year to 30 June 2014.

In the first year of application, disclosures for comparative periods are not required. Disclosures required by IFRS 13 must be provided for the periods after the date of initial application.⁸⁴ In our example, the entity would provide the required disclosures for the year ending 30 June 2014, but need not disclose the same information for the comparative period to 30 June 2013.

21.2 Can IFRS 13 be used as guidance prior to adoption?

Prior to adoption of the standard, IFRS 13 may serve as a useful reference tool of for entities undertaking fair value measurements. However, entities that consider the standard's guidance need to ensure the resulting fair value measurements and disclosures are in accordance with the existing fair value measurement requirements in IFRS, rather than IFRS 13.

Even if entities do not use IFRS 13 as a reference tool, it is possible that regulators may refer to the standard when evaluating the appropriateness of entities' fair value measurements. For example, ESMA released a public statement in November 2011,⁸⁵ in which it stated that although IFRS 13 was not yet endorsed in the European Union it could be relevant as part of analyses of whether or not a financial instrument can be regarded as 'quoted in an active market' at the reporting date.

⁸³ IFRS 13.C1-2

⁸⁴ IFRS 13.C3

⁸⁵ European Securities and Markets Authority public statement *Sovereign Debt in IFRS Financial Statements* issued in November 2011

22 Convergence with US GAAP

22.1 The development of IFRS 13

IFRS 13 was the result of a convergence project between the IASB and the FASB. However, the Boards originally began developing their fair value measurement standards separately. The FASB issued Statement of Financial Accounting Standards No. 157 *Fair Value Measurements* (SFAS 157, now ASC 820) in 2006. The IASB's initial discussion paper, issued in 2006, and subsequent exposure draft, issued in 2009, were developed using the requirements of SFAS 157. However, the proposed requirements were not wholly consistent with that guidance and responses from constituents emphasised the need for a common set of requirements regarding the determination of fair value measurements under both IFRS and US GAAP. As a result, the Boards began joint discussions in 2010. From the IASB's perspective, the project had four main objectives:

- ▶ "... to establish a single set of requirements for all fair value measurements required or permitted by IFRSs to reduce complexity and improve consistency in their application, thereby enhancing the comparability of information reported in financial statements;
- ▶ to clarify the definition of fair value and related guidance to communicate the measurement objective more clearly;
- ▶ to enhance disclosures about fair value measurements that will help users of financial statements assess the valuation techniques and inputs used to develop fair value measurements; and
- ▶ to increase the convergence [of IFRSs and US GAAP]..."⁸⁶

The Boards' joint discussions resulted in the issuance of IFRS 13 and ASU 2011-04 and created a generally uniform framework for applying fair value measurement in both IFRS and US GAAP (refer to section 22.2 below for further discussion).

IFRS 13 was also part of the IASB's response to G20 requests in relation to the financial crisis. Therefore, the disclosures required by the standard are intended to help users assess the valuation techniques and inputs used to measure fair value. The IASB had originally proposed to require entities to disclose a quantitative sensitivity analysis for non-financial assets and liabilities measured at fair value. While the proposed disclosures were favoured by users and were consistent with the recommendations from the IASB's Expert Advisory Panel, the proposals were heavily criticised by preparers. Their concerns included the additional cost involved. Therefore, the Boards decided not to include this requirement until additional outreach could be completed. Until such time that this project is completed, sensitivity disclosures are only required for financial assets and liabilities (this continues the current disclosure requirements in IFRS 7).⁸⁷

22.2 Convergence with US GAAP

As noted above, the Boards' joint fair value measurement project resulted in both the issuance of IFRS 13 and amendments to particular aspects of ASC 820. These standards now have a consistent definition of fair value and represent converged guidance in relation to how to measure fair value. However, some differences still remain. The main differences are discussed below in sections 22.2.1-22.2.4.

⁸⁶ IFRS 13.BC6

⁸⁷ IFRS 13.IN5-6

It's also worth noting that there continue to be differences between IFRS and US GAAP as to *what* is measured at fair value, but those differences were outside the scope of the joint project, which focused on *how* to measure fair value.

22.2.1 Practical expedient for alternative investments

ASC 820 provides a practical expedient to measure the fair value of certain investments in investment companies (e.g., investments in hedge funds or private equity funds that do not have readily determinable fair values) using net asset value (NAV), without adjustment.⁸⁸ IFRS 13 does not have a similar practical expedient. Therefore, IFRS-preparers cannot presume that NAV, or an equivalent measure, will be the same as fair value as measured in accordance with IFRS 13.

IFRS does not currently have accounting requirements that are specific to investment companies and therefore the IASB believed it would be difficult to identify when such a practical expedient would be applied, given the different practices companies across the world use to calculate NAV. This difference may be addressed as part of the IASB's project on Investment Entities.⁸⁹

22.2.2 Fair value of liabilities with a demand feature

The guidance in IFRS on measuring the fair value of a financial liability with a demand feature differs slightly from US GAAP. IFRS 13 states that the fair value of a liability with a demand feature cannot be less than the present value of the amount payable on demand, which is consistent with the existing requirements in IFRS. Under US GAAP,⁹⁰ the fair value of a liability with a demand feature is described as the amount payable on demand at the reporting date.⁹¹

22.2.3 Recognition of day-one gains and losses

While fair value is defined in IFRS 13 as an exit price (which may differ from an entry price), the standard defers to other IFRSs on whether to recognise any difference between fair value and transaction price at initial recognition, that is, day-one gains or losses. IAS 39 and IFRS 9 restrict the recognition of day-one gains and losses when fair value is determined using unobservable inputs.

US GAAP contains no specific threshold regarding the observability of fair value inputs. As such, US GAAP does not specifically prohibit the recognition of day-one gains or losses even when the fair value measurement is based on significant unobservable inputs (i.e., a Level 3 measurement – see section 15.2 for further discussion regarding categorisation within the fair value hierarchy).

⁸⁸ ASC 820, sections 10-35-59 - 10-35-62

⁸⁹ IFRS 13.BC238(a)

⁹⁰ US Accounting Standards Codification Topic 825 *Financial Instruments* and Topic 942 *Financial Services—Depository and Lending*

⁹¹ IFRS 13.BC238(b)

22.2.4 Disclosures

IFRS 13 and ASC 820 have some differences in the disclosure requirements for fair value measurements. For example, IFRS 13 does not provide exceptions to its disclosure requirements for non-public entities, whereas ASC 820 does. The IASB believes that *IFRS for Small and Medium-Sized Entities* addresses the accounting for entities that do not have public accountability, and the disclosures about their fair value measurements.⁹²

Other examples of disclosure differences include:

- (a) Quantitative sensitivity analysis disclosures for Level 3 financial instruments – IFRS 13 currently requires a quantitative sensitivity analysis disclosure for Level 3 financial instruments. That is, if different inputs could have reasonably been used in place of one or more of the unobservable inputs used to measure fair value (and those inputs would have significantly changed the fair value measurement), entities are required to state that fact, disclose the effect on their fair value measurements and describe how they calculated those effects (note, this disclosure was previously required by IFRS 7). No similar disclosure is currently required under US GAAP. However, as discussed in section 22.1, the Boards will revisit whether to require a measurement uncertainty disclosure, which includes a quantitative sensitivity analysis (similar to those currently required under IFRS 7) that considers the interrelationships between the unobservable inputs.
- (b) Other Level 3 disclosures – IFRS generally does not allow for derivative assets and liabilities to be presented on a net basis. As such, amounts disclosed for fair value measurements categorised in Level 3 might differ between US GAAP and IFRS because US GAAP allows a net presentation in some cases.
- (c) Retirement benefit plan investments measured at fair value in accordance with IAS 26 – As discussed in Chapter 2, retirement benefit plans that measure their investments at fair value in accordance with IAS 26 are required to measure fair value in accordance with IFRS 13 but are exempt from IFRS 13's disclosure requirements. Instead, the disclosure requirements in IAS 26 apply. Under US GAAP, retirement benefit plans have no similar exemption from ASC 820's disclosure requirements.

⁹² IFRS 13.BC238(c)

Appendix A Glossary

This appendix summarises terms that used in IFRS 13.

Unless indicated, terms are defined in Appendix A of IFRS 13.

Term	Definition
<i>Acquiree</i> ⁹³	The business or businesses that the acquirer obtains control of in a business combination.
<i>Acquirer</i> ⁹⁴	The entity that obtains control of the acquiree.
<i>Active market</i>	A market in which transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis.
<i>Brokered market</i> ⁹⁵	A market in which 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.
<i>Business</i> ⁹⁶	An integrated set of activities and assets that is capable of being conducted and managed for the purpose of providing a return in the form of dividends, lower costs or other economic benefits directly to investors or other owners, members or participants.
<i>Business combination</i> ⁹⁷	A transaction or other event in which an acquirer obtains control of one or more businesses. Transactions sometimes referred to as 'true mergers' or 'mergers of equals' are also business combinations as that term is used in [IFRS 3].
<i>Cost approach</i>	A valuation technique that reflects the amount that would be required currently to replace the service capacity of an asset (often referred to as current replacement cost).
<i>Credit risk</i> ⁹⁸	The risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation.
<i>Currency risk</i> ⁹⁹	The risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates.
<i>Dealer market</i> ¹⁰⁰	A market in which 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 at which the dealer is willing to buy and the price at which the dealer is willing to sell, respectively) are more readily available than closing prices. Over-the-counter markets (for which prices are publicly reported) are dealer markets. Dealer markets also exist for some other assets and liabilities, including some financial instruments, commodities and physical assets (e.g., used equipment).

⁹³ IFRS 3 *Business Combinations* Appendix A

⁹⁴ IFRS 3 Appendix A

⁹⁵ IFRS 13.B34(c)

⁹⁶ IFRS 3 Appendix A

⁹⁷ IFRS 3 Appendix A

⁹⁸ IFRS 7 *Financial Instruments: Disclosures* Appendix A

⁹⁹ IFRS 7 Appendix A

¹⁰⁰ IFRS 13.B34(b)

Term	Definition
<i>Discount rate adjustment technique</i> ¹⁰¹	A present value technique that uses a risk-adjusted discount rate and contractual, promised or most likely cash flows.
<i>Entry price</i>	The price paid to acquire an asset or received to assume a liability in an exchange transaction.
<i>Exchange market</i> ¹⁰²	A market in which closing prices are both readily available and generally representative of fair value. An example of such a market is the London Stock Exchange.
<i>Exit price</i>	The price that would be received to sell an asset or paid to transfer a liability.
<i>Expected cash flow</i>	The probability-weighted average (i.e., mean of the distribution) of possible future cash flows.
<i>Fair value</i>	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.
<i>Financial asset</i> ¹⁰³	A financial asset is any asset that is: <ul style="list-style-type: none"> (a) cash; (b) an equity instrument of another entity; (c) a contractual right: <ul style="list-style-type: none"> (i) to receive cash or another financial asset from another entity; or (ii) to exchange financial assets or financial liabilities with another entity under conditions that are potentially favourable to the entity; or (d) a contract that will or may be settled in the entity's own equity instruments and is: <ul style="list-style-type: none"> (i) a non-derivative for which the entity is or may be obliged to receive a variable number of the entity's own equity instruments; or (ii) a derivative that will or may be settled other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of the entity's own equity instruments. For this purpose the entity's own equity instruments do not include puttable financial instruments classified as equity instruments in accordance with paragraphs 16A and 16B [of IAS 32], instruments that impose on the entity an obligation to deliver to another party a pro rata share of the net assets of the entity only on liquidation and are classified as equity instruments in accordance with paragraphs 16C and 16D [of IAS 32], or instruments that are contracts for the future receipt or delivery of the entity's own equity instruments.

¹⁰¹ IFRS 13.B17(a)

¹⁰² IFRS 13.B34(a)

¹⁰³ IAS 32.11

Term	Definition
<i>Financial liability</i> ¹⁰⁴	<p>A financial liability is any liability that is:</p> <ul style="list-style-type: none"> (a) a contractual obligation : <ul style="list-style-type: none"> (i) to deliver cash or another financial asset to another entity; or (ii) to exchange financial assets or financial liabilities with another entity under conditions that are potentially unfavourable to the entity; or (b) a contract that will or may be settled in the entity's own equity instruments and is: <ul style="list-style-type: none"> (i) a non-derivative for which the entity is or may be obliged to deliver a variable number of the entity's own equity instruments; or (ii) a derivative that will or may be settled other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of the entity's own equity instruments. For this purpose, rights, options or warrants to acquire a fixed number of the entity's own equity instruments for a fixed amount of any currency are equity instruments if the entity offers the rights, options or warrants pro rata to all of its existing owners of the same class of its own non-derivative equity instruments. Also, for these purposes the entity's own equity instruments do not include puttable financial instruments that are classified as equity instruments in accordance with paragraphs 16A and 16B [of IAS 32], instruments that impose on the entity an obligation to deliver to another party a pro rata share of the net assets of the entity only on liquidation and are classified as equity instruments in accordance with paragraphs 16C and 16D [of IAS 32], or instruments that are contracts for the future receipt or delivery of the entity's own equity instruments. <p>As an exception, an instrument that meets the definition of a financial liability is classified as an equity instrument if it has all the features and meets the conditions in paragraphs 16A and 16B or paragraphs 16C and 16D [of IAS 32].</p>
<i>Highest and best use</i>	The use of a non-financial asset by market participants that would maximise the value of the asset or the group of assets and liabilities (e.g., a business) within which the asset would be used.
<i>Income approach</i>	Valuation techniques that convert future amounts (e.g., cash flows or income and expenses) to a single current (i.e., discounted) amount. The fair value measurement is determined on the basis of the value indicated by current market expectations about those future amounts.
<i>Interest rate risk</i> ¹⁰⁵	The risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates.
<i>Inputs</i>	<p>The assumptions that market participants would use when pricing the asset or liability, including assumptions about risk, such as the following:</p> <ul style="list-style-type: none"> (a) the risk inherent in a particular valuation technique used to measure fair value (such as a pricing model); and (b) the risk inherent in the inputs to the valuation technique. <p>Inputs may be observable or unobservable.</p>

¹⁰⁴ IAS 32.11¹⁰⁵ IFRS 7 Appendix A

Term	Definition
<i>Key management personnel</i> ¹⁰⁶	Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the entity, directly or indirectly, including any director (whether executive or otherwise) of that entity.
<i>Level 1 inputs</i>	Quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date.
<i>Level 2 inputs</i>	Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.
<i>Level 3 inputs</i>	Unobservable inputs for the asset or liability.
<i>Liability issued with an inseparable third-party credit enhancement</i> ¹⁰⁷	A liability that is issued with a credit enhancement obtained from a third party, such as debt that is issued with a financial guarantee from a third party that guarantees the issuer's payment obligation.
<i>Liquidity risk</i> ¹⁰⁸	The risk that an entity will encounter difficulty in meeting obligations associated with financial liabilities that are settled by delivering cash or another financial asset.
<i>Market approach</i>	A valuation technique that uses prices and other relevant information generated by market transactions involving identical or comparable (i.e., similar) assets, liabilities or a group of assets and liabilities, such as a business.
<i>Market-corroborated inputs</i>	Inputs that are derived principally from or corroborated by observable market data by correlation or other means.
<i>Market participants</i>	Buyers and sellers in the principal (or most advantageous) market for the asset or liability that have all of the following characteristics: <ul style="list-style-type: none"> (a) They are independent of each other, i.e., they are not related parties as defined in IAS 24, although the price in a related party transaction may be used as an input to a fair value measurement if the entity has evidence that the transaction was entered into at market terms. (b) They are knowledgeable, having a reasonable understanding about the asset or liability and the transaction using all available information, including information that might be obtained through due diligence efforts that are usual and customary. (c) They are able to enter into a transaction for the asset or liability. (d) They are willing to enter into a transaction for the asset or liability, i.e., they are motivated but not forced or otherwise compelled to do so.
<i>Market risk</i> ¹⁰⁹	The risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises three types of risk: currency risk, interest rate risk and other price risk.

¹⁰⁶ IAS 24.9

¹⁰⁷ Discussed in IFRS 13.44

¹⁰⁸ IFRS 7 Appendix A

¹⁰⁹ IFRS 7 Appendix A

Term	Definition
<i>Most advantageous market</i>	The market that maximises the amount that would be received to sell the asset or minimises the amount that would be paid to transfer the liability, after taking into account transaction costs and transport costs.
<i>Non-performance risk</i>	The risk that an entity will not fulfil an obligation. Non-performance risk includes, but may not be limited to, the entity's own credit risk.
<i>Observable inputs</i>	Inputs that are developed using market data, such as publicly available information about actual events or transactions, and that reflect the assumptions that market participants would use when pricing the asset or liability.
<i>Orderly transaction</i>	A transaction that assumes exposure to the market for a period before 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 (e.g., a forced liquidation or distress sale).
<i>Other price risk</i> ¹¹⁰	The risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices (other than those arising from interest rate risk or currency risk), whether those changes are caused by factors specific to the individual financial instrument or its issuer, or factors affecting all similar financial instruments traded in the market.
<i>Present value</i> ¹¹¹	A tool used to link future amounts (cash flows or values) to a present amount using a discount rate (an application of the income approach). Present value techniques differ in how they adjust for risk and in the type of cash flows they use. See Discount Rate Adjustment Technique.
<i>Principal market</i>	The market with the greatest volume and level of activity for the asset or liability.
<i>Principal-to-principal market</i> ¹¹²	A market in which transactions, both originations and resales, are negotiated independently with no intermediary. Little information about those transactions may be made available publicly.
<i>Related party</i> ¹¹³	<p>A related party is a person or entity that is related to the entity that is preparing its financial statements (in [IAS 24] referred to as the 'reporting entity').</p> <p>(a) A person or a close member of that person's family is related to a reporting entity if that person:</p> <ul style="list-style-type: none"> (i) has control or joint control over the reporting entity; (ii) has significant influence over the reporting entity; or (iii) is a member of the key management personnel of the reporting entity or of a parent of the reporting entity. <p>(b) An entity is related to a reporting entity if any of the following conditions applies:</p> <ul style="list-style-type: none"> (i) The entity and the reporting entity are members of the same group (which means that each parent, subsidiary and fellow subsidiary is related to the others). (ii) One entity is an associate or joint venture of the other entity (or an associate or joint venture of a member of a group of which the other entity is a member).

¹¹⁰ IFRS 7 Appendix A

¹¹¹ IFRS 13.B13

¹¹² IFRS 13.B34(d)

¹¹³ IAS 24.9

Term	Definition
	<ul style="list-style-type: none"> (iii) Both entities are joint ventures of the same third party. (iv) One entity is a joint venture of a third entity and the other entity is an associate of the third entity. (v) The entity is a post-employment benefit plan for the benefit of employees of either the reporting entity or an entity related to the reporting entity. If the reporting entity is itself such a plan, the sponsoring employers are also related to the reporting entity. (vi) The entity is controlled or jointly controlled by a person identified in (a). (vii) A person identified in (a)(i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity).
<i>Related party transaction</i> ¹¹⁴	A related party transaction is a transfer of resources, services or obligations between a reporting entity and a related party, regardless of whether a price is charged.
<i>Risk premium</i>	Compensation sought by risk-averse market participants for bearing the uncertainty inherent in the cash flows of an asset or a liability. Also referred to as a 'risk adjustment'.
<i>Systematic risk</i> ¹¹⁵	The common risk shared by an asset or a liability with the other items in a diversified portfolio. Portfolio theory holds that in a market in equilibrium, market participants will be compensated only for bearing the systematic risk inherent in the cash flows (in markets that are inefficient or out of equilibrium, other forms of return or compensation might be available). Also referred to as non-diversifiable risk.
<i>Transaction costs</i>	<p>The costs to sell an asset or transfer a liability in the principal (or most advantageous) market for the asset or liability that are directly attributable to the disposal of the asset or the transfer of the liability and meet both of the following criteria:</p> <ul style="list-style-type: none"> (a) They result directly from and are essential to that transaction. (b) They would not have been incurred by the entity had the decision to sell the asset or transfer the liability not been made (similar to costs to sell, as defined in IFRS 5).
<i>Transport costs</i>	The costs that would be incurred to transport an asset from its current location to its principal (or most advantageous) market.
<i>Unit of account</i>	The level at which an asset or a liability is aggregated or disaggregated in an IFRS for recognition purposes.
<i>Unobservable inputs</i>	Inputs for which market data are not available and that are developed using the best information available about the assumptions that market participants would use when pricing the asset or liability.
<i>Unsystematic risk</i> ¹¹⁶	The risk specific to a particular asset or liability. Also referred to as diversifiable risk.

¹¹⁴ IAS 24.9

¹¹⁵ IFRS 13.B24(b)

¹¹⁶ IFRS 13.B24(a)

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