## Contents

- Comparability is the challenge
- About the standards
- About this publication
- A. An introduction to fair value measurement
- B. Scope
- C. The item being measured and the unit of account
- D. Market participants
- E. Principal and most advantageous markets
- F. Valuation approaches and techniques
- G. Inputs to valuation techniques
- H. Fair value hierarchy
- I. Fair value at initial recognition
- J. Highest and best use
- K. Liabilities and own equity instruments
- L. Portfolio measurement exception
- M. Inactive markets
- N. Disclosures
- O. Application issues: Derivatives and hedging
- P. Application issues: Investments in investment funds
- Q. Application issues: Practical expedient for investments in investment companies
- Appendix: Index of questions and answers
- Appendix: Effective dates – US GAAP
- Acknowledgments
- Keeping in touch
Comparability is the challenge

The use of fair value measurement for financial reporting continues on an upward trajectory and presents significant challenges, requiring judgment and interpretation.

Fair value measurement is not a static discipline and markets are demonstrating increasing interconnectedness and are inherently unstable. Further, the regulatory frameworks continue to change. This means that new valuation methodologies are being created and refined as they are adopted by market participants. And as the fair value standards dictate, it is the market participant view that shapes fair value.

As a result, preparers of financial statements cannot be complacent about the methodologies they use to measure fair value. Management needs to monitor developments in valuation techniques to ensure that its valuation models appropriately reflect the types of inputs that market participants would consider.

But monitoring alone isn’t sufficient. Regulators frequently question preparers about many areas of fair value measurement, including the appropriateness of the assumptions used and disclosures. The European regulator, ESMA,¹ issued a report in July 2017² as part of the IASB’s implementation review that discussed the application of IFRS 13, *Fair Value Measurement*. It found that the IFRS 13 requirements were well incorporated into the financial statements of the sampled issuers, but identified areas of improvement when applying IFRS 13. For example, the report called for more clarity in the standard in areas where there is uncertainty in practice. In addition, the report called for improvement in the level of compliance and comparability in applying IFRS 13.

Although the fair value accounting principles under US GAAP and IFRS are largely converged, achieving global comparability in measuring fair value is a continuous challenge in an ever-changing world.

We are pleased to help you navigate the complexity by providing our current guidance in this third edition of *Questions and Answers*.

Kimber Bascom and Mahesh Narayanasami
Department of Professional Practice
KPMG LLP

Sylvie Leger and Chris Spall
KPMG International
Standards Group

---

¹ European Securities and Markets Authority.
² Review of Fair Value Measurement in the IFRS financial statements.
About the standards

Chronology and objective

FASB ASC Topic 820, *Fair Value Measurement*, was originally issued in September 2006 as FASB Statement No. 157. The IFRS equivalent, IFRS 13, was issued in May 2011. At the same time, the FASB issued ASU 2011-04, *Amendments to Achieve Common Fair Value Measurement and Disclosure Requirements in US GAAP and IFRSs*. The ASU amended US GAAP to achieve the Boards’ objectives of a converged definition of fair value and substantially converged measurement and disclosure guidance.

Topic 820 and IFRS 13 define fair value, establish a framework for measuring fair value and a fair value hierarchy based on the source of the inputs used to estimate fair value, and require disclosures about fair value measurements. The standards do not establish new requirements for when fair value is required or permitted, but provide a single source of guidance on how fair value is measured. In general, this guidance is applied when fair value is required or permitted by other applicable GAAP.

Since our last edition of *Questions and Answers*, a disclosure simplification for investments measured using the net asset value per share practical expedient (or its equivalent) has become effective for public and nonpublic companies applying US GAAP (see section Q). The FASB also issued codification improvements that (1) amend the definition of readily determinable fair value (see Question Q15) and (2) clarify the difference between a valuation technique and a valuation approach (distinctions clarified throughout). Additionally, public and nonpublic companies may early adopt accounting standards that affect the guidance in Topic 820, which are highlighted as forthcoming requirements throughout (discussed in About this publication).

Summary of differences between US GAAP and IFRS

Throughout this publication, we highlight what we believe are significant differences between US GAAP and IFRS. However, many of these differences do not arise from the fair value measurement standards themselves, but because of the interaction of those standards with other US GAAP or IFRS requirements. For example, Question C90 discusses a key difference in respect of the unit of account; and Question I20 discusses day one gains or losses on the initial recognition of financial instruments.
The following summarizes what we believe are the few significant differences between US GAAP and IFRS caused by the fair value measurement standards.

<table>
<thead>
<tr>
<th>US GAAP</th>
<th>IFRS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Disclosures (section N)</strong></td>
<td></td>
</tr>
<tr>
<td>Nonpublic entities are exempt from some requirements. In addition, certain qualifying nonpublic entities have additional exemptions for financial instruments.</td>
<td>Unlike US GAAP, there are no exemptions for nonpublic entities.</td>
</tr>
<tr>
<td>There is no requirement to disclose quantitative sensitivity information about Level 3 recurring measurements of financial instruments.</td>
<td>Unlike US GAAP, quantitative sensitivity information about Level 3 recurring measurements of financial instruments is required.</td>
</tr>
</tbody>
</table>

| **Practical expedient for investments in investment companies (section Q)** | |
| There is a practical expedient to measure the fair value of these investments at net asset value if certain criteria are met. | Unlike US GAAP, there is no practical expedient for these investments. |
About this publication

**Purpose**

The purpose of this publication is to assist you in understanding the requirements of, and the differences between, Topic 820, *Fair Value Measurement*, and IFRS 13, *Fair Value Measurement*.

**Organization of the questions and answers**

The questions and answers are numbered in steps of 10 so that future questions and answers can be added without breaking the flow of the commentary on fair value measurement. The questions and answers that have been added, deleted or substantially expanded in this edition are highlighted in the Appendix: Index of questions and answers.

**Organization of the text**

Each section of this publication includes a short overview, followed by questions and answers. Our commentary is referenced to the FASB ASC (or Codification) and to current IFRS literature, where applicable.

References to the relevant literature are included in the left-hand margin, with the IFRS references in square brackets below the US GAAP references. For example, 820-10-35-9 is paragraph 35-9 of Subtopic 820-10; and IFRS 13.22 is paragraph 22 of IFRS 13.

The main text is written in the context of US GAAP. To the extent that the requirements of IFRS are the same, the references in the left-hand margin include both US GAAP and IFRS. However, if the requirements of IFRS are different from US GAAP, or a different wording might result in different interpretations in practice, a box at the end of that question and answer discusses the requirements of IFRS and how they differ from US GAAP.

**Effective dates**

New standards and interpretations issued by the IASB have a single effective date. In contrast, those issued by the FASB usually have at least two effective dates: one for public business entities, and one for other entities. This may be further nuanced by including certain other entities (e.g. employee benefit plans that file their financial statements with the SEC) with public business entities, and in some cases the effective date for public business entities is further split between SEC filers and non-SEC filers. This means that the effective date of a pronouncement can be spread over two or even three years. Appendix: Effective dates – US GAAP includes a table of effective dates to help navigate new requirements included in forthcoming requirements of this publication that are not yet (fully) effective.
When a currently effective requirement in Topic 820 or IFRS 13 is affected by a new standard or amendment that *changes* those requirements and has been issued at December 15, 2017, but is not yet effective, it is highlighted as a *forthcoming requirement*. Forthcoming requirements are noted for the following questions:

- US GAAP: B10, B40, B80, B90, C10, N70, O60 and O70.
- IFRS: B40, B80, B90, O50, O60 and O70.

When we anticipate a future change in Topic 820 or IFRS 13 as a result of a FASB or IASB project (i.e. no amendments have yet been made), this is highlighted as a *future development*. Future developments are noted for the following questions:

- IFRS: C90, G100, L20 and L60.

These forthcoming requirements and future developments either are directly relevant to the application of Topic 820 or IFRS 13, or they are otherwise directly relevant to the specific question. They are not a complete listing of all forthcoming requirements and future developments under US GAAP and IFRS that deal with *when* a fair value measurement is required.
A. An introduction to fair value measurement

This section provides a brief introduction to some of the key terms used in fair value measurement, as well as a diagram that shows the flow of the publication in relation to the process of measuring fair value and determining the appropriate disclosures.

The key term that drives this process is *fair value*: 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. Fair value is an exit price (e.g. the price to sell an asset rather than the price to buy that asset). An exit price embodies expectations about the future cash inflows and cash outflows associated with an asset or liability from the perspective of a market participant (i.e. based on buyers and sellers who have certain characteristics, such as being independent and knowledgeable about the asset or liability).

Fair value is a market-based measurement, rather than an entity-specific measurement, and is measured using assumptions that market participants would use in 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 fulfill a liability is not relevant in measuring fair value.

Fair value is measured assuming a transaction in the principal market for the asset or liability (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 maximize the amount that would be received to sell an asset or minimize the amount that would be paid to transfer a liability, taking into account transaction and transportation costs. In either case, the entity needs to have access to that market, although it does not necessarily have to be able to transact in that market on the measurement date.

A fair value measurement is made up of one or more inputs, which are the assumptions that market participants would make in valuing the asset or liability. The most reliable evidence of fair value is a quoted price in an active market. When this is not available, entities use a valuation approach to measure fair value, maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs.

These inputs also form the basis of the fair value hierarchy, which is used to categorize a fair value measurement (in its entirety) into one of three levels. This categorization is relevant for disclosure purposes. The disclosures about fair value measurements are extensive, with more disclosures being required for measurements in the lowest category (Level 3) of the hierarchy.
A. An introduction to fair value measurement

1. Establish parameters:
   - Identify the item being measured
   - Identify the unit of account and the unit of valuation
   - Identify market participants, and identify the market

2. Select appropriate valuation approach(es) and technique(s):
   - Approach: market
     - Example technique: quoted prices in an active market
   - Approach: income
     - Example technique: discounted cash flows
   - Approach: cost
     - Example technique: depreciated replacement cost

3. Determine inputs to measure fair value:
   - Level 1
     - Example: quoted price for an identical asset in an active market
   - Level 2
     - Example: quoted price for a similar asset in an active market
   - Level 3
     - Example: discounted cash flows

4. Measure fair value:
   - Fair value at initial recognition
   - Highest and best use
   - Liabilities and own equity instruments
   - Portfolio measurement exception
   - Inactive markets

5. Disclose information about fair value measurements

6. Application issues
B. Scope

Overview

- Topic 820 provides guidance on how to measure fair value when such measurement is required by other Topics/Subtopics, and specifies the related disclosures to be made in the financial statements. Topic 820 does not mandate when a fair value measurement is required.

- Topic 820 applies to the following, subject to certain exceptions:
  - fair value measurements (both initial and subsequent) that are required or permitted by other Topics/Subtopics;
  - fair value measurements that are required or permitted to be disclosed by other Topics/Subtopics, but which are not included in the statement of financial position; and
  - measurements that are based on fair value, or disclosures of such measurements.

- The exceptions from the scope of Topic 820 include most share-based payment transactions, and leasing transactions.

B10. What are some examples of assets and liabilities that are measured at fair value based on Topic 820?

The following are some examples of assets and liabilities that fall within the scope of Topic 820 for the purpose of measurement and/or disclosure. The scope of the disclosure requirements, including the distinction between recurring and nonrecurring fair value measurements, is discussed in more detail in section N.

<table>
<thead>
<tr>
<th>Topic (Subtopic)</th>
<th>Measurement</th>
<th>Disclosure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topic 320, Topic 825</td>
<td>Financial instruments available-for-sale or held for trading (recurring fair value measurements)</td>
<td>✓</td>
</tr>
<tr>
<td>Topic 320</td>
<td>Financial instruments held-to-maturity subsequent to initial recognition</td>
<td>× (3)</td>
</tr>
<tr>
<td>Topic 846</td>
<td>Investments of investment companies</td>
<td>✓</td>
</tr>
</tbody>
</table>

3. The measurement requirements of Topic 820/IFRS 13 do not apply to the measurement of financial instruments held-to-maturity in the statement of financial position subsequent to initial recognition because they are measured at amortized cost. However, Topic 820/IFRS 13 do apply to measuring fair value for disclosure purposes.
<table>
<thead>
<tr>
<th>Topic</th>
<th>Measurement</th>
<th>Disclosure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topic 805</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Topic 350</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Topic 350</td>
<td>✓</td>
<td>✗</td>
</tr>
<tr>
<td>Topic 350</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Topic 350</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Topic 360</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

**IFRS different from US GAAP**

Like US GAAP, some fair value measurements may be within the scope of IFRS 13 only for measurement or disclosure purposes, and others may be within the scope of IFRS 13 for both measurement and disclosure purposes. However, the examples of such items differ in some respects from US GAAP because of differences in the underlying literature. The following are examples relevant to IFRS.
### Forthcoming requirements under US GAAP

**ASU 2017-04**

In January 2017, the FASB issued ASU 2017-04, *Simplifying the Test for Goodwill Impairment*, which eliminates the requirement for an entity to perform a hypothetical purchase price allocation to measure goodwill impairment. Instead, impairment will be measured using the difference between the carrying amount and the fair value of the reporting unit limited to the total amount of goodwill allocated to the reporting unit.

**ASU 2016-01**

In February 2016, the FASB issued ASU 2016-01, *Recognition and Measurement of Financial Assets and Financial Liabilities*, which requires certain equity investments to be measured at fair value with changes in fair value recognized in net income. It also will change the income statement effect of equity investments and the recognition of changes in fair value of financial liabilities when the fair value option is elected.

See Appendix: Effective dates – US GAAP for effective date information.
B20. Does Topic 820 apply to measurements that are similar to but not the same as fair value?

No. Topic 820 does not apply to measurements that have similarities to fair value, but which are not fair value or are not based on fair value. These other terms have meanings different from fair value. For example, Topic 820 does not apply to net realizable value used in measuring inventories at the lower of cost and net realizable value. The ASC Master Glossary defines net realizable value as estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. Because this definition is not consistent with the exit price notion in measuring fair value, it is specifically excluded from the scope of Topic 820. In contrast, the measurement of fair value in determining the lower of amortized cost basis or fair value of mortgage loans held for sale is within the scope of Topic 820.

B30. Are cash equivalents that meet the definition of a security in the scope of Topic 820?

Yes. Many short-term investments that have been appropriately classified as cash equivalents, including money market funds, meet the definition of a security. These types of investments are subject to the accounting and disclosure requirements for debt securities. If the securities are categorized as trading securities or as available-for-sale securities, they fall within the scope of Topic 820 (for both measurement and disclosure purposes).

IFRS different from US GAAP

Unlike US GAAP, although certain short-term investments may meet the criteria to be classified as cash equivalents, their measurement basis may be different from US GAAP.
B40. **Does Topic 820 apply to loans measured for impairment testing using the practical expedient in the applicable Subtopic?**

Yes. The measurement and disclosure requirements of Topic 820 are applicable when a loan’s impairment is measured using the practical expedient under the applicable Subtopic (i.e. based on the loan’s observable market price, or the fair value of the collateral). Topic 820 applies even if the underlying collateral is nonfinancial.

When a loan is impaired, a creditor measures impairment based on the present value of the expected future cash flows discounted at the loan’s effective interest rate. However, as a practical expedient, a creditor may measure impairment based on a loan’s observable market price, or the fair value of the collateral if the loan is collateral dependent (i.e. a loan for which the repayment is expected to be provided solely by the underlying collateral).

If the fair value is used to measure impairment for a collateral-dependent impaired loan for which repayment is dependent on the sale of the collateral, the fair value should be adjusted for the estimated costs to sell. In addition, regardless of the measurement method used, a creditor measures impairment based on the fair value of the collateral when the creditor determines that foreclosure is probable.

---

**IFRS different from US GAAP**

Unlike US GAAP, current IFRS does not specify whether measurements of impairment of financial assets carried at amortized cost that are based on the instrument’s fair value using an observable market price are within the scope of the disclosure requirements of IFRS 13.

Unlike US GAAP, current IFRS does not state that an entity may, as a practical expedient, measure the impairment of a collateral-dependent loan based on the fair value of the collateral. IFRS requires the calculation of the present value of the estimated future cash flows of a collateralized financial asset to reflect the cash flows that may result from foreclosure less costs to obtain and sell the collateral, whether or not foreclosure is probable. The related implementation guidance states that the measurement of an impaired financial asset secured by collateral reflects the fair value of the collateral.

In our view, in calculating the impairment loss for these assets, an entity could choose either of the following approaches.

- **Approach 1**: Use the fair value of the collateral at the end of the reporting period less costs to obtain and sell the collateral.

- **Approach 2**: Use the cash flows that may result from foreclosure less the costs to obtain and sell the collateral.

Under both approaches, the amounts are discounted from the expected date of realization to the reporting date using the financial asset’s original effective interest rate. In our experience, lenders often realize collateral at a discount to appraised values, and expected discounts on the realization of collateral are reflected in the measurement of impairment.
**Forthcoming requirements under US GAAP**

**ASU 2016-13**

In June 2016, the FASB issued ASU 2016-13, *Measurement of Credit Losses on Financial Instruments*, which requires an entity to reflect its current estimates of all expected credit losses for financial assets that are not accounted for at fair value through net income. The concept of an impaired loan does not exist under the new standard. For all collateral dependent financial assets (not just loans) for which foreclosure is not probable, an entity will be permitted to apply a practical expedient to use the collateral’s fair value to estimate expected credit losses. For financial assets for which foreclosure is probable, an entity is required to use the collateral’s fair value to estimate expected credit losses.

See [Appendix: Effective dates – US GAAP](#) for effective date information.

---

**Forthcoming requirements under IFRS**

[IFRS 9.B5.5.54]

Unlike US GAAP, IFRS 9 does not contain a practical expedient that allows an entity to measure impairment on the basis of an instrument’s fair value using an observable market price. However, it requires an entity, as part of considering all reasonable and supportable information that is available without undue cost and effort in estimating expected credit losses, to also consider observable market information about credit risk.

[IFRS 9.B5.5.55]

Unlike US GAAP, IFRS 9 requires the estimate of expected cash shortfalls on a collateralized financial asset to reflect:

- the amount and timing of cash flows that are expected from foreclosure on the collateral; less
- costs for obtaining and selling the collateral.

This applies irrespective of whether foreclosure is probable, i.e. the estimate of expected cash flows considers the probability of a foreclosure and the cash flows that would result from it.

IFRS 9 is effective for annual periods beginning on or after January 1, 2018. Early adoption is permitted.

---

**B50. In a plan sponsor’s financial statements, does Topic 820 apply to pension plan assets measured at fair value?**

Yes. Plan assets measured at fair value in accordance with other applicable Topics/Subtopics are in the scope of Topic 820 for measurement purposes. Those measurements are not scoped out of the measurement requirements of Topic 820.

The applicable plan sponsor guidance on the measurement of plan assets requires the fair value of an investment to be reduced by brokerage commissions and other costs normally incurred in a sale if those costs are significant (similar to fair value less cost to sell). Therefore, Topic 820 applies only to the fair value component of the measurement basis.
However, plan sponsors are not required to provide the disclosures of Topic 715 for plan assets. Instead, plan sponsors’ financial statements continue to follow the applicable benefit plan disclosure requirements.

In addition, the measurement and disclosure requirements of Topic 820 do not apply to a defined benefit obligation, because the obligation is not measured at fair value.

**IFRS different from US GAAP**

**[IFRS 13.7(a)]**

Unlike US GAAP, the employee benefits standard requires plan assets to be measured at fair value without a reduction for costs to sell.

**[IAS 19.113]**

Although the measurement of the fair value of plan assets is in the scope of IFRS 13, as an exception from the fair value measurement basis, and unlike US GAAP, if the payments under a qualifying insurance policy or a reimbursement right exactly match the amount and timing of some or all of the benefits payable under a defined benefit plan, the present value of the related obligation is deemed to be the fair value of the insurance policy or reimbursement right (subject to recoverability).

**B60. Does Topic 820 apply to the financial statements of an employee benefit plan?**

Yes. The measurement and disclosure requirements of Topic 820 generally apply to the financial statements of an employee benefit plan, and in particular to its investments that are measured at fair value. Employee benefit plans encompass defined benefit plans, defined contribution plans, employee stock ownership plans and health and welfare plans.

The Codification Subtopics applicable to benefit plans on the subsequent measurement of other investments require fair value to be reduced by brokerage commissions and other costs normally incurred in a sale if those costs are significant (similar to fair value less cost to sell). Therefore, Topic 820 applies only to the fair value component of the measurement basis.

Because a plan’s investments are required to be measured at fair value at each reporting date, the recurring disclosure requirements of Topic 820 are required to be included in the benefit plan’s financial statements (see section N).

**IFRS different from US GAAP**

**[IFRS 13.7(b), IAS 26.32]**

Unlike US GAAP, investments held by retirement benefit plans and measured at fair value in accordance with IAS 26, *Accounting and Reporting by Retirement Benefit Plans* are within the scope of IFRS 13 for measurement purposes, but not for disclosure purposes.
B70. Do the fair value concepts apply in measuring the change in the carrying amount of the hedged item in a fair value hedge?

Yes, in our view the concepts of fair value measurement in Topic 820 apply to measuring the change in the carrying amount of the hedged item in a fair value hedge.

The hedged item in a fair value hedge is remeasured to fair value in respect of the risk being hedged. Therefore, although the hedged item in a fair value hedge might not be required to be carried at fair value, the measurement of changes in the fair value of the hedged item attributable to the hedged risk(s) should be performed in accordance with the principles of Topic 820.

Although the determination of the change in fair value of the hedged item should be measured in accordance with the principles of Topic 820, the disclosure requirements of Topic 820 do not apply to the hedged item unless the measurement basis in the statement of financial position is, or is based on, fair value, independent of hedge accounting (e.g. available-for-sale securities). When the hedged item has a hybrid carrying amount whose measurement is based on a measurement basis that is not fair value, the requirements of Topic 820 would not apply.

Hedging is the subject of section O.

Example B70: Applying the fair value concepts in a fair value hedge

Company B has a fixed interest liability denominated in US dollars and measured at amortized cost. Company B enters into a pay-LIBOR receive-fixed interest rate swap to hedge 50% of the liability in respect of its benchmark interest exposure. The swap qualifies for hedge accounting. The proportion of the liability that is hedged (50%) will be remeasured with respect to changes in fair value due to changes in the designated benchmark interest rate from the beginning of the hedge relationship. The liability will not be remeasured for any changes in its fair value due to changes in credit spread, liquidity spread or other factors.

The fair value related to changes in benchmark interest rates is measured following the guidance in Topic 820. However, the related disclosures do not apply because the hedged item, the liability, is measured on a hybrid basis (adjusted amortized cost) that is not fair value or based on fair value.

B80. Does Topic 820 apply to fair value measurements under Topic 840 (leases)?

No. When applying Topic 840, an entity measures fair value using the fair value guidance in Topic 840 – e.g. in applying the criteria to determine how a lease should be classified.
However, Topic 820 does apply to fair value measurements of nonfinancial assets resulting from lease accounting when they are not part of the lease accounting itself – i.e. fair value measurements after the initial recognition of an asset as a result of a lease. For example, Topic 820 applies when measuring the fair value of an asset recognized by the lessee under a capital lease for the purpose of measuring impairment.

Forthcoming requirements under US GAAP and IFRS

In January and February 2016, the IASB and the FASB respectively issued new standards on leases, which require a lessee to record most leases on the balance sheet.

Under US GAAP (Topic 842), an entity will refer to Topic 820 for all guidance on measuring fair value (e.g. applying the criteria to determine lease classification under US GAAP).

However, under IFRS (IFRS 16), fair value is defined differently than under IFRS 13: “For the purpose of applying the lessor accounting requirements in this Standard, the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm’s length transaction.” Therefore, for applying the criteria to determine lease classification, the lessor will use the fair value definition in IFRS 16.

IFRS 16 is effective for annual reporting periods beginning on or after January 1, 2019. Early adoption is permitted if an entity adopts IFRS 15 at the same time.

For ASU 2016-02, see Appendix: Effective dates – US GAAP for effective date information.

B90. Does Topic 820 apply to fair value measurements under Topic 605 (revenue recognition)?

It depends. Topic 820 excludes from its scope fair value measurements that are based on, or otherwise use, vendor-specific objective evidence of fair value (VSOE) for revenue recognition under an arrangement with multiple deliverables in Topic 605. This is because the measurement is not always based on an exit price from the market participants’ perspective, but instead it may be determined based on a transaction price (an entry price) from the perspective of the entity or a third-party vendor.

In other cases (i.e. for other than multiple deliverable arrangements), the measurement requirements of Topic 820 apply if revenue is measured at the fair value of the consideration received.

However, even if revenue is measured at fair value under Topic 820, the disclosure requirements of Topic 820 discussed in section N do not apply. This is because the disclosures focus on assets and liabilities recognized in the statement of financial position after initial recognition, and revenue is not an asset or liability.
[IFRS 13.5, IAS 18.9–11]

IFRS different from US GAAP

Unlike US GAAP, there is no requirement under IAS 18 to recognize revenue based on VSOE and therefore there is no similar exception. The measurement requirements of IFRS 13 generally apply to fair value measurements under IAS 18.

ASU 2014-09

[IFRS 15]

Forthcoming requirements under US GAAP and IFRS

In May 2014, the FASB and the IASB issued a joint revenue standard. Under the standard, revenue is recognized based on the transaction price, which in general is the consideration to which an entity expects to be entitled in exchange for transferring goods or services to a customer. This is not a fair value measurement and therefore not within the scope of Topic 820 or IFRS 13.

IFRS 15 is effective for annual reporting periods beginning on or after January 1, 2018. Early adoption is permitted.

For ASU 2014-09, see Appendix: Effective dates – US GAAP for effective date information.

B100. Does Topic 820 apply to the measurement of share-based payment transactions?

820-10-15-2(a)

It depends on the type of share-based payment transaction. Topic 820 excludes from its scope share-based payment transactions except for those that relate to employee stock ownership plans (ESOPs) in the scope of Subtopic 718-40.

718-10-30-11, 30-13

[IFRS 2.B2–B3]

In many cases, the fair value measurement of an instrument granted in a share-based payment transaction is not consistent with the requirements of Topic 820. For example, for an award of a share that vests over a specified period, the grant-date fair value of the award under Topic 718 is the unrestricted value of the share on the grant date. It does not consider either the probability that the service condition will not be met or the effect of the non-transferability of the share over the vesting period. This is different from the definition of fair value under Topic 820.

[IFRS 13.6(a)]

IFRS different from US GAAP

Unlike US GAAP, all share-based payment transactions are excluded from the scope of IFRS 13. Under IFRS, there is no specific guidance on ESOPs.
C. The item being measured and the unit of account

### Overview

- An entity takes into account characteristics of the asset or liability that market participants would take into account in a transaction for the asset or liability at the measurement date. In the case of an asset, these characteristics may include, for example:
  - the condition and location of the asset; and
  - restrictions, if any, on the sale or use of the asset.

- The unit of account is the level at which an asset or a liability is aggregated or disaggregated for recognition purposes. It is also the level at which an asset or a liability generally is aggregated or disaggregated for the purpose of measuring fair value. When these two units differ, the term unit of valuation is used to describe the unit used for fair value measurement.

- For a discussion of how the unit of account interacts with the portfolio measurement exception, see section L.

### C10. How should an entity determine the appropriate unit of account (unit of valuation) in measuring fair value?

Generally, the unit being measured is determined based on the unit of account in accordance with the Topics/Subtopics specific to the asset or liability. The unit of account for fair value measurement and the unit of account for recognition generally are the same. For convenience, when the unit of account for fair value measurement and the unit of account for recognition are different, we refer to the level at which an asset or liability is aggregated or disaggregated to measure fair value as the unit of valuation.

There are two exceptions included in Topic 820 itself.

- The unit of account (unit of valuation) for financial instruments generally is the individual financial instrument (e.g., a share). However, an entity is permitted to measure the fair value of a group of financial assets and financial liabilities on the basis of the net risk position, if certain conditions are met (see section L).

- In certain circumstances, an entity is required to measure nonfinancial assets in combination with other assets or with other assets and liabilities (see section J).
C. The item being measured and the unit of account

The following are examples.

- For goodwill impairment testing, the unit of account (unit of valuation) is the reporting unit in Step 1 of the test.

- For loans (e.g. mortgage loans) held-for-sale, the unit of account and therefore the unit of valuation is an accounting policy election determined based on the entity’s policy of measuring the loans on an aggregate or individual loan basis (see Question F90).

In certain circumstances, when measuring fair value based on the unit of account, an entity may use a valuation technique that determines the fair value by considering the fair values of the component parts of the unit of account. This may be appropriate if market participants would consider these separate fair values when pricing the item in its entirety.

**Example C10: Measuring fair value based on component parts of the unit of account**

- Investment Fund A holds an investment in Company B that is accounted for at fair value. Company B is a private holding company with two subsidiaries each operating in a different line of business. Both subsidiaries have issued public debt and publish their financial statements.

- Investment Fund A values its investment in Company B by valuing the two subsidiaries separately and includes any potential holding company value effects. Because the subsidiaries have different characteristics – i.e. growth prospects, risk profiles, investment requirements – this approach allows separate consideration of the subsidiaries’ facts and circumstances and is consistent with the approach that a market participant would consider in valuing an investment in Company B.

**IFRS different from US GAAP**

Although IFRS 13 has the same requirements as Topic 820 in determining the unit of account, the underlying examples may differ from US GAAP because of differences in the underlying literature. The following are examples relevant to IFRS.

- For goodwill impairment testing, the unit of account (unit of valuation) is the (group of) cash-generating unit(s).

- For financial instruments, the unit of account (unit of valuation) generally is the individual instrument unless the portfolio measurement exception applies (see section L). For investments in subsidiaries, associates and joint ventures, see Question C90.

- Unlike US GAAP, IFRS does not have specific guidance on the unit of account for measuring the fair value of mortgage loans held for sale. Therefore, unless the portfolio measurement exception applies, the unit of account is the individual loan (see Question F90).
Forthcoming requirements under US GAAP

As noted in Question B10, the FASB issued a new standard that eliminates the requirement for an entity to perform a hypothetical purchase price allocation to measure goodwill impairment. Instead, impairment will be measured using the difference between the carrying amount and the fair value of the reporting unit limited to the total amount of goodwill allocated to the reporting unit.

C15. What is the appropriate unit of account for an investment held through an intermediate entity?

It depends. If the intermediate entity was consolidated by the reporting entity, then the investment held by the intermediate entity may represent a unit of account being measured at fair value when it is prescribed by the Topic/Subtopic that requires or permits the fair value measurement.

However, if the intermediate entity was not consolidated then the direct investment in an intermediate entity will represent the unit of account being measured at fair value, instead of investments held indirectly through the intermediate entity. See Question C10.

Example C15: Investment held through an intermediate entity

Company C has a direct investment in Intermediate Entity ABC. Intermediate Entity ABC is a holding company whose only purpose is to invest in the common stock of Public Company DEF. Therefore, Company C has an indirect equity investment in Public Company DEF.

Scenario 1

Intermediate Entity ABC is a wholly owned subsidiary that is consolidated by Company C. The consolidated financial statements of Company C and Intermediate Entity ABC are presented as those of a single economic entity. As a result, the equity investment in Public Company DEF is a direct investment of the consolidated entity. In this instance, the equity investment in Public Company DEF represents the unit of account being measured at fair value.

Scenario 2

Company C is an investment entity that accounts for its investment in Intermediate Entity ABC at fair value through profit or loss (net income). The direct investment in Intermediate Entity ABC represents the unit of account being measured at fair value. Any investments held indirectly through Intermediate Entity ABC, such as the equity investment in Public Company DEF, are not considered to be separate units of account by Company C. Although those investments held indirectly may be used as valuation inputs to measure the fair value of Intermediate Entity ABC, Company C should consider whether there are other characteristics that a market participant would take into account when valuing an investment in Intermediate Entity ABC as the unit of account.
C20. If an asset requires installation in a particular location before it can be used, should the measurement of fair value of the installed asset consider these costs?

Generally, yes. Installation costs generally are considered an attribute of the asset in measuring fair value if the asset would provide maximum value to the market participant through its use in its current location in combination with other assets or with other assets and liabilities (see section J).

Therefore, all costs (excluding transaction costs) that are necessary to transport and install an asset for future use should be included in the measurement of fair value. Examples include delivery and other costs necessary to install an asset for its intended use. Installation costs are added to the estimated uninstalled value indication (e.g. replacement cost) for the asset, which results in measurement of fair value on an installed basis.

Many assets that require installation generally will require a fair value measurement based on Level 3 inputs. However, for some common machinery that is traded in industrial markets, Level 2 inputs may be available. In this situation, the inclusion of installation costs in the measurement of fair value may result in a Level 3 categorization of the measurement if the installation costs are significant (see section H).

C30. Do restrictions on the sale or transfer of a security affect its fair value?

It depends. In measuring the fair value of a security with a restriction on its sale or transfer, judgment is required to determine whether and in what amount an adjustment is required to the price of a similar unrestricted security to reflect the restriction.

To make that determination, the entity should first analyze whether the restriction is security-specific or entity-specific (i.e. whether the restriction is an attribute of the instrument or an attribute of the holder).

– For security-specific restrictions, the price used in the fair value measurement should reflect the effect of the restriction if this would be considered by a market participant in pricing the security; this may require an adjustment to the quoted price of otherwise similar but unrestricted securities.

– For entity-specific restrictions, the price used in the fair value measurement should not be adjusted to reflect the restriction because it would not be considered by a market participant in pricing the security.

Factors used to evaluate whether a restriction is security-specific or entity-specific may include whether the restriction is:

– transferred to a (potential) buyer;
– imposed on a holder by regulations;
– part of the contractual terms of the asset; or
– attached to the asset through a purchase contract or another commitment.
For restrictions determined to be entity-specific, fair value measurements for the security do not reflect the effect of such restrictions. As a result, securities that are subject to an entity-specific restriction are considered identical to those that are not subject to entity-specific restrictions. Consequently, a quoted price in an active market is a Level 1 input for the security that is subject to an entity-specific restriction. This is the case even though the entity is not able to sell the particular security on the measurement date due to an entity-specific restriction; an entity needs to be able to access the market, but it does not need to be able to transact in the market at the measurement date to be able to measure the fair value on the basis of the price in that market (see section E).

For restrictions determined to be security-specific, the fair value adjustment will vary depending on the nature and duration of the restriction. Generally, it is not appropriate to apply a discount that is a fixed percentage over the entire life of the restriction period in measuring fair value. For example, if the security-specific restriction is two years as of the measurement date and the discount is estimated to be 10 percent, the following year’s discount would be less than 10 percent because only one year remains, assuming all else remains equal. All relevant drivers of the discount, including but not limited to the length of the restriction, the risk of the underlying security (e.g. its volatility), the float and market capitalization of the issuer, liquidity of the market and other qualitative and quantitative factors specific to the security are evaluated in determining the appropriate discount.

In our experience, measuring the discount generally is based on quantitative techniques (e.g. an option pricing model) that explicitly incorporate duration of the restriction and characteristics of the underlying security (e.g. risk, dividends, rights and preferences, etc.). When using these models to derive the discount, an entity needs to consider the ability of the model to appropriately quantify the liquidity adjustment under the specific facts and circumstances. For example, some option pricing models may not appropriately measure the discount that a market participant would apply.

For a discussion of security-specific restrictions when the fair value of a liability or own equity instrument is measured with reference to the identical instrument held as an asset by a market participant, see section K.

**C40. What are some common restrictions on the sale or transfer of a security?**

The following are some common restrictions on the sale or transfer of a security.

**Restrictions on securities offered in a private offering under Rule 144A and Section 4(2) Transactions (private placements) of the SEC**

Restrictions on the transfer of securities obtained in a Rule 144A offering attach to the security itself as a result of the securities laws applicable to these offerings. For these types of offerings, the securities can only be sold (both initially and subsequently) to qualified institutional buyers (or accredited investors in the case of Section 4(2) transactions).
C. The item being measured and the unit of account

The restriction on sale is specific to the security and also lasts for the life of the security, barring subsequent registration of the security or seasoning of the securities through sales outside of the United States or under Rule 144; for further discussion, see Question C50. Therefore, these restrictions should be considered in measuring the fair value of the security.

For securities initially obtained through a Rule 144A offering or a Section 4(2) transaction that subsequently have become registered or seasoned and are therefore tradable without restriction, an adjustment related to the restriction is no longer applicable to the fair value measurement because the restriction has been removed.

**Securities subject to a lock-up provision resulting from an underwriter’s agreement for the offering of securities in a public offering**

In many public offerings of securities, the underwriting agreement between the underwriter and the issuing entity contains a lock-up provision that prohibits the issuing entity and its founders, directors and executive officers from selling their securities for a specified period of time; the lock-up period is usually 180 days for initial offerings and shorter for secondary offerings. These provisions give the underwriters a certain amount of control over after-market trading for the lock-up period.

Based on our understanding of common lock-up agreements, these provisions may be based on a contract separate from the security (i.e. resulting from the underwriting agreement) and apply only to those parties that signed the contract (e.g. the issuing entity) and their affiliates. Therefore, these restrictions represent entity-specific restrictions that should not be considered in the fair value measurement of the securities.

However, there may be situations in which a lock-up provision is determined to be security-specific based on the specific terms and nature of the restriction. In that case, the restriction should be considered in measuring the fair value of the securities.

**Securities owned by an entity where the sale is affected by blackout periods**

An investment in the securities of another entity will sometimes result in the investor being subject to blackout restrictions imposed by regulations on the investee (e.g. when the investor has a board seat on the investee’s board of directors). When the blackout period of the investee coincides with the investor’s periodic financial reporting dates, the investor is, in effect, restricted from selling its securities at its own financial reporting date. These restrictions represent entity-specific restrictions that should not be considered in measuring the fair value of the securities.

**Securities pledged as collateral**

In some borrowing arrangements, securities held by an investor are pledged as collateral supporting debt, or other commitments, of the investor. In these situations, the investor is restricted from selling the securities pledged during the period that the debt or other commitment is outstanding. Restrictions on securities resulting from the securities being pledged as collateral represent entity-specific restrictions that should not be considered in measuring the fair value of the securities.
C50. SEC Rule 144 allows the public resale of certain restricted or control securities if certain conditions are met. During the period before the restrictions lapse, should the fair value measurement reflect such restrictions?

Yes. However, the restrictions reflected in the fair value measurement should be limited to those that are security-specific.

Restricted securities are securities acquired in unregistered or private sales from the issuer or from an affiliate of the issuer. Control securities are restricted securities held by affiliates of the issuer. An affiliate is a person, such as a director or large shareholder, in a relationship of control. However, securities acquired by an affiliate in the public market are not subject to the requirements of Rule 144 (i.e. not restricted).

Generally, restricted securities acquired directly or indirectly from an issuer or its affiliate can be publicly sold under Rule 144 if the following conditions are met.

(1) There is adequate current information about the issuer before the sale can be made. Generally this means that the issuer has complied with the periodic reporting requirements of the Securities Exchange Act of 1934 (1934 Act).\(^5\)

(2) If the issuer is subject to the reporting requirements of the 1934 Act, the securities must be held for at least six months. If the issuer is not subject to the requirements of the 1934 Act, the securities must be held for more than one year.

If the securities are control securities not obtained in a public market held by affiliates, the following conditions, in addition to the conditions listed above, must be met.

(3) Sales – Sales must be handled in all respects as routine trading transactions, and brokers may not receive more than a normal commission. Neither the seller nor the broker can solicit orders to buy the securities.

(4) Volume limitations – The number of securities sold by an affiliate during any three-month period cannot exceed the greater of one percent of the outstanding shares of the same class or, if the class is listed on a stock exchange or quoted on NASDAQ, the greater of one percent or the average weekly trading volume during the four weeks preceding the filing of a notice for sale on Form 144.

(5) Filing requirements – An affiliate must file a notice with the SEC on Form 144 if the sale involves more than 5,000 shares or the aggregate dollar amount is greater than $50,000 in any three-month period. The sale must take place within three months of filing Form 144.

Conditions (1) and (2) generally are met only after a prescribed period of time has elapsed (and the issuing entity has made information publicly available). Therefore, during the period before conditions (1) and (2) are met, the securities have security-specific restrictions that may need to be reflected in the measurement of fair value for those securities; this is because these restrictions are characteristics of the security and would be transferred to market participants. Conditions (3), (4) and (5) only apply to affiliates, and therefore these conditions are entity-specific and should not be reflected in the measurement of the fair value.

---

C60. **How should executory contracts be considered in measuring the fair value of an asset that is the subject of an executory contract?**

It depends. Some assets recorded in an entity's financial statements are the subject of executory contracts that directly affect the use of, and cash flows from, those assets. For example, a company might acquire a leasing company that has several airplanes recorded as fixed assets that are leased to third parties under operating leases.

If the unit of account is the asset on a stand-alone basis, the effects of executory contracts, including any contractual cash flows, should not be included in measuring the fair value of the underlying asset. In these cases, the fair value of the asset should be measured using the price that would be received from a market participant to sell the asset at the measurement date.

Alternatively, if the unit of account is determined to be an aggregation of the contract with the underlying asset, the effects of the executory contract would be considered.

If the unit of valuation is determined to be on a stand-alone basis but the entity has evidence that suggests that a market participant would sell both the executory contract and the underlying asset as a group, it may be appropriate to measure fair value for the entire group. Once measured, the group fair value would be allocated to the individual components required by other applicable accounting literature (e.g. in the same way that an impairment loss is allocated to fixed assets).

C70. **In measuring the fair value of a financial instrument, how should an entity consider the existence of a separate arrangement that mitigates credit risk exposure in the event of default?**

If the unit of account is the individual financial instrument, a separate arrangement that mitigates credit risk exposure in the event of default is not reflected in the fair value of the individual financial instrument; instead, the arrangement is measured as a separate financial instrument. Examples of such arrangements include a master netting agreement or a credit support agreement that requires the exchange of collateral on the basis of each party's net exposure to the credit risk of a group of financial instruments.

In our experience, for individual instruments that are actively traded on an exchange, the actual counterparty to the trade transaction is, in many instances, the exchange entity (e.g. the clearing house for the exchange). For these exchange transactions, we understand that even when there is no master netting agreement between the exchange and the entity, credit risk is usually deemed to be minimal because the operating procedures of the exchanges require the daily posting of collateral, which is, in effect, an arrangement that mitigates credit risk exposure in the event of default, and which is instrument-specific (see Question C80).

For a discussion of fair value measurement under the portfolio measurement exception, see Question L70.
C80. Does a requirement to post collateral affect the fair value measurement of the underlying instrument?

Yes. Because the asset or liability requires that collateral be posted, that feature is instrument-specific and should be included in the fair value measurement of the asset or liability. Therefore, the asset or liability is supported by posted collateral and the discount rate reflects these conditions. Any nonperformance risk adjustment related to credit risk used in measuring the fair value of the asset or liability may be different from the adjustment if the collateral was not present (i.e. a lower discount rate assigned to the counterparty risk or lower loss severity when counterparty default is assumed to occur).

Example C80: Collateralized derivative instrument

Company C holds a collateralized derivative instrument where the parties to the derivative contract post collateral on a daily basis, and the maximum exposure to the asset holder is the one-day change in the asset’s fair value. The collateralization is required as a result of the terms of the instrument and not as a result of separate arrangements that mitigate credit risk exposures in the event of default.

In this case, market participants apply an appropriate rate reflecting the reduced credit risk (e.g. an overnight index swap rate; see also Question O30) as the discount rate used in the valuation of the asset or liability. However, if the derivative instrument was not collateralized, the parties’ credit risk would be included in the fair value measurement of the instrument. For further discussion on measuring the fair value of liabilities, see section K.

If the derivative would have had a separate arrangement that mitigates credit risk exposure in the event of default (i.e. not within the requirements of the derivative contract), that agreement would not be included in the fair value measurement of the derivative if the unit of valuation is the individual derivative. However, if an entity applies the portfolio measurement exception to a group of financial assets and financial liabilities entered into with a particular counterparty, the effect of such an agreement would be included in measuring the fair value of the group of financial assets and financial liabilities if market participants would do so.

Derivative instruments are the subject of section O.

C90. What is the unit of account for investments in subsidiaries, equity method investees and joint ventures?

It depends. The unit of account is prescribed by the applicable Topic/Subtopic that requires or permits the fair value measurement. The measurement of investments in subsidiaries, equity method investees, and joint ventures at fair value may be required in a number of circumstances such as business combinations, impairment assessments, and the measurement of retained investments upon a loss of control, among others.
C. The item being measured and the unit of account

Unlike US GAAP, there is uncertainty under IFRS about the unit of account for investments in subsidiaries, associates and joint ventures. The unit of account for such investments is not clear because the investment held by the entity comprises a number of individual shares. However, as explained below, the IASB is seeking to clarify this area.

The following are examples of situations in which the unit of account (and therefore the unit of valuation) for such an investment needs to be determined to measure fair value.

- Investments in associates and joint ventures that are accounted for in accordance with the financial instruments standards by a venture capital or similar organization.
- Shares in a subsidiary, associate, or joint venture distributed to owners.
- A previously held equity interest in an acquiree in accounting for a business combination achieved in stages.
- A retained interest following a loss of control, joint control or significant influence.

In our view, an entity may choose an accounting policy, to be applied consistently, to identify the unit of account of an investment in a subsidiary, associate or joint venture as:

- the investment as a whole; or
- the individual share making up the investment.

If the unit of account is the investment as a whole, it may be appropriate to add such a premium in measuring the fair value of the investment – even if Level 1 prices exist for individual shares (see section H). However, if the unit of account is each individual share making up the investment, a premium related to the whole investment cannot be added in measuring the fair value of the investment.

In applying a consistent accounting policy, an entity should choose the same policy for similar items. The choice of accounting policy is important, because the value of an aggregate holding may be different from the sum of the values of the components measured on an individual basis.

Future developments under IFRS

In September 2014, the IASB published Exposure Draft Measuring Quoted Investments in Subsidiaries, Joint Ventures and Associates at Fair Value – Proposed amendments to IFRS 10, IFRS 12, IAS 27, IAS 28 and IAS 36 and Illustrative Examples for IFRS 13. The exposure draft clarified the unit of account for investments in subsidiaries, joint ventures and associates and the interaction with Level 1 prices.
The exposure draft proposed:

– that the unit of account for such investments would be the investment as a whole rather than the individual financial instruments that make up the investment; but

– the fair value measurement of an investment comprising financial instruments quoted in an active market would be the product (P×Q) of the quoted price of the financial instrument (P) and the quantity (Q) of instruments held. This is on the basis that fair value measurements are more relevant, objective and verifiable when they are based on unadjusted Level 1 inputs.

Most constituents who provided their comments to the IASB on the exposure draft supported the proposal in respect of the unit of account, but disagreed with the proposal that the fair value of investments in subsidiaries, associates and joint ventures that are quoted in an active market would be P×Q. Their main reason was a perceived lack of alignment between the proposed measurement and the unit of account. Conversely, the majority of users who participated in the IASB’s outreach indicated a strong preference for P×Q measurement because it is less judgmental.

As a result of the divergent views on the fair value measurement proposals, in 2015 the IASB decided to undertake further research on the proposed measurement of quoted investments. The research indicated that the population of entities that would be affected by the exposure draft is limited. Consequently, the IASB decided to continue the research on this topic by feeding it into the Post-Implementation Review (PIR) of IFRS 13. As part of the second phase of the PIR, in May 2017 the IASB issued a request for information, which includes prioritizing Level 1 inputs or the unit of account as one area of focus.
D. Market participants

Overview

Market participants are buyers and sellers in the principal (or most advantageous) market for the asset or liability that have all of the following characteristics:

- they are independent of each other;
- 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;
- they are able to enter into a transaction for the asset or liability; and
- 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).

D10. Does an entity need to specifically identify market participants?

No. An entity need not identify specific market participants even though the fair value of the asset or liability is based on the assumptions that market participants would use in pricing the asset or liability when acting in their economic best interest. Instead, the entity identifies characteristics that distinguish market participants generally, considering factors specific to:

- the asset or liability;
- the principal (or most advantageous) market for the asset or liability; and
- market participants with whom the entity would transact in that market.

D20. Can a market participant be a related party?

No. By definition, market participants are independent of each other and therefore cannot be related parties. However, 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.

D30. How should an entity determine what assumptions a market participant would make in measuring fair value?

An entity selects 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. These characteristics include:

- the condition and location of the asset; and
- restrictions, if any, on the sale or use of the asset.
Market participants are assumed to be knowledgeable about the asset or liability, using all available information, including information that would be expected to become available in customary and usual due diligence. To the extent that additional uncertainty exists, it is factored into the fair value measurement.

In some cases, those characteristics result in the application of an adjustment, such as a premium or discount (e.g., a control premium (or market participant acquisition premium) or a noncontrolling interest discount – see section G). However, a fair value measurement generally does not incorporate a premium or discount:

- that is inconsistent with the item’s unit of account under the Topic/Subtopic that requires or permits the fair value measurement (see section C);
- that reflects size as a characteristic of the entity’s holding, such as a blockage factor (see Questions G30 and G40); or
- if there is a quoted price in an active market for an identical asset or liability unless one of the exceptions allowing adjustments to Level 1 inputs applies (see Question G70).

As discussed in section H, the fair value hierarchy gives the highest priority to quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date (Level 1 inputs) and the lowest priority to unobservable inputs (Level 3 inputs). Unobservable inputs also reflect the assumptions that market participants would use when pricing the asset or liability, including assumptions about risk.

D40. If the entity is unwilling to transact at a price provided by an external source, should that price be disregarded?

No. Fair value measurements are market-based measurements, not entity-specific measurements. The fair value of an asset or a liability is measured using assumptions that market participants would use in pricing the asset or liability, assuming that market participants act in their economic best interest. As a result, an entity’s intention to hold an asset or to settle a liability is not relevant in measuring fair value. Therefore, an entity cannot disregard a price reflecting current market conditions simply because the entity is not a willing seller at that price.

D50. How should an entity adjust the fair value measurement for risk inherent in the asset or liability?

An entity assumes that market participants have a reasonable understanding of the rights and obligations inherent in the asset or liability being measured that is based on information that would be available to them after customary due diligence (see Question D30). Therefore, it is assumed that the market participant would apply any and all necessary risk adjustments to the price to compensate itself for market, nonperformance (including credit), liquidity and volatility risks.

As a result, an entity applies a liquidity discount in measuring the fair value of a particular asset or liability if market participants would apply this factor based on the inherent characteristics of the asset or liability and the unit of valuation. Similarly, an entity uses a risk-adjusted discount rate that market participants would use even

---

6. A liquidity discount or adjustment is an adjustment to reflect the marketability of an asset or liability (see Question G40).
when the entity has a different view of the inherent risk of the asset or liability because the entity has specific expertise that leads it to conclude that the risk is lower than other market participants would conclude.

In measuring fair value, an entity uses the best information available in the circumstances, which might include its own data. In developing unobservable inputs, an entity may begin with its own data, but adjusts it if reasonably available information indicates that market participants would use different data or there is something particular to the entity that is not available to market participants (e.g. entity-specific synergies, expertise or organizational differences that would not be available to other market participants).
E.     Principal and most advantageous markets

<table>
<thead>
<tr>
<th>Overview</th>
</tr>
</thead>
<tbody>
<tr>
<td>– The principal market is the market with the greatest volume and level of activity for the asset or liability.</td>
</tr>
<tr>
<td>– The most advantageous market is the market that maximizes the amount that would be received to sell the asset or minimizes the amount that would be paid to transfer the liability, after taking into account transaction costs and transportation costs.</td>
</tr>
<tr>
<td>– A fair value measurement assumes that the transaction takes place in the principal market for the asset or liability. Only in the absence of a principal market does the entity assume that the transaction takes place in the most advantageous market.</td>
</tr>
</tbody>
</table>

E10. **If an entity identifies a principal market for the asset or liability, should it disregard the price in that market and instead use the price from the most advantageous market?**

In general, no. If an entity identifies a principal market, it cannot consider prices from other, more advantageous markets. Only if the entity does not have access to the principal market does it measure fair value assuming a transaction in the most advantageous market.

In many cases, the principal market and the most advantageous market are the same. In either case, to use pricing from a market, the entity needs to be able to access the market in which the transaction is assumed to occur. However, the identification of a principal market is not limited to those markets in which the entity would actually sell the asset or transfer the liability. Furthermore, although the entity has to be able to access the market, it does not need to be able to buy or sell the particular asset (or transfer the particular liability) on the measurement date in that market.

The determination of the principal market and the most advantageous market is an independent analysis performed by each entity, allowing for differences between entities with different activities and between different businesses within an entity. For example, when a swap transaction takes place between an investment bank and a commercial entity, the former may have access to wholesale and retail markets while the latter may only have access to retail markets.
Example E10: Principal versus most advantageous market

Company E holds an asset that is traded in three different markets but it usually buys and sells in Market C. Information about all three markets follows.

<table>
<thead>
<tr>
<th></th>
<th>Market A</th>
<th>Market B</th>
<th>Market C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume (annual)</td>
<td>30,000</td>
<td>12,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Trades per month</td>
<td>30</td>
<td>12</td>
<td>10</td>
</tr>
<tr>
<td>Price</td>
<td>50</td>
<td>48</td>
<td>53</td>
</tr>
<tr>
<td>Transportation costs</td>
<td>(3)</td>
<td>(3)</td>
<td>(4)</td>
</tr>
<tr>
<td>Possible fair value</td>
<td>47</td>
<td>45</td>
<td>49</td>
</tr>
<tr>
<td>Transaction costs</td>
<td>(1)</td>
<td>(2)</td>
<td>(2)</td>
</tr>
<tr>
<td>Net proceeds</td>
<td>46</td>
<td>43</td>
<td>47</td>
</tr>
</tbody>
</table>

Company E identifies the principal market for the asset as Market A because it has the highest volume and level of activity. It identifies the most advantageous market as Market C because it has the highest net proceeds.

Company E bases its measurement of fair value on prices in Market A. Pricing is taken from this market even though Company E does not normally transact in that market and it is not the most advantageous market. Therefore, fair value is 47, considering transportation costs but not transaction costs (see Question E40), even though Company E normally transacts in Market C and could maximize its net proceeds in that market.

If Company E is unable to access Markets A and B, it would use Market C as the most advantageous market. In that case, fair value would be 49.

The example highlights the presumption that the principal market is the market in which the entity usually transacts may be overcome. The fact that Company E has information about Market A that it cannot ignore results in Market A being the principal market, and not Market C.
E20. **How should an entity determine the principal market, and how frequently should it reevaluate its determination?**

There is no explicit guidance on how an entity should identify the principal market, over what period it should analyze transactions for that asset or liability, or how often it should update its analysis.

An entity is not required to 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. However, it should take into account all information that is reasonably available. For example, if reliable information about volumes transacted is publicly available (e.g. in trade magazines or on the internet), it may be appropriate to consider this information to determine the principal market.

Absent evidence to the contrary, the principal (or most advantageous) market is presumed to be the market in which the entity normally enters into transactions to sell the asset or transfer the liability.

In our view, an entity should update its analysis to the extent that events have occurred or activities have changed in a manner that could change the entity’s determination of the principal (or most advantageous) market for the asset or liability.

E30. **Can an entity have multiple principal or most advantageous markets for identical assets and liabilities within its consolidated operations?**

Yes. An entity has to have access to the principal (or most advantageous) market in order to use a price from that market. Therefore, the identification of the relevant market is considered from the perspective of the specific entity. In some cases, different entities within a consolidated group (and businesses within those entities) may have different principal or most advantageous markets for the same asset or liability.

For example, a parent company trades a particular asset in its principal market for that asset. Due to regulatory restrictions, its overseas subsidiary is prohibited from transacting in that market. As a result, the overseas subsidiary has a different principal market for the same asset.

E40. **How are transaction costs and transportation costs treated in identifying the principal or most advantageous market and in measuring fair value?**

Transaction costs are directly attributable costs that an entity would incur in selling an asset or transferring a liability. Transportation costs are not included in transaction costs. They are the costs that would be incurred to transport an asset from its current location to the principal (or most advantageous) market. Examples of transportation costs include trucking, shipping, rail, pipeline, cartage and other costs directly incurred in the bundling and physical movement of the asset.

Whether transaction and transportation costs are taken into account in identifying the principal and most advantageous markets, and in measuring fair value, is summarized in the following table.
Transaction and transportation costs are not considered in identifying the principal market, because such a market is identified based only on the volume and level of activity. However, such costs are considered in identifying the most advantageous market, because it is identified based on the net proceeds from the assumed transaction.

Once the market for the transaction has been identified, the measurement of fair value is an independent, different calculation.

- Fair value is not adjusted for transaction costs; instead, transaction costs are accounted for in accordance with other applicable Topics/Subtopics. This is because transaction costs are a characteristic of the transaction, and not a characteristic of the asset or liability.

- Fair value is adjusted for transportation costs, if location is a characteristic of the asset (see section C). For example, the fair value of crude oil held in the Arctic Circle would be adjusted for the cost of transporting the oil from the Arctic Circle to the appropriate market.

### E50. Should transportation costs be included in the entity’s measurement of fair value using an identified basis differential?

No. An identified basis differential generally cannot be used as a proxy for transportation costs.

This is because an identified basis differential between the price at the location of the asset and at the principal (or most advantageous) market generally also includes other factors besides location. Basis differentials reflect multiple factors, such as timing, quality and location; and can be volatile because they capture the passage of time (a financing element), changes in the relative value of different qualities or grades of commodities, and changes in the attractiveness of locations from the central pricing hub relative to each other factor.

Supply and demand is a critical factor in influencing the changes in basis due to quality and location. A basis differential is therefore not a simple fixed transportation charge, but rather a complex and volatile variable in and of itself.
E55. **Should a forward price be used to measure the fair value of an asset that is not located in the principal market when both spot and forward prices are available?**

No. In our view, fair value should be measured based on the spot price.

A spot price is a price for almost immediate delivery on the measurement date, while a forward or futures price is to exchange the item at a future date. It may seem intuitive to use the forward or futures price to measure fair value when the asset is not located in the principal market; this is because of the time that it will take to get the asset to the market and achieve the sale. However, in our view an asset that is not located in the principal market should be valued using the spot price at the measurement date rather than the forward or futures price. We believe that the asset should be assumed to be available in the principal market at the measurement date, which is consistent with the definition of fair value.

In measuring fair value, the spot price in the principal market is adjusted for transportation costs to that market from where the asset is located (see Question E40).

**Example E55: Spot versus forward price to value inventory**

Company X applies fair value hedge accounting for its commodity inventory. At the measurement date (December 31, 2015), X has physical inventory located in India and it would take two months to deliver the inventory to the principal market in New York.

In measuring the fair value of the inventory, X uses the spot price in New York on December 31, 2015, adjusted for appropriate transportation costs. It does not use the two-month forward price that is quoted on December 31, 2015.

In addition, we believe that the fair value of the inventory on December 31, 2015, which is based on the spot price, should also be discounted to reflect:

- the fact that it would take two months to deliver the inventory to the principal market and so it cannot be converted to cash immediately (if material); and
- other risks involved in the transfer (e.g. damage to the inventory during shipment).

E60. **How should future transaction costs be treated when the fair value is measured using discounted cash flows?**

As discussed in Question E40, an investor does not subtract transaction costs that it would incur to sell an investment at the measurement date because these transaction costs are not a characteristic of the asset. This is the case regardless of the valuation technique used.

However, it may be appropriate for future transaction costs (i.e. in subsequent sales transactions) to be deducted in a discounted cash flow (DCF) analysis. For example, for entities that use a DCF analysis to measure the fair value of real estate, and the DCF analysis includes an assumption that a market participant would sell the property...
in the future, there is a practice to subtract transaction costs (e.g. selling costs) expected to be incurred at the time of that future disposition.

In contrast, when valuing a business enterprise in a DCF analysis, future transaction costs (e.g. selling costs) are generally not included because it is assumed that a market participant would maximize economic benefit by continuing to operate the business indefinitely into the future. In our experience, market participants entering into a transaction for a business would generally not consider transaction costs associated with a sale in the future. A terminal value within a DCF analysis generally reflects the value of future cash flows at the end of a discrete cash flow period but does not imply that a market participant would sell the business at that point in time.

Example E60: Role of transaction costs in measuring the fair value of certain real estate

Company E measures the fair value of its investment real estate. A DCF analysis resulting in an estimated value of $100 million for the investment real estate asset at the measurement date includes a cash inflow (discounted) of $80 million for future sale proceeds and a cash outflow (discounted) of $5 million for selling costs associated with the future sale at the end of an assumed five-year holding period. The remaining cash flows (discounted) of $25 million in the $100 million value are from net operating cash flows during the five-year holding period. If the real estate was sold at the measurement date, selling costs of $4 million would be incurred by the existing investor.

Company E measures the fair value at $100 million (i.e. including the assumed cash outflow for transaction costs at the end of the five-year holding period) on the basis that the DCF analysis is prepared from the perspective of a market participant buyer who would consider future transaction costs in determining the price that it would be willing to pay for the asset.

However, it would not be appropriate for Company E to measure the asset at a value of $96 million (i.e. estimated value of $100 million less transaction costs of $4 million that would be incurred if the asset were sold at the measurement date) because market participants would transact at $100 million on the measurement date.

E70. If an entity sells its loans to market participants that securitize them, should the market for securities issued by these market participants (securitization market) be the principal market?

No. A fair value measurement is for particular assets or liabilities, which, in this case, are the loans.

The securities issued by the market participant that securitizes the loans are significantly different from the loans and have different characteristics. The process of securitizing and issuing interests in a securitization vehicle fundamentally changes the investors’ interest in the underlying loans. The price received for the sale of the interests in a securitization vehicle includes earnings associated with the
Securitization process. It would be inappropriate to reflect the earnings related to the securitization process in the fair value measurement of loans.

820-10-35-5

Also, a fair value measurement assumes that the transaction to sell the asset takes place in the principal market for that asset. The securitization market cannot be the principal market for the loans because what is being sold or transferred in the securitization market are the securities issued by the vehicle that securitized the loans. However, as discussed in Question G90, it may be appropriate to consider securitization prices as an input into the valuation technique.

E80. How do transaction costs affect the initial measurement of a financial asset or financial liability?

820-10-35-9

For a financial asset or financial liability measured at fair value, the fair value measurement would be performed based on an exit price notion. A fair value measurement excludes transaction costs. For a financial asset or financial liability not required to be measured at fair value upon initial recognition, transaction costs would be accounted for under other applicable standards, including Topic 320 (debt and equity securities) and Topic 946 (investment companies).

946-320-30-1, 35-1

Portfolio securities are reported at fair value by entities within the scope of Topic 946. These fair value measurements should be performed using the guidance in Topic 820. However, Topic 946 requires investments in debt and equity securities to be recorded initially at their transaction price, including commissions and other charges. Accordingly, entities within the scope of Topic 946 should record the transaction costs in the cost basis of investment securities, which will then affect the realized and unrealized gain or loss calculations.

ASC Master Glossary

Topic 320 does not provide specific guidance on accounting for transaction costs; however, it refers to ‘holding gains or losses.’ The ASC Master Glossary defines a holding gain or loss as “The net change in fair value of a security. The holding gain or loss does not include dividend or interest income recognized but not yet received, writeoffs, or the allowance for credit losses.” Therefore, transaction costs generally are not included as part of the cost basis of securities and are expensed as incurred by noninvestment companies.

However, because Topic 320 does not provide specific guidance on initial recognition for investments within its scope, some entities other than investment companies may have elected a policy of including transaction costs as part of the cost of purchased securities. This was under the view that Topic 820 specifically addresses fair value measurements without affecting an entity’s previous accounting policy elections for transaction costs associated with purchased securities.

IFRS different from US GAAP

Unlike US GAAP, on initial recognition an entity generally measures a financial asset or financial liability at its fair value, plus or minus, in the case of a financial asset or financial liability not classified as fair value through profit or loss, transaction costs that are directly attributable to the acquisition or issue of the financial asset or financial liability.
Therefore, an initial measurement of a financial asset or financial liability classified as fair value through profit or loss excludes transaction costs that are directly attributable to the entry transaction, while the initial measurement of all other financial assets and financial liabilities includes transaction costs that are directly attributable to the entry transaction.

**E90. How is fair value measured when there appears to be no market for an asset or liability?**

The concept of a market in Topic 820 does not mean that there needs to be a structured, formal or organized market (e.g. a dealer network or an organized exchange). When a structured or other market does not exist, the entity focuses on identifying market participants to which it would sell the asset or transfer the liability in a hypothetical transaction (see section D). The entity also considers the assumptions that those market participants would use in pricing the asset or liability, assuming that they act in their economic best interest.

**Example E90: Measuring the fair value of customer relationships**

Company P acquired contractual customer relationships as part of a business combination. There is no structured market where such items are traded, and instead Company P focuses on identifying market participants that would benefit from the customer relationships.

Company P concludes that there are two types of potential market participants:
- two or three strategic buyers in the same industry as Company P, which would use the customer relationships to enhance its business; and
- a number of financial buyers, which would restructure the acquired business (including the customer relationships) for later resale.

In measuring the fair value of the customer relationships, Company P considers the assumptions that these market participants would use in pricing the asset and, as a result, which type of market participants would be willing to pay the highest price in a hypothetical sale transaction. Company P does not automatically limit itself to financial buyers simply because there are more of them than strategic buyers.

For simplicity, the above answer ignores the valuation premise of the customer relationships when considered together with the other assets acquired. For further discussion of this point, see Question J40.
F. Valuation approaches and techniques

Overview

– In measuring the fair value of an asset or a liability, an entity selects those valuation approaches and techniques that are appropriate and for which sufficient data is available to measure fair value.

– The technique chosen should maximize the use of relevant observable inputs and minimize the use of unobservable inputs (see section G).

– A valuation approach is a broad category of techniques, while a valuation technique refers to a specific technique such as a particular option pricing model.

– Valuation approaches used to measure fair value fall under three categories:
  - Market approach—Valuation techniques that fall under the market approach include quoted prices in an active market, but often derive market multiples from a set of comparable assets.
  - Income approach—Valuation techniques that fall under the income approach convert future amounts such as cash flows or income streams to a current amount on the measurement date.
  - Cost approach—Valuation techniques under the cost approach reflect the amount that would be required to replace the service capacity of an asset. The concept behind the cost approach is that an investor will pay no more for an asset than the cost to buy or construct a substitute asset of comparable utility.
F10. **What are some examples of the different valuation techniques used?**

The following are examples of different valuation techniques used under the three valuation approaches, and examples of common usage of those techniques.

### Market approach

<table>
<thead>
<tr>
<th>Technique</th>
<th>Examples of common usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quoted price in an exchange market</td>
<td>Equity securities, futures</td>
</tr>
<tr>
<td>Quoted prices in dealer markets</td>
<td>− On-the-run US Treasury notes</td>
</tr>
<tr>
<td></td>
<td>− To-be-announced (TBA) mortgage-backed-securities</td>
</tr>
<tr>
<td>Market multiples derived from a set of comparable assets (e.g. a price to earnings ratio expresses an entity’s per-share value in terms of its earnings per share)</td>
<td>Unlisted equity interests</td>
</tr>
<tr>
<td>Matrix pricing</td>
<td>Debt securities similar to benchmark quoted securities</td>
</tr>
</tbody>
</table>

### Income approach

<table>
<thead>
<tr>
<th>Technique</th>
<th>Examples of common usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present value techniques</td>
<td>− Debt securities with little, if any, trading activity</td>
</tr>
<tr>
<td></td>
<td>− Unlisted equity instruments</td>
</tr>
<tr>
<td>Black-Scholes-Merton model or lattice model</td>
<td>Over-the-counter European call option or American call option</td>
</tr>
<tr>
<td>Multi-period excess earnings method: based on a discounted cash flow analysis that measures the fair value of an asset by taking into account not only operating costs but also charges for contributory assets; this isolates the value related to the asset to be measured and excludes any value related to contributory assets</td>
<td>Intangible assets, such as customer relationships and technology assets, acquired in a business combination</td>
</tr>
<tr>
<td>Relief-from-royalty method</td>
<td>Intangible assets expected to be used actively (e.g. brands)</td>
</tr>
</tbody>
</table>
Cost approach

<table>
<thead>
<tr>
<th>Technique</th>
<th>Examples of common usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depreciated replacement cost (DRC) method: considers how much it would cost to replace an asset of equivalent utility taking into account physical, functional and economic obsolescence; it estimates the replacement cost of the required capacity rather than the actual asset</td>
<td>Factory plant and equipment</td>
</tr>
</tbody>
</table>

**F20. When more than one valuation approach or technique is used, what factors should an entity consider in weighting the indications of fair value produced by the different valuation approaches and techniques?**

An entity should consider, among other things, the reliability of the valuation approaches and techniques and the inputs that are used in the approaches and techniques. If a particular market-based approach relies on higher-level inputs (e.g. observable market prices) compared to a particular income-based approach that relies heavily on projections of income, the entity will often apply greater weight to the measurement of fair value generated by the market-based approach because it relies on higher-level inputs.

An entity should maximize the use of relevant observable inputs and minimize the use of unobservable inputs. Therefore, higher-level inputs that are available and relevant should not be ignored (see section G).

Any, or a combination of, the approaches and techniques discussed in Topic 820 can be used to measure fair value if the approaches and techniques are appropriate in the circumstances. However, when multiple valuation approaches or techniques are used to measure fair value (e.g. when valuing a reporting unit for impairment testing purposes), Topic 820 does not prescribe a mathematical weighting scheme; rather it requires judgment.

In our experience, in many cases valuation professionals produce an evaluated price that uses a market approach based on observable transactions of identical or comparable assets or liabilities and an income approach that is calibrated to market data.

When multiple valuation approaches and techniques are used to measure fair value, the approaches and techniques should be evaluated for reasonableness and reliability, and how they should be weighted. The respective indications of value should be evaluated considering the reasonableness of the range of values indicated by those results. The objective is to find the point within the range that is most representative of fair value in the circumstances. In some cases, a secondary method is used only to corroborate the reasonableness of the most appropriate valuation approach or technique.
F30. In using the income approach to measure the fair value of a nonfinancial asset or nonfinancial liability, what are some of the key components that will have the most significant effect on the overall fair value measurement?

Measuring the fair value of a nonfinancial asset or nonfinancial liability using an income approach (e.g. a discounted cash flow method) requires consideration of the following.

The type of valuation model employed

The type of valuation model employed is important because the model affects the nature of the projected financial information. There are three primary types of discounted cash flow valuation techniques:

820-10-55-10 [IFRS 13.B18]

- The discount rate adjustment technique uses one set of forecasted cash flows and includes a premium in the discount rate for all possible risks, including risks in the timing of the cash flows, liquidity risks, credit risks, market risks, etc.


- The expected present value technique method 1 (EPV Method 1) uses expected cash flows (which represent a probability-weighted average of all possible cash flow scenarios) and adjusts those expected cash flows by subtracting a cash risk premium. Because the adjusted cash flows represent certainty-equivalent cash flows, the discount rate used is a risk-free interest rate.

820-10-55-16 [IFRS 13.B26]

- The expected present value technique method 2 (EPV Method 2) also uses expected cash flows but does not adjust those expected cash flows by subtracting a cash risk premium. EPV Method 2 adjusts for risk by adding a risk premium to the risk-free interest rate for discounting purposes. The expected cash flows are discounted at a rate that corresponds to an expected rate of return associated with the probability-weighted cash flows (expected rate of return).

The discount rate

The discount rate for the discount rate adjustment technique and the EPV Method 2 should consider all of the risks associated with the cash flows being discounted to the extent that these risks have not been considered in the cash flows. For the EPV Method 2, the discount rate comprises a risk-free rate and a risk premium that a market participant would require to take on the risk of investing in the asset given the alternative investment opportunities. To determine this discount rate, an entity may employ a model used for pricing risky assets, such as the capital asset pricing model.

F40. How should the fair value of an intangible asset acquired in a business combination be measured if the acquirer plans to discontinue its active use?

The fair value measurement of an intangible asset to be retired or whose active use will be discontinued is no different from any other nonfinancial asset, and should be based on its highest and best use by market participants (see section J). One common methodology is the with-versus-without method. This method is useful for intangible assets that market participants would be expected to use defensively. It
measures the incremental cash flows that would be achieved by market participants arising from their ownership of an existing intangible asset by locking up the competing acquired intangible asset. Fair value is measured as the difference between the fair value of the group of assets of the market participant:

– assuming that the acquired intangible asset were to be actively used by others in the market; and

– assuming that the acquired intangible asset was withdrawn from the market.

F50. **Is the cumulative cost of construction an acceptable technique for measuring the fair value of real estate property?**

Generally, no. For real estate properties undergoing development, estimating fair value can prove difficult, because much of the data used as inputs to a traditional valuation analysis is not available. Few, if any, sales of comparable projects under construction exist from which meaningful fair value inputs can be derived. As a result of this lack of relevant and applicable market data, some real estate investment funds may consider the total cost expended in the measurement of the fair value of a development property.

Although the cumulative cost of construction of a development property may be an appropriate input to consider in measuring the property’s fair value, particularly in the very early stages of development, it would generally not be expected to equal the property’s fair value. In the absence of observable and comparable transactions, in our experience the property’s fair value is generally based on a discounted cash flow method where cash inflows and outflows are discounted at a risk-adjusted rate of return required by market participants.

In practice, as development progresses, the probability of completion increases and certain risks associated with the investment decrease, which increases the fair value of the property. Those risks include, but are not limited to, failure to secure necessary planning and other permissions on a timely basis, construction cost overruns, changes in market conditions during construction that could lead to delays in leasing/sales and/or reduced lease rates or sale prices, and higher than projected operating expenses. In addition, there is an element of developer’s profit that would be expected to increase the fair value of the property.

In our view, market participant assumptions used in a discounted cash flow model would include estimates of cash outflows needed to complete the project (which should consider the developer’s profit for the remaining work to be completed) as well as cash inflows and outflows from operating the property and ultimately selling it at some point in the future. We believe that a market participant would also be expected to consider the likelihood of achieving those estimated cash inflows based on the risks associated with completion of development and ultimate operations of the property.

If it is determined that the cumulative cost of construction is a reasonable proxy for fair value (e.g. in the very early stages of development), it would not be appropriate to include third-party costs associated with the acquisition of an investment in the determination of cost. Such costs typically relate to direct incremental costs incurred for due diligence and closing the transaction and should be excluded from a fair value measurement following the general principle that the fair value of an asset or liability...
is not adjusted for transaction costs (see Question E40). Accordingly, regardless of industry practice, under the requirements of Topic 820, transaction costs should not be included in the fair value measurement.

F60. **Is the initial cost (transaction price) of an investment in a private operating company an acceptable proxy for fair value at subsequent measurement dates?**

Generally, no. Although measuring the fair value of an investment in a private operating company can prove difficult because of a lack of observable data to use as inputs, it cannot be assumed that the initial cost remains indicative of fair value at subsequent measurement dates.

In our experience, cost will be an appropriate estimation of fair value at the measurement date only in limited circumstances, such as for a pre-revenue entity when there is no catalyst for a change in fair value, or the transaction date is relatively close to the measurement date.

The following are examples of factors that make it unlikely that fair value will stay consistent with initial cost:

- the passage of time between the transaction date and the measurement date;
- the performance of the investee compared with budgets, plans or milestones;
- the expectation that the investee’s technical product milestones will be achieved or their timing;
- the market for the investee’s products or potential products;
- the economic environment in which the investee operates;
- the equity markets, such as variances in the market valuations of comparable, publicly traded entities;
- internal matters of the investee such as fraud, commercial disputes, litigation, management or strategy; and
- evidence about the valuation of the investment implied from external transactions in the investee’s equity, either by the investee (such as a new equity issue), or by transfers of equity instruments between third parties.

In some cases (e.g., start-up companies), performance that follows original plans or the launch of a new product as expected, may lead to a significant increase in the fair value of the investment. This is because uncertainty over those events is removed. All else being equal, the fair value of an investment is expected to increase over time based on returns required by investors.

F70. **Is the par amount of a loan an acceptable proxy for fair value at subsequent measurement dates?**

Generally, no. This is because the contractual interest rate of a loan does not generally represent the market rate of interest charged by market participants at the measurement date. This includes floating interest rate loans, which generally have differences between par and fair value that is attributable to the following:

- the effect of interest rate changes since the last reset date; and
– the contractual spread above the benchmark rate, which is usually not re-priced to reflect changes in market participants’ views of credit and liquidity risks between the date of issuance and the measurement date.

**F80. How should the fair value of loan assets be determined?**

In measuring fair value for either measurement or disclosure purposes (but see exception in Question N70), the approach used depends on the facts and circumstances. Some loans can be valued using a market approach (e.g. if there are secondary market transactions and prices for identical or similar loans). However, in our experience, other loans are not traded on secondary markets; therefore, they often are valued using the income approach. When there is no secondary market for loan sales, in some cases relevant inputs might be derived from rates or prices in the origination market (i.e. rates associated with the issuance of new loans).

When loans are valued using origination rates or prices, the entity needs to consider whether a sale to a market participant would reflect a premium or discount from the price in the origination market. If there is no secondary market for loans but they are valued using inputs from markets for more liquid traded instruments, the entity also needs to consider whether an additional liquidity adjustment is required (see Question G40).

In general, the assumptions made in applying the income approach need to be consistent with the assumptions that market participants would make with respect to future cash flows and discount rates. Estimates of future cash flows used might, depending on the circumstances, reflect either:

– contractual cash flows, gross of expected credit losses; or
– expected cash flows, net of expected credit losses.

The discount rates used in each case need to be consistent with the cash flow estimates used:

– In using contractual cash flows, a discount rate adjustment technique is required and the discount rate reflects uncertainty and risks not reflected in the cash flows – i.e. the discount rate is adjusted for both expected and unexpected credit losses.

– In using expected cash flows, an expected present value technique is required and the discount rate is consistent with the risk inherent in the expected cash flows – i.e. it would not include an adjustment for expected credit losses as it is already reflected in the cash flows, but it would reflect the cost of bearing the risk that credit losses will be different from expected.

Factors that affect estimates of expected cash flows and discount rates include the following:

– the time value of money;
– the currency denomination of the loan;
– the credit risk of the loan (e.g. the credit spread over the risk-free interest rate) considering both the credit standing of the issuer and the specific terms of the instrument, such as collateral and other credit risk enhancements, seniority, subordination or nonrecourse features;
– prepayment risk;
– liquidity risk;
– legal risks (e.g. contractual or legislative provisions or deficiencies that might affect the ability of the lender to realize any collateral); and
– embedded derivatives that have not been separated from the loan, and other risks and uncertainties inherent in the cash flows that relate to specific contractual terms of the loan, not including credit risk (e.g. terms that link cash flows to inflation or to variables specific to the borrower such as revenues or EBITDA).\(^7\)

An entity needs to consider all available information and use judgment to determine whether any adjustments are required to reflect differences between the characteristics of instruments from which inputs are derived and the loans being valued. For example, adjustments may be required to reflect differences in liquidity, underwriting criteria, collateral, maturity, vintage, customer type, geographical location, prepayment options or rates or other differences in credit risk.

An entity may sell its loans to market participants that securitize them, or it may securitize the loans itself. The securitization market cannot be the principal market for the loans (see Question E70). However, in measuring the fair value of the loans it may be appropriate to consider the current transaction price for the securities that would be issued by a market participant that securitizes the loans as an input (see Question G90).

**F90. Should an entity measure the fair value of a group of loan assets with similar risk characteristics on a pooled basis?**

It depends. The fair value of financial assets is generally determined on an instrument-by-instrument basis. As discussed in section L, Topic 820 permits an exception to measure the fair value of a group of financial assets and liabilities with offsetting risk positions on the basis of a net exposure, if certain criteria are met (the portfolio measurement exception).

The portfolio measurement exception does not apply to a group of loan assets because the loans do not have offsetting risks. However, in our view it may be appropriate to measure the fair value of a group of loans as a pool, but only if it is consistent with the way in which market participants would transact, the loans are similar to loans that are typically transacted by the entity as part of a pool, and it is consistent with the guidance on the unit of account (see section C).

For example, for mortgage loans and mortgage-backed securities held for sale, Topic 948 permits using either the aggregate or individual loan basis to determine the lower of cost or fair value. Therefore, for such loans, measuring fair value on a pooled basis may be appropriate if it is consistent with market participants’ approaches and assumptions in buying and selling the loans, and the entity is able to access the market for pooled loans at the measurement date.

However, we believe that generally it would not be appropriate to measure fair value on a pooled basis for loans that do not have similar risk characteristics. To do so would generally be inconsistent with the approach and assumptions used by market participants when buying and selling these loans.

\(^7\) EBITDA means earnings before interest, taxes, depreciation and amortization.
Example F90: Mortgage loans transacted as a pool

Bank B acquired a group (pool) of mortgage loans on April 1. All assets in the pool were current (i.e. none were past due) with credit risk (FICO) scores above 650.

In Bank B’s principal market, mortgage loans of this type with similar FICO scores are typically transacted in whole loan sales as a pool, as opposed to sales of individual mortgage loans. In addition, Bank B typically buys and sells mortgage loans of this type as a pool, and is able to access the market for pooled loans at the measurement date.

On June 30, all loans remained current with FICO scores over 650. As a result, Bank B concluded that it was appropriate to measure fair value based on prices for loan pools.

On December 31, 5% of the loans in Bank B’s pool are now delinquent and/or have credit scores below 650. As a result, Bank B determines that those mortgage loans are not comparable to the pools of mortgage loans being transacted in the market. Accordingly, Bank B measures the fair value of the delinquent loans and/or loans with credit scores below 650 on an individual loan basis.

IFRS different from US GAAP

Unlike US GAAP, IFRS does not have specific measurement requirements for mortgage loans and mortgage-backed securities held for sale or specific guidance for the unit of account for measuring the fair value of these loans. Unless the portfolio measurement exception applies, the unit of account is typically the individual loan.

F100. What techniques are used to measure the fair value of a financial guarantee?

In certain circumstances, it will be necessary to measure the fair value of a financial guarantee, e.g. a financial guarantee in the scope of Topic 815 (derivatives). Below are some examples of the valuation techniques used to measure the fair value of a financial guarantee.

Market prices of comparable instruments

An entity may be able to identify a market price for financial guarantees identical or similar to those that either it or a member of the group has issued or received in exchange for consideration. It might also be possible to identify market prices for similar guarantees, credit default swaps or credit insurance products. These prices could be adjusted to estimate the fair value of the financial guarantee. In our experience, this will be the easiest technique to apply.
Discounted cash flow models

There are different discounted cash flow models that could be applied to estimate the fair value of the financial guarantee, including using a probability-weighted discounted cash flow analysis reflecting default and recovery rates among entities with the same credit rating as the entity. In respect of default rates, an entity should consider whether historical default rates should be updated to reflect current and forecasted economic conditions.

Interest rate differentials

In some cases, an entity (borrower) might receive a guarantee for its issued loan for no consideration (e.g. a parent gives a guarantee for a loan of its subsidiary). When measuring the fair value of the benefit received at initial recognition, the entity might use the difference between the interest charged on the guaranteed loan and what would have been charged had the loan not been guaranteed as the basis for estimating the fair value of the guarantee. The premise is that the interest that the capital provider (e.g. a bank) is willing to forgo represents the price that it is willing to pay for the guarantee. This technique requires the entity to estimate the interest rate that it would have been charged without the financial guarantee and evaluating the borrower’s credit standing on a stand-alone basis.
Inputs to valuation techniques

Overview

- Inputs to valuation techniques are the assumptions that market participants would use in pricing the asset or liability.
- Inputs are categorized into three levels:
  - **Level 1 inputs**—Unadjusted quoted prices in active markets for identical assets or liabilities that the entity can access at the measurement date.
  - **Level 2 inputs**—Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).
  - **Level 3 inputs**—Unobservable inputs for the asset or liability.
- These inputs include assumptions about risk, such as the risk inherent in a particular valuation technique used to measure fair value and the risk inherent in the inputs to the valuation technique.
- An entity selects the valuation techniques:
  - that are appropriate in the circumstances;
  - for which sufficient data is available; and
  - that maximize the use of relevant observable inputs and minimize the use of unobservable inputs.

G10. If quoted prices in an active market are available and readily accessible, is it permissible for an entity to use a lower level input as a starting point for measuring fair value?

Generally, no. An entity does not make an adjustment to a Level 1 input except under specific circumstances. If an identical instrument is actively traded, a price is available and the entity can access that price at the measurement date, the fair value measurement should equal the product of the quoted market price (unadjusted) times the quantity of instruments held by the entity at the reporting date (i.e. $P \times Q$) (see also Question C90).
G20. **If Level 1 inputs are not available, does that change the objective of the fair value measurement?**

No. The fair value measurement objective remains the same regardless of the level of the inputs to the fair value measurement. Unobservable inputs also reflect the assumptions that market participants would use when pricing the asset or liability, including assumptions about risk.

G30. **Should a blockage factor be considered in measuring the fair value of financial assets?**

No. A blockage factor is a discount that reflects the number of instruments (i.e. Q) as a characteristic of the entity’s holding relative to daily trading rather than a characteristic of the asset or liability. An entity is prohibited from applying a blockage factor for a fair value measurement for all three levels of the fair value hierarchy. This is the case even in respect of positions that comprise a large number of identical assets and liabilities, such as financial instruments.

An entity selects inputs that are consistent with the characteristics of the unit of valuation for the asset or liability that market participants would take into account. An entity should not select inputs that reflect size as a characteristic of the entity’s holding even if the market’s daily trading volume is not sufficient to absorb the entire quantity held by the entity without changing the market price.

If an entity decides to enter into a transaction to sell a block of identical assets or liabilities (e.g. financial instruments), the consequences of that decision should not be recognized before the transaction occurs regardless of the level of the hierarchy in which the fair value measurement is categorized. Selling a block as opposed to selling the underlying assets or liabilities individually or in multiple, smaller pieces is an entity-specific decision. These differences are not relevant in a fair value measurement, and therefore they should not be reflected in the fair value of an asset or a liability.

G40. **Should a liquidity adjustment be considered in measuring the fair value of financial assets?**

Yes, in certain circumstances.

A liquidity adjustment should not be applied if the instruments being valued are actively traded (e.g. for instruments for which there are Level 1 inputs for the noncontrolling equity instruments). In that case, fair value is measured as the product of the quoted price and the quantity held by the entity (i.e. P\times Q).

However, applying a liquidity adjustment may be appropriate in measuring fair value if the:

- instruments being valued are categorized in Level 2 or Level 3 of the fair value hierarchy;
- other inputs in the valuation have not factored in the liquidity of the instrument; and
- market participants would include an adjustment when buying or selling the instrument.
If it is appropriate to make a liquidity adjustment, the amount of the adjustment is based on the liquidity of the specific instrument’s unit of valuation in the entity’s principal (or most advantageous) market and not on the size of the entity’s holding relative to the market’s daily trading volume.

**IFRS different from US GAAP**

Unlike US GAAP, in some cases there is uncertainty about the unit of account (unit of valuation), in particular for investments in subsidiaries, associates and joint ventures. This difference, which is discussed in Question C90, affects whether a liquidity adjustment is considered in measuring fair value.

**G50.** [Not used]

**G60. When an investment company holds a controlling interest in an entity, should it include a control premium (or market participant acquisition premium) in its measurement of fair value?**

It depends. If the instruments being valued are actively traded (i.e., for instruments for which there are Level 1 inputs for the noncontrolling equity instruments), fair value is measured as the product of the quoted price and the quantity held by the entity (i.e., PxQ). In this situation, an adjustment for a control premium (or market participant acquisition premium) would not be appropriate for Level 1 inputs.

This conclusion for instruments categorized as Level 1 in the fair value hierarchy does not apply to equity instruments held by an investment company that are categorized as Level 2 and Level 3 (i.e., for instruments for which there are no Level 1 inputs for the noncontrolling equity instruments). Specifically, for investment companies within the scope of Topic 946 (investment companies), there are situations in which a control premium (or market participant acquisition premium) may be appropriate if an entity holds a controlling interest. Topic 946 does not clearly establish a unit of account for investment companies and does not prohibit the use of either the individual security or the grouping of one issuer’s equity securities together as the unit of account. Practice has evolved so that investment companies use a single unit of account in these situations (i.e., the entire controlling interest) if market participants would take that approach; in such cases, a control premium (or market participant acquisition premium) would be considered.

**IFRS different from US GAAP**

Unlike US GAAP, in our view there is an accounting policy choice for the unit of account for investments in subsidiaries. If the unit of account is the investment as a whole, it may be appropriate to add such a premium in measuring the fair value of the investment (even if Level 1 prices exist for individual shares). This is explained in Question C90, including future developments under IFRS.
G70. **What criteria must be met to qualify for the practical expedient not to use Level 1 inputs?**

As a practical expedient, an entity may measure the fair value of certain assets and liabilities using an alternative method that does not rely exclusively on quoted prices. This practical expedient is appropriate only when the following criteria are met.

– The entity holds a large number of similar (but not identical) assets or liabilities; and

– Quoted prices from an active market, while available, are not readily accessible for these assets or liabilities individually (i.e., 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 our view, the use of such an alternative method as a practical expedient also is subject to the condition that it results in a price that is representative of fair value. We believe that the application of a practical expedient is not appropriate if it would lead to a measurement that is not representative of an exit price at the measurement date.

For a discussion of the categorization of the resulting fair value measurement in the hierarchy, see Questions H30 and H90.

G80. **How is the fair value measurement of an asset or liability affected by the transaction price for similar or identical assets or liabilities?**

An entity considers all of the following in measuring fair value or estimating market risk premiums.

– If the evidence indicates that a transaction is not orderly, the entity places little, if any, weight (compared with other indications of fair value) on that transaction price (see section M).

– If the evidence indicates that a transaction is orderly, the entity takes 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 facts and circumstances, such as the volume of the transaction, the comparability of the transaction to the asset or liability being measured, and the proximity of the transaction to the measurement date.

– If the entity does not have sufficient information to conclude whether a transaction is orderly, it takes into account the transaction price. However, that transaction price may not represent fair value; that is, the transaction price is not necessarily the sole or primary basis for measuring fair value or estimating market risk premiums. If the entity does not have sufficient information to conclude whether particular transactions are orderly, it places less weight on those transactions when compared with other transactions that are known to be orderly.

A fair value measurement is not intended to reflect a forced transaction or a distressed sale price. Nevertheless, the presence of distressed sellers in a particular market may influence the price that could be obtained by a non-distressed seller in an orderly transaction.
Although significant adjustments to a Level 2 input may be necessary as a result of a significant decrease in the volume or level of activity for the asset or liability in relation to normal market activity, Level 2 inputs related to transactions that are either orderly or where there is insufficient information to conclude whether a transaction was orderly are considered to be relevant and therefore should be considered in the valuation technique.

**G90. In measuring the fair value of loans, should an entity consider the current transaction price for the securities that would be issued by a market participant that securitizes the loans?**

It depends. A valuation technique should maximize observable inputs and minimize unobservable inputs. In addition, the fair value hierarchy gives 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).

As a result, it may be appropriate to include securitization prices as an input into the valuation technique if market participants would consider this pricing. This would be the case particularly if a reliable observable price for the loans is not available, even though the securitization market is not considered the principal market (discussed in Question E70). If the valuation technique uses these inputs, then the fair value of the loans generally would be obtained by adjusting the securitization prices (including the value of retained interests) for the costs that would be incurred and the estimated profit margin that would be required by a market participant to securitize the loans.

**G100. How should the fair value of a reporting unit that is a subsidiary be measured if the entity owns a 60 percent controlling interest and the remaining noncontrolling interest shares are publicly traded?**

In measuring the fair value of a reporting unit for goodwill impairment testing purposes, the unit of account is the collection of assets and liabilities forming the controlled entity. Acquisitions of public companies frequently involve payment of a premium to the pre-announcement share price, primarily because of synergies and other benefits that flow from control over another entity. In these circumstances, the quoted market price of an individual equity security may not be representative of the fair value of the reporting unit as a whole. Therefore, a control premium (or market participant acquisition premium) adjustment may be appropriate.

---

**Future developments under IFRS**

In September 2014, the IASB published Exposure Draft *Measuring Quoted Investments in Subsidiaries, Joint Ventures and Associates at Fair Value – Proposed amendments to IFRS 10, IFRS 12, IAS 27, IAS 28 and IAS 36 and Illustrative Examples for IFRS 13.*
The exposure draft proposed that, when assessing for impairment, the fair value less costs of disposal of a cash-generating unit that is a subsidiary whose shares are quoted in an active market would be measured based on the product (i.e. \( P \times Q \)) of the quoted price (\( P \)) multiplied by the quantity (\( Q \)) of instruments held (i.e. excluding a control premium (or market participant acquisition premium)).

Most constituents who provided their comments to the IASB on the exposure draft disagreed with the proposal. Their main reason was a perceived lack of alignment between the proposed measurement and the unit of account. Conversely, the majority of users who participated in the IASB’s outreach indicated a strong preference for \( P \times Q \) measurement because it is less judgmental.

As a result of the divergent views on the fair value measurement proposals, in 2015 the IASB decided to undertake further research on the proposed measurement of quoted CGUs. The research indicated that the population of entities that would be affected by the exposure draft is limited. Consequently, the IASB decided to continue the research on this topic by feeding it into the Post-Implementation Review (PIR) of IFRS 13. As part of the second phase of the PIR, in May 2017 the IASB issued a request for information, which includes prioritizing Level 1 inputs or the unit of account as one area of focus.

G110. If an entity has adopted a convention for prices subject to a bid-ask spread, but evidence exists that the price under the convention is not representative of fair value, should the entity adjust its valuation?

Yes. An entity should not ignore available evidence that its pricing convention (e.g. mid-market pricing) is producing an amount that is not representative of fair value. The price within the bid-ask spread that is representative of fair value in the circumstances should be used to measure fair value.

Topic 820 does not preclude an entity from establishing policies to use 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. However, in our view, the use of mid-market pricing or other pricing conventions is subject to the condition that it results in a price that is representative of fair value. Therefore, an entity cannot ignore available evidence that its pricing convention does not result in an amount that is representative of fair value. When using a pricing convention, an entity should ensure that the assumptions used each reporting period reflect current market conditions.

Example G110: Mid-market pricing

Company G invests in a financial asset that has bid and ask prices with a very wide bid-ask spread. Company G’s approach is to use the mid-market pricing convention for measuring fair value.
If Company G’s approach is to use mid-market pricing for assets and liabilities measured at fair value that have bid and ask prices, and the bid-ask spread is particularly wide or the applicable bid-ask spread has widened significantly for a specific asset or liability, a mid-market price may not be representative of fair value in those circumstances. In that case, Company G would evaluate whether the mid-market price continues to be representative of a fair value measurement as used by market participants for that specific asset or liability.

G120. **Is it appropriate for an entity that historically measured the fair value of individual positions using a mid-market pricing convention to use a different point within the bid-ask spread, to achieve a desired reporting outcome?**

No. In our view, it is not appropriate for an entity to change its valuation technique or policies to achieve a desired financial reporting outcome. However, a change in valuation technique or policy that results in a more representative measure of the fair value in the current circumstances would be appropriate.

G130. **In measuring the fair value of exchange-traded securities, at what time of the day should the security be priced?**

In practice, an entity generally uses the closing price from the principal (or most advantageous) market on the last day of its reporting period. Some entities use prices that reflect after-hours trading, which in practice is most common for instruments that trade in foreign markets that close before similar markets in other time zones. Consideration should be given to the circumstances in which adjustments to Level 1 prices may be appropriate.

**820-10-35-36C**

**[IFRS 13.B34]**

In an exchange market, closing prices are both readily available and generally representative of fair value. However, the definition of a closing price may represent different things on different exchanges for different types of financial instruments. For example, a closing price may range from the last transaction price for the day to a price derived from a complicated calculation or process. If an asset or liability is subject to a bid-ask spread, an entity needs to assess the nature of the closing price.

**946-320-S99**

For mutual funds and other similarly regulated entities, the measurement date may be determined either by reference to other applicable Codification Subtopics or industry-specific regulations.

**IFRS different from US GAAP**

There are no industry specific requirements under IFRS. Instead, the general principles of IFRS 13 apply.
**G140. When might a quoted price in an active market not be representative of fair value at the measurement date?**

In some cases, a quoted price in an active market might not represent fair value at the measurement date, which might occur if a significant event takes place after the close of a market but before the measurement date (e.g., the announcement of a business combination or trading activity in similar markets). In that case, an entity chooses an accounting policy, to be applied consistently, 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 categorized within a lower level of the fair value hierarchy (see section H).

**Example G140: Adjustment to inputs**

Company G holds shares of Company T that are listed on the London Stock Exchange (LSE). On the reporting date, Company G obtains the closing price of the shares from the LSE. Subsequent to the LSE’s closing time, but still on the reporting date, Company T makes a public announcement that affects the fair value of its shares as evidenced by prices for a small number of aftermarket transactions in depository receipts on the shares of Company T that are traded on the New York Stock Exchange.

Company G would use the aftermarket prices to make appropriate adjustments to the closing price from the LSE to measure the fair value of the shares at the measurement date. Because the adjustment is derived from observed market prices, the resulting fair value measurement would be a Level 2 measurement in the fair value hierarchy.

**G150. How might an entity determine the necessary adjustment when the quoted price is not representative of fair value at the measurement date?**

An entity should choose an accounting policy, to be applied consistently, to identify significant events occurring after the close of the principal or most advantageous market, but before the measurement date, which may affect fair value measurements.

In our experience, pricing data from aftermarket trades or trades for identical or similar assets or liabilities in another market may be useful to determine the existence of a significant event that affects the fair value measurement of an asset or liability. Pricing data also may be used to determine the amount of the adjustment to be made to the Level 1 price sourced from the entity’s principal (or most advantageous) market.

If an entity uses pricing data from aftermarket trades or trades for identical or similar assets or liabilities in another market to determine the amount of the adjustment, it should support that adjustment through analysis of how the pricing data or their underlying factors affect the fair value of the asset or liability. This analysis may be based on quantitative and qualitative factors to assess whether the pricing data is relevant to the fair value measurement of the asset or liability being measured.
For example, if an entity uses a statistical method in its analysis, to the extent that the analysis supports a correlation coefficient that is other than 1, that factor may need to be applied to pricing data from aftermarket trades or trades for identical or similar assets or liabilities in another market to develop the adjustment to be applied to the Level 1 price in the entity’s principal (or most advantageous) market.

This analysis also may include a comparison between the pricing data from aftermarket trades or trades for identical or similar assets or liabilities in another market and the subsequent price in the entity’s principal (or most advantageous) market. To the extent that a difference is found through this analysis, an adjustment to the Level 1 price from the entity’s principal (or most advantageous) market may need to reflect this difference.

**Example G150: Oil futures contracts**

Company G holds oil futures contracts at the New York Mercantile Exchange (NYMEX). On the reporting date, Company G obtains the closing price of the oil futures from NYMEX. On the reporting date, but subsequent to the closing time of NYMEX, there is a public announcement that affects oil prices and related financial instruments. This is evidenced by prices of oil forward contracts transacted in the over-the-counter (OTC) market on the reporting date.

Company G needs to evaluate the futures prices with forward contracts to factor in how correlated the futures and forward markets are. If this analysis supports a correlation, and the correlation coefficient is other than 1, that factor may need to be applied to the aftermarket forward prices to determine the appropriate adjustments to the price quoted on NYMEX.

Because of the adjustment to the price obtained from the principal market, the resulting fair value measurement generally would be expected to be a Level 2 measurement, unless the unobservable inputs are significant, in which case a Level 3 designation would be appropriate.

**G160. If an entity uses a pricing service to obtain inputs to a fair value measurement, what is management’s responsibility for evaluating the appropriateness of those inputs?**

The preparation of financial statements requires management to establish accounting and financial reporting processes for measuring fair value, including adequate internal controls. Even though third-party sources may provide management with data points for measuring fair value, management is still responsible for:

- complying with the applicable Topics, including disclosure requirements;
- maintaining appropriate internal controls to prevent or detect material misstatements related to the fair value measurements and disclosures; and
- assessing the effectiveness of internal control over financial reporting related to fair value measurements.
Management should understand how the quote or price was determined by the pricing service. It should understand what the source of the information was, the inputs and assumptions used, and whether a quote is binding or nonbinding. It also should consider whether an adjustment to the price is necessary. In addition, management is expected to establish internal controls to determine that the pricing information received from a vendor and used by management in the valuation process is relevant and reliable, including whether:

- the prices are consistent with the fair value measurement objective (i.e. the price at which an orderly transaction would take place between market participants on the measurement date); and

- there are a number of price indicators for a single instrument and the price indications are widely dispersed. If so, management should consider which prices best represent the price at which an orderly transaction would take place between market participants on the measurement date. If the differences in prices are significant, it generally is not appropriate to take the average of the quotes obtained from pricing services because an average does not necessarily represent a price at which a transaction would take place, and it is likely that one or more of the prices obtained better represents fair value than the others. See also Question H120.

Prices obtained from a pricing service are not considered observable simply because they were obtained from a third party or because the instrument being measured is liquid. The classification of these measurements within the fair value hierarchy depends on the nature of the inputs involved in the measurement. Therefore, to make sure that fair value measurements are categorized properly in the fair value hierarchy, management needs to understand the source of the inputs used for the measurement.

With respect to SEC registrants, the SEC staff noted that obtaining information from pricing sources may be critical to providing appropriate management’s discussion and analysis (MD&A) and financial statement disclosure. Therefore, the better management understands the models, inputs, and assumptions used in developing the price provided by the vendor, the more likely that appropriate risk and uncertainty disclosures will be made.

The SEC staff’s communications have clarified management’s responsibilities relating to prices obtained from third-party pricing sources that are used by management for estimating fair values for financial reporting purposes.

**G170. When an IPO is a likely event for a private company, does the expected IPO price represent the fair value of the company’s own equity instruments prior to the IPO?**

Generally, no. While the expected IPO price is a meaningful data point and should be considered in measuring the fair value of the company’s own equity instruments, it generally will not be representative of fair value as of the measurement date. This is because the ultimate IPO price is not finalized until the registration date, and the market price will not be determinable until trading takes place. Furthermore, the expected IPO price reflects the value of the entity’s shares under the assumption that they are publicly traded (i.e. a liquid instrument), whereas they are not in fact publicly traded at the measurement date.
Although the expected IPO price generally is not representative of fair value as of the measurement date, in our experience it is usual for management to obtain an understanding of the differences between that price and the measurement of fair value. This review can help to support the reasonableness of assumptions underpinning the valuation.

G180. Should the price established in an orderly, recent round of equity financing be considered in measuring the fair value of an existing equity investment that is similar but not identical?

Generally, yes. However, the entity needs to consider differences between the investments. For example, a recent round of equity financing might relate to Series B preferred instruments, while the equity investment whose fair value is being measured comprises Series A preferred instruments that have different liquidation preferences. In this case, an adjustment could be applied against the recent price to reflect such differences. Alternatively, the recent price may be an input into a valuation technique, e.g. calibrating the valuation model to value the instrument using the recent price of a similar instrument.

In our experience, the nature and amount of adjustments will depend on the facts and circumstances as of the measurement date. These factors also influence the relative weighting that would be given to the adjusted price if the results of multiple valuation techniques are being used (see Question F20). Considerations include the following.

- **The comparability of the instrument in the transaction to the asset being measured:** The rights and preferences associated with the instruments issued in the recent investment round (e.g. liquidation preferences, conversion ratios, dividends and anti-dilution provisions) are compared with the instrument that is being valued. This assessment includes considering the effect that the recent issuance had on previously issued instruments (e.g. the liquidation preference for an existing instrument may have become subordinated to more recently issued instruments).

- **The proximity of the transaction to the measurement date:** The passage of time between the transaction date and the measurement date reduces the relevance and reliability of the recent investment round for measuring the fair value of the instrument at the measurement date. In addition, events occurring between the recent investment round and the measurement date need to be considered.

- **The volume of the transaction:** The size of the recent investment round in total dollars.
Overview

- Topic 820 establishes a fair value hierarchy based on the inputs to valuation techniques used to measure fair value.
- The inputs are categorized into three levels – the highest priority is given to unadjusted quoted prices in active markets for identical assets or liabilities, and the lowest priority is given to unobservable inputs. For a more in-depth discussion of inputs to valuation techniques, see section G.
- The fair value hierarchy is made up of three levels, with Level 1 being the highest level.
  - **Level 1 inputs**—Unadjusted quoted prices in active markets for identical assets or liabilities that the entity can access at the measurement date.
  - **Level 2 inputs**—Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).
  - **Level 3 inputs**—Unobservable inputs for the asset or liability.
- Fair value measurements are categorized in their entirety based on the lowest level input that is significant to the entire measurement.
- The resulting categorization is relevant for disclosure purposes.

H10. How are fair value measurements categorized in the fair value hierarchy?

Fair value measurements are categorized in their entirety based on the lowest level input that is significant to the entire measurement. This is summarized in the following diagram.
H20. **If fair value is measured using inputs from multiple levels of the hierarchy, how should an entity determine the significance of an input for categorizing the fair value measurement within the hierarchy?**

Topic 820 does not provide guidance on how to determine *significance*. If a fair value is measured using inputs from multiple levels of the fair value hierarchy, the inclusion of a lower level input in an entity’s measurement may indicate that the input is significant. This is because the entity’s decision to include the lower level input provides evidence that it considers the input to be significant to the overall measurement of fair value. However, the final determination of whether inputs are significant is a matter of judgment that requires an entity to consider:

- factors specific to the asset or liability; and
- the importance of the input to the overall fair value measurement, including the quantitative effect of the input on the overall fair value measurement and possible alternative assumptions for the input.

If multiple unobservable inputs are used, in our view the unobservable inputs should be considered individually and in total for the purpose of determining their significance. For example, it would not be appropriate to categorize in Level 2 a fair value measurement that has multiple Level 3 inputs that are individually significant to that measurement but whose effects happen to offset. If factors such as volatility inputs are used, an entity could apply some form of comparability methodology (e.g. a stress test of the sensitivity of the fair value estimate to an option’s volatility input or a with and without comparison to assist in determining significance).

H30. **When an entity uses the practical expedient in G70 to deviate from a Level 1 input, how is the resulting fair value measurement categorized in the hierarchy?**

The use of an alternative pricing method results in a fair value measurement categorized within a lower level of the fair value hierarchy. An example of an alternative pricing method is matrix pricing. This pricing method involves using a selection of data points, usually quoted prices, or yield curves to calculate prices for separate financial instruments that share characteristics similar to the data points. Matrix pricing using observable market-based data points will usually result in a Level 2 categorization in the fair value hierarchy.
H40. In what level of the hierarchy should an entity categorize a fair value measurement of a publicly traded equity investment that is subject to a security-specific restriction?

Generally, Level 2 or Level 3. For securities that, absent the security-specific restriction, are publicly traded in an active market (i.e. the observed price is a Level 1 input for the unrestricted security), an entity adjusts the publicly available price for the effects of the restriction to arrive at the fair value of the restricted security. Any such adjustments will cause the overall fair value measurement to be categorized as a Level 2 or Level 3 measurement.

Although the overall fair value measurement will be a Level 2 or Level 3 measurement, further adjustments to the publicly traded price are generally not appropriate (see also Question H80).

H45. In what level of the hierarchy should an entity categorize the fair value measurement of publicly traded equity investments held indirectly through an intermediate entity?

It depends. The categorization of an asset or liability in the fair value hierarchy is based on the lowest level input that significantly affects the fair value measurement in its entirety. A reporting entity first determines the unit of account prescribed by the Topic/Subtopic that applies to the intermediate entity and the publicly traded equity investments held indirectly. Generally, we expect that a direct investment in an intermediate entity will represent the unit of account being measured at fair value, instead of investments held indirectly by the intermediate entity (see Question C15).

In instances where the sole purpose of the intermediate entity is to hold the publicly traded equity investments, the fair value of the investment in the intermediate entity may be determined by adjusting the fair value of the publicly traded equity investments for the effects of risks (e.g. liquidity risk) of the intermediate entity. Regardless of whether adjustments were applied to the fair value of the publicly traded equity investments, when the intermediate entity is the unit of account being measured, the investment in the intermediate entity is not an identical asset to the publicly traded equity investments. Therefore, assuming that the intermediate entity is not listed, it would not be appropriate to categorize the investment in Level 1 of the hierarchy.

The intermediate entity may hold assets and/or liabilities in addition to its investments in the publicly traded equity investments. In this case, the categorization of the investments in Level 2 or Level 3 of the hierarchy will depend on whether significant unobservable inputs were used to value these assets and/or liabilities.

In instances where the intermediate entity is consolidated by the reporting entity, the publicly traded equity investments (the individual shares) held by the intermediate entity become the unit of account of the consolidated reporting entity (see Question C15). If the publicly traded equity investments have a quoted price in an active market for the identical asset, then the equity investments are categorized in Level 1 of the hierarchy. If the market for the publicly traded equity investments is not active, then the investments are categorized in Level 2 or 3 of the hierarchy.
In certain instances, the intermediate entity may be an investment company in which the fair value of the investment is estimated using the net asset value as a practical expedient. In these instances, the fair value is not categorized in the hierarchy.

**IFRS different from US GAAP**

Unlike US GAAP, IFRS does not include an exception that allows the use of NAV as a practical expedient. Under IFRS, an entity may only measure investments on the basis of NAV when it is representative of fair value (see Questions P20 and P30). Therefore, the last paragraph above is relevant only to US GAAP.

**H50. In what level of the hierarchy should an entity categorize a fair value measurement of an equity investment in a privately held company?**

Generally, Level 3. The categorization of an asset or liability in the fair value hierarchy should be based on the lowest level input that significantly affects the fair value measurement in its entirety. To determine an investment's categorization in the hierarchy, an entity should consider the technique used to value the investment as well as the inputs to the measurement. Usually, there are no current observable prices for shares in private companies and accordingly the measurement of fair value is based on valuation techniques that use unobservable inputs.

For example, one common technique for valuing equity securities using the market approach is basing the measurement on multiples of income statement amounts (e.g., EBITDA, net income, revenue) for similar companies. For this technique, the multiples used in the fair value measurement should, if available and applicable, be calculated based on publicly available market information for similar companies that have actively traded equity securities.

However, although market information should be used if available and relevant, the overall fair value measurement of the equity securities measured using this technique generally will be a Level 3 measurement because the other inputs into the measurement technique (e.g., entity-specific income statement amounts, comparability adjustments) are not observable.

One of the other inputs that needs to be considered is a discount for the nonmarketable nature of the unquoted equity investment being measured, as compared with equity instruments of the similar companies that are publicly traded and, therefore, likely to be more liquid. An adjustment to reflect the nonmarketable nature of the investment generally will result in a fair value measurement categorized as a Level 3 measurement.
H60. For assets or liabilities that have maturities longer than instruments for which market pricing information is available, how should the fair value measurement be categorized?

In the absence of quoted prices in active markets for identical assets or liabilities that the entity can access on the measurement date, fair value measurements should not be categorized as Level 1. To be categorized as a Level 1 measurement, the market information should be observable prices for identical instruments.

To determine the appropriate categorization of fair value measurements of instruments that involve terms requiring both observable and unobservable inputs, an entity should consider each of the following factors.

- If market prices are observable for substantially all of the term of the asset or liability, the fair value measurement may be a Level 2 measurement. If market prices are not observable for substantially all of the term of the asset or liability, this may cause the measurement to be a Level 3 measurement.

- If the effect of an unobservable input on the overall fair value measurement is significant, the fair value measurement will be a Level 3 measurement. An adjustment to a Level 2 input for the effect of the unobservable term that is significant to the entire measurement may cause it to be a Level 3 measurement if the adjustment uses unobservable inputs.

Example H60: Categorization of derivatives when prices are not available

Company H has an over-the-counter contract to purchase natural gas every month for the next 30 months. The contract is accounted for as a derivative instrument and therefore is measured at fair value. Assume that natural gas futures prices are available in an active market for the next 24 months after the current reporting date. However, observable natural gas futures prices with maturities ranging from 25-30 months are not available. Therefore, for the remaining 6 months of the term, Company H uses internally developed estimates of future natural gas prices.

In our view, the fair value measurement of the natural gas contract would be categorized as a Level 3 measurement because market pricing information (Level 2 inputs) is only available for 80% of the term of the contract (24 of the 30 months), which does not represent substantially the entire term of the contract. Further, it is doubtful that the effect of the unobservable market pricing information (Level 3 inputs) on the overall fair value measurement would be insignificant. However, in the following year, if quoted natural gas prices continue to be available for the following 24 months, the fair value measurement might be categorized as a Level 2 measurement.
H70. **How should an entity determine whether entity-derived inputs are corroborated by correlation to observable market data for the purpose of determining whether they are Level 2 inputs?**

Market-corroborated inputs are defined as “inputs that are derived principally from or corroborated by observable market data by correlation or other means.”

An entity may use correlation analysis to prove the relationship between inputs. Correlation is a statistical concept, indicating the strength and direction of a linear relationship between two variables. In our view, for an input to be considered a Level 2 input by using correlation, the correlation between the input and relevant observable market data should be high. In using correlation or other statistical means to support Level 2 inputs, an entity may apply similar statistical considerations to those applied in establishing that a hedging relationship is highly effective using a regression analysis.

In establishing the level in the hierarchy of an input corroborated using correlation analysis, an entity considers factors such as the R-squared confidence level of the statistical analysis and the number of data points.

H80. **How does an adjustment for information occurring after the close of the market affect the categorization of the measurement in the hierarchy and an entity’s ability to make other adjustments?**

An adjustment to exchange-traded pricing for information occurring after the close of the principal (or most advantageous) market, but before the measurement date, will result in a fair value measurement that is lower than Level 1.

Although the adjusted price is no longer a Level 1 measurement, in our view, an entity is not allowed to make other adjustments to the measurement (e.g. for market or other risks), except if the criteria to make one of the other adjustments to Level 1 prices in Topic 820 are met (see Question G70 and sections K and L). We believe that the circumstances that allow an entity to adjust Level 1 inputs only allow for adjustments related to those circumstances.

H90. **If an entity obtains prices from a third-party pricing service to use in its fair value measurement of an asset or liability, how should it categorize the resulting measurement in the hierarchy?**

The use of a pricing service for inputs in a fair value measurement does not change the analysis of the categorization of the inputs in the fair value hierarchy. Prices obtained from a pricing service are not considered observable simply because they were obtained from a third party. Instead, the resulting fair value measurement is categorized in the fair value hierarchy based on the nature (or source) of the prices provided by the pricing service. Therefore, an entity using a pricing service should obtain an understanding of the valuation methods and the sources of inputs used by the pricing service to properly categorize any fair value measurements based on those inputs. See also Question G160.
For example, if a pricing service provides quoted prices (unadjusted) from active markets for identical assets or liabilities, any resulting fair value measurement that relies solely on those prices would be Level 1 (see Question H110). Alternatively, if the pricing service provides prices based on models that it has generated, any resulting fair value measurement would be a Level 2 or Level 3 measurement, depending on the observability and significance of inputs used in the model for the measurement and any adjustments made to those inputs.

In some cases, pricing services may provide Level 2 inputs determined using a matrix pricing methodology, even though Level 1 inputs are available to both the entity and the pricing service. Using Level 2 inputs in these situations is not appropriate unless the entity meets the criteria in Question G70. If these criteria are not met, the entity should obtain quoted prices (Level 1 inputs) either from the pricing service or from other sources.

**Example H90: Fair value measurement from pricing services**

If a price is obtained from a pricing service, how should it be categorized in the fair value hierarchy in each of the following scenarios?

**Scenario 1: Debt security traded in a dealer market**

Company H holds a debt security that is traded in a dealer market in which bid-ask quoted prices are available. Assume that the market is an active market for the debt security and Company H has access to this market.

If the pricing service used the price to measure the fair value of the debt security (i.e. the identical CUSIP), the debt security would be a Level 1 measurement. However, if the pricing service uses a methodology for this class of debt securities based on observable market data using matrix pricing methodology in addition to Level 1 inputs when it meets the relevant criteria (see Questions G70 and H30), the price would usually be categorized as a Level 2 measurement.

**Scenario 2: Exchange-traded debt security**

Company H issued an exchange-traded debt security and elected to account for the instrument under the fair value option. The pricing service uses the quoted price for the security trading as an asset in an active market as its measurement of the fair value of the debt security.

Company H evaluates whether the quoted price for the asset used by the pricing service requires adjustment for factors such as a restriction preventing the sale of that asset, which would not apply to the fair value measurement of the liability.

In this case, Company H determines that no adjustments are required to the quoted price of the asset. Therefore, the debt security would be categorized as a Level 1 measurement. This is because the price used to measure the fair value of the debt security is for the identical instrument issued by Company H and traded as an asset, and no adjustments were made to the quoted price of the identical instrument.

---

8. Committee on Uniform Security Identification Procedures – the US alphanumeric code that identifies a financial security.
**Scenario 3: Interest rate swap**

Company H is a party to an interest rate swap transaction in an OTC market. There are no quoted prices in the OTC market for interest rate swaps that are identical to Company H’s swap. Company H obtains rates from a third-party pricing service to use in the measurement of the fair value of the swap. For providing the price, the pricing service uses transaction rates for similar swaps in the OTC market.

While similar swaps may have been transacted in the OTC market, these swaps have different counterparties as well as different fixed coupons and residual maturities, and therefore are not identical to Company H’s interest rate swaps. The price at which Company H would be able to sell the interest rate swap would result from a negotiated transaction taking into account the credit ratings of the two parties to the swap as well as the terms of the specific swap. Because the swap is not identical to similar swaps for which there are transactions in the OTC market, the price would not be categorized as a Level 1 measurement, but as Level 2 or Level 3 depending on whether significant unobservable inputs are used to produce the price.

**H100. When prices derived from consensus valuations are used for measuring fair value, where in the hierarchy does the resulting measurement fall?**

It depends. A consensus valuation is a common method (e.g. for loans and derivatives) when multiple participants in a group assembled by a pricing service submit their best estimate of price (typically a mid-market price) for the assets or liabilities that each entity holds in its trading books. The pricing service returns consensus prices to each subscriber based on the data received.

When assessing consensus data, it is important to understand what the prices submitted represent. If the estimates provided to the service do not represent executable quotes or are not based on observable prices, a fair value measurement derived from the consensus price would be a Level 3 measurement. However, if the inputs to the price received from the pricing service are Level 1 or Level 2 inputs, the use of those prices generally will result in a Level 2 measurement.

As discussed in Question G160, management is required to obtain an understanding of the source of the inputs for a price received from a pricing service to properly categorize any fair value measurement based on those inputs.

**H110. Should a fair value measurement be categorized in Level 1 of the hierarchy when the asset or liability measured has a bid price and an ask price?**

It depends. In our view, a valuation technique that uses only unadjusted quoted prices in an active market at the measurement date for an identical instrument may be categorized in its entirety in Level 1 if it uses more than one Level 1 input (e.g. a Level 1 bid price and a Level 1 ask price) and the valuation technique does not include adjustments to those Level 1 inputs.
Therefore, we believe that a fair value measurement that uses a mid-market price that is an average of a Level 1 bid price and a Level 1 ask price may be considered a Level 1 measurement. Similarly, we believe that the price within the bid-ask spread that is most representative of fair value may also be categorized in Level 1, if the bid and ask prices are Level 1 prices.

However, we believe that a fair value measurement that is based on a model that uses complex algorithms or quoted prices in an active market from different points in time before the measurement date cannot be considered a Level 1 measurement. Similarly, a fair value measurement that is based on a model that uses only quoted prices in an active market as inputs, but not all of those inputs relate to the identical instrument being measured, cannot be considered a Level 1 measurement.

H120. Should executable prices be considered quoted prices?

It depends. In our view, certain types of executable prices (e.g., third-party quotes that represent binding offers) can be considered quoted prices even though they do not represent the price of an actual transaction.

For example, in many markets (particularly when market makers or similar intermediaries are involved) the market price is determined on the basis of bid and ask prices, which are binding offers but do not represent the price of an actual transaction until the offer is accepted and a trade occurs.

Although in measuring fair value less weight generally is placed on quotes that do not reflect the result of transactions compared with other indications of fair value that reflect the result of transactions, we believe that bid and ask prices may in some cases represent quoted market prices. This is because current quoted bid and ask prices (or similar binding offers to trade) from market makers or exchanges may be more representative of the price at which a market participant could sell an asset at the measurement date than the prices of actual transactions that occurred at an earlier point in time; these earlier transactions do not necessarily represent the price at the measurement date. If an executable price is considered a quoted price but the market is not active, the price will be categorized in Level 2 of the hierarchy.

We believe that determining whether a binding offer is considered a quoted price in the market and whether the market in which the binding offer is made is considered ‘active’ requires judgment and depends on the specific facts and circumstances. In particular, it would be unusual for binding offers to be available at widely different price levels if the market is active. Similarly, a wide bid-ask spread may be associated with a market not being active.
I. Fair value at initial recognition

Overview

– If an asset is acquired (or a liability assumed), the transaction price paid for the asset (or received to assume the liability) normally reflects an entry price. However, Topic 820 requires fair value measurements to be based on an exit price.

– Although conceptually different, in many cases the exit and entry price are equal and therefore fair value at initial recognition generally equals the transaction price.

– However, if there is a difference, it is necessary to consider whether a day one gain or loss should be recognized.

I10. Can there be a difference between the transaction price and fair value at initial recognition?

Yes, although this is expected to occur only in limited circumstances. In many cases, the transaction price (excluding transaction costs) equals the fair value. However, there may be situations in which the transaction price might not be representative of fair value at initial recognition.

In determining whether fair value at initial recognition equals the transaction price, an entity considers factors specific to the transaction and to the asset or liability. The transaction price might, for example, not represent fair value at initial recognition if the:

– transaction to purchase the asset or assume the liability was entered into in a market other than the entity’s principal (or most advantageous) market;

– transaction price (i.e. entry or purchase price) is not the price within the bid-offer spread that is most representative of fair value (i.e. an exit or sale price). This may apply when an entity uses bid prices for asset positions and ask prices for liabilities;

– transaction is between related parties;

– transaction takes place under duress or the seller is forced to accept the price in the transaction; and/or

– 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 might be the case in a business combination, or for a financial asset or financial liability that is purchased or assumed as part of a portfolio to which the entity applies the portfolio measurement exception (see section L). In this case, the transaction price is based on the individual item, while the initial fair value measurement is based on the entity’s net position.
Before concluding that it is appropriate that the fair value at initial recognition is different from the transaction price, the entity should:

- identify the specific attributes of the transaction that generate the difference between the transaction price and the entity’s estimate of fair value; and
- consider the guidance and examples given in Topic 820.

The transaction price remains an important piece of objective evidence for measuring the fair value of financial instruments. Therefore, as the significance of the assumptions made by an entity increases in importance to the overall measurement of fair value, the entity should consider whether the transaction price for the instrument provides better evidence of the fair value of the instrument than its own estimate of fair value.

**Example I10: Difference between transaction price and fair value at initial recognition**

Company R, a retail counterparty, enters into an interest rate swap in a retail market with Company D, a dealer, for no initial consideration (i.e. the transaction price is zero).

- Company D can access both the retail market (i.e. with retail counterparties) and the dealer market (i.e. with dealer counterparties).
- Company R can access only the retail market.

The dealer market is the market with the greatest volume and level of activity for the swap. The fair value determined by transactions in the dealer market may be different from the transaction price in the retail market.

**Company D**

From the perspective of Company D, the dealer market is the principal market for the swap, which is different from the market in which it initially entered into the swap transaction (the retail market). Therefore, for Company D the transaction price of zero may not necessarily represent the fair value of the swap on initial recognition.

**Company R**

Company R cannot access the dealer market, and the retail market is the principal market from its perspective. If it were to transfer its rights and obligations under the swap, it would do so with a dealer counterparty in that retail market. Therefore, the transaction price of zero represents the fair value of the swap to Company R on initial recognition (ignoring the potential effect of the bid-ask spread).
I20. **Is an entity required to recognize a day one gain or loss if the transaction price differs from the fair value measurement at initial recognition?**

It depends. For assets or liabilities that are measured initially at fair value, Topic 820 requires day one gains or losses resulting from the difference between the fair value and the transaction cost to be recognized in profit or loss, unless the relevant Topic that requires or permits fair value measurement specifies otherwise.

Recognition of the difference between the transaction price and the entity’s estimate of fair value is not dependent on where in the fair value hierarchy the entity’s fair value measurement falls (i.e. Level 1, 2 or 3). As such, an entity can recognize a day one gain or loss even when the fair value measurement is categorized in Level 3 of the hierarchy.

### IFRS different from US GAAP

For financial instruments, the relevant standards contain requirements that specify when an entity is required to recognize day one gains or losses in profit or loss. Unlike US GAAP, these standards prohibit the immediate recognition of a day one gain or loss unless fair value is evidenced by a quoted price in an active market for an identical financial asset or liability, or is based on a valuation technique whose variables include only data from observable markets (the observability condition).

Unlike US GAAP, if the entity determines that the fair value at initial recognition differs from the transaction price but it is not evidenced by a valuation technique that uses only data from observable markets, the carrying amount of the financial asset or liability on initial recognition is adjusted to defer the difference between the fair value measurement and the transaction price. This deferred difference is subsequently recognized as a gain or loss only to the extent that it arises from a change in a factor (including time) that market participants would take into account when pricing the asset or liability.

However, in our experience some banks immediately recognize losses equal to the difference between the fair value on initial recognition and the transaction price, even if the valuation technique is not based wholly on observable market data. Additionally, in our experience banks may consider the recognition of day one gains if any unobservable inputs used in the valuation technique that forms the basis for measuring the instrument’s fair value on initial recognition are judged to be insignificant in relation to measuring the day one gain.

The table illustrates the application of the day one gain and loss guidance in IFRS on initial recognition if:

- a difference arises between the transaction price (e.g. 100) and management’s alternative estimate of fair value (e.g. 99); and
- the observability condition is not met.
I30. Can there be a day one difference for a hybrid instrument if the entity has access to a market for the components of the hybrid that would result in a more advantageous measurement of the entire hybrid instrument?9

It depends. An entity is required to consider the hybrid instrument acquired or obtained, including all its rights and obligations, as well as any other items that would be considered by market participants, when developing a price for the hybrid instrument in its entirety.

It may be appropriate to measure the fair value of a hybrid instrument in its entirety based on the separate fair value measurements of its individual components (i.e. the host contract and one or more embedded derivatives) if that is how market participants would price the instrument in the principal (or most advantageous) market for the hybrid instrument.

However, if the resulting measurement at initial recognition is different from the transaction price, it may be appropriate for an entity to recognize the difference between the transaction price and the entity’s measurement of fair value, only if the entity can:

- identify the specific attributes of the transaction that generate the difference between the transaction price and the entity’s estimate of fair value; and
- reconcile those attributes with the guidance on recognizing when a day one gain or loss may be appropriate (see Questions I10 and I20).

If there is a difference between the transaction price and the fair value of the hybrid instrument at initial recognition based on the fair values of its separate components, the resulting day one gain or loss is recognized in profit or loss.

For the fair value of a hybrid financial instrument in its entirety to be based on the instrument’s individual component parts, without adjustment, the valuation technique used should capture all of the cash flows or other exchanges of value included in the contractual terms of the hybrid instrument together with associated risks including any interdependencies between different components.

---

9. A hybrid instrument refers to a nonderivative instrument that consists of a nonderivative host contract and one or more embedded derivatives.
Can a gain or loss arise at initial measurement for an investment when fair value is measured using a mid-market pricing convention?

Yes. As explained in Question G110, Topic 820 does not prohibit using mid-market prices or other pricing conventions generally used by market participants as a practical expedient for fair value measurements within a bid-ask spread. However, in our view the use of mid-market prices requires that it provides a reasonable approximation of an exit price.

Therefore, if it is determined that the mid-market price is representative of fair value, a gain or loss will arise on initial recognition because of the difference between the transaction price (e.g. ask price paid to purchase an asset) and the mid-market price. For discussion of the treatment of gains or losses at initial recognition, see Question I20.

Unlike US GAAP, for financial instruments IFRS prohibits the immediate recognition of a day one gain or loss unless the observability condition is met (see Question I20).
Highest and best use

Overview

- **Highest and best use** is a valuation concept that represents the use of a nonfinancial asset by market participants that would maximize the value of the asset or the group of assets and liabilities (e.g. a business) within which the asset would be used.
- The highest and best use of a nonfinancial asset establishes the *valuation premise* that is used to measure the asset’s fair value.
- A fair value measurement of a nonfinancial asset considers a market participant’s ability to generate economic benefits by using the asset at its highest and best use or by selling it to another market participant who would use the asset in its highest and best use.

J10. **Can an entity assume a change in the legal use of a nonfinancial asset in determining its highest and best use?**

It depends. A fair value measurement of a nonfinancial asset takes into account a market participant’s ability to generate economic benefits by using the asset at its highest and best use or by selling it to another market participant that would use the asset at its highest and best use.

```
Physically possible?  
| Yes | No |
----------|----|
Legally permissible?  
| Yes | No |
| | |
Financially feasible?  
| Yes | No |
| | |
Maximizes value?  
| Yes | No |
----------|----|
Use is not considered in measuring fair value
Use is considered in measuring fair value
```
In determining the highest and best use of a nonfinancial asset, the entity considers whether the use is physically possible, legally permissible and financially feasible. The entity also considers whether maximum value would be provided to market participants by using the asset on a stand-alone basis or in combination with other assets. This is illustrated in the above diagram.

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 nonfinancial asset is presumed to be its highest and best use unless market or other factors suggest that a different use by market participants would maximize the value of the asset.

A use that is legally permissible takes into account any legal restrictions on the use of the nonfinancial asset that market participants would take into account when pricing the asset. To be considered legally permissible, the potential use of a nonfinancial asset should not be prohibited under current law in the jurisdiction.

When a nonfinancial asset’s fair value measurement contemplates a change in its legal use (e.g. a change in zoning restrictions), the risks of changing its legal usage and the costs a market participant would incur to transform the asset should be considered.

Example J10: Land acquired in a business combination

Company J acquires land in a business combination. The land is currently developed for industrial use as a factory site. Although the land’s current use is presumed to be its highest and best use unless market or other factors suggest a different use, Company J considers the fact that nearby sites have recently been developed for residential use as high-rise apartment buildings.

On the basis of that development and recent zoning and other changes to facilitate that development, Company J determines that the land currently used as a factory site could be developed as a residential site (e.g. for high-rise apartment buildings) and that 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 is determined by comparing the following.

- The value of the land as currently developed for industrial use (i.e. an assumption that the land would be used in combination with other assets, such as the factory, or with other assets and liabilities); and
- The value of the land as a vacant site for residential use, taking into account the costs of demolishing the factory and other costs necessary to convert the land to a vacant site. The value under this use would take into account risks and uncertainties about whether the entity would be able to convert the asset to the alternative use (i.e. an assumption that the land would be used by market participants on a stand-alone basis).
J20. **When an acquirer in a business combination plans to use an acquired intangible asset defensively, who are the market participants?**

It depends. In evaluating the highest and best use to market participants, the possible perspectives of financial and strategic buyers may be considered to determine the asset’s highest and best use. In general, the key difference between the two categories of potential market participants is that strategic buyers have existing operations and may have complementary assets with which the intangible asset may be used either actively or defensively, while financial buyers do not. There are exceptions such as when financial buyers have existing investments in a specific market with which acquired assets may be used or when financial buyers may be pursuing a roll-up strategy.

The highest and best use of the intangible asset to market participants may be to actively use the intangible asset with other assets, including potentially other assets already owned by market participants. This use could apply to both financial and strategic buyers. Alternatively, the highest and best use may be to use the asset defensively in a manner that results in a highest and best use of the group of complementary assets. This may be the highest and best use for strategic buyers, but would be less likely to apply to financial buyers who are more likely to use the intangible asset actively.

One of the most important aspects of valuing an intangible asset that is expected to be used defensively to increase the value of other assets, is determining the characteristics of market participants. The entity’s decision not to actively use the asset is not determinative in concluding who the appropriate market participants are or the highest and best use of the intangible asset to market participants.

J30. **Should an entity use entity-specific assumptions about its future plans in measuring the fair value of an intangible asset acquired in a business combination?**

No. The entity does not consider its planned future use or non-use (i.e. retired or otherwise not used) in measuring the fair value of the intangible asset. Like all nonfinancial assets, the fair value of an intangible asset is measured based on the assumptions that market participants would use in pricing the asset. Therefore, an entity considers the highest and best use by market participants in measuring the fair value to be allocated to the intangible assets in the acquisition accounting.
J40. Can an entity use differing valuation premises for nonfinancial assets within a group of assets and liabilities?

No, assumptions about the highest and best use of nonfinancial assets within a group should be consistent.

Example J40: Customer relationships

Company J acquired contractual customer relationships and technology assets as part of a business combination. Company J considers the following in determining whether the highest and best use of the customer relationships would be on a stand-alone basis or in combination with complementary assets.

- The relationships with customers arose in the context of the sale of products incorporating the technology. A market participant without complementary technology would likely realize lower value from the customer relationships on a stand-alone basis, because of the probability of lower expected sales.

- However, a market participant with access to complementary technology would likely realize higher sales and profits than on a stand-alone basis and would consider this in valuing the customer relationships.

In this example, the valuation premise for each asset in the group would be in combination with the other assets and liabilities of the group.

J50. Does the highest and best use concept apply to financial assets?

No. The highest and best use and valuation premise is only relevant when measuring the fair value of nonfinancial assets. This is because financial assets do not have alternative uses, and their fair values do not depend on their use within a group of other assets or liabilities. In addition, the unit of account of a financial instrument is typically the individual instrument (see Question C10).

Financial assets do not have alternative uses because they have specific contractual terms and have a different use only if the contractual terms change. However, a change to the contractual terms generally will cause the financial asset to become a different asset (which does not exist at the measurement date).

Although the highest and best use concept does not apply to financial assets, Topic 820 permits a measurement exception that allows an entity to measure the fair value of a group of financial assets and liabilities with offsetting risk positions on the basis of its net exposure, if certain criteria are met (see section L).
K. Liabilities and own equity instruments

**Overview**

- In measuring the fair value of a liability or an own equity instrument, it is assumed that the item is transferred to a market participant at the measurement date (e.g. the liability remains outstanding and the market participant transferee would be required to fulfil it).

- If there is no quoted price for the transfer of an identical or a similar liability or an entity’s own equity instrument, and another market participant holds the identical item as an asset, the entity measures the item’s fair value from the perspective of such a market participant.

- In other cases, an entity uses a valuation technique to measure the fair value of the item from the perspective of a market participant that owes the liability or that issued the equity instrument.

- The fair value of a liability reflects the effect of nonperformance risk (i.e. the risk that an entity will not fulfil an obligation). Nonperformance risk includes, but may not be limited to, an entity’s own credit risk.

---

**K10. How does a fair value measurement based on a transfer notion differ from a valuation based on a settlement notion?**

A fair value measurement based on a transfer notion requires an entity to determine the price that would be paid by a market participant to another market participant to assume the obligation. Because the liability will be transferred, it is assumed that the liability remains outstanding and that the transferee will be required to fulfill the obligation; the liability is not settled with the counterparty or otherwise extinguished on the measurement date.

In contrast, settlement may include different forms of extinguishment of the liability with the counterparty or any other party. Topic 820 does not allow fair value measurements based on a settlement notion because this would incorporate an assumption of an extinguishment of the liability, which would be based on entity-specific rather than market participant assumptions. As a result, when a liability is measured at fair value, the relative efficiency of the entity in settling the liability using its own internal resources appears in earnings over the course of its settlement, not before.

---

10. A hybrid instrument refers to a nonderivative instrument that consists of a nonderivative host contract and one or more embedded derivatives.
K20. **How should an entity measure the fair value of a liability or own equity instrument?**

A fair value measurement of a liability (financial or nonfinancial) or an entity’s own equity instrument assumes that the item is transferred in an orderly transaction between market participants at the measurement date. This transfer notion is conceptually consistent with the exit-price concept.

The following diagram illustrates the process that an entity uses in performing a fair value measurement of a liability or its own equity instruments:

![Diagram showing the process of fair value measurement for liabilities and equity instruments.](attachment:diagram.jpg)

Liabilities are rarely transferred individually because of contractual or other legal restrictions preventing their transfer (see Question K50). In addition, in many cases there is no observable market to provide pricing information about the transfer of a liability or an equity instrument. However, there might be an observable market for these items if they are held by other parties as assets (e.g. debt securities).
Liabilities and equity instruments held by other parties as assets

When there is no quoted price for the transfer of an identical or similar liability or equity instrument and another party holds the identical item as an asset, an entity measures fair value based on the perspective of a market participant that holds the identical item as an asset, adjusted for factors like restrictions on sale.

Factors that may indicate that the quoted price of the asset should be adjusted include 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. For example, a liability may have a particular characteristic, such as the credit quality of the issuer, which is different from what is reflected in the fair value of a similar liability held as an asset.

- The unit of valuation for the asset is not the same as that of the liability or equity instrument. For liabilities, the price for an asset may reflect 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 the combined package, the objective is to measure the fair value of the issuer’s liability and not the fair value of the combined package. In these cases, the entity would adjust the observed price for the asset to exclude the effect of the third-party credit enhancement (see Question K60).

Liabilities not held by other parties as assets

When there is no quoted price for the transfer of an identical or similar liability and there is no corresponding asset, (e.g. an an asset retirement obligation (ARO)), the entity uses a valuation technique to measure the fair value of the item from the perspective of a market participant that owes the liability.

When using a present value technique to measure fair value, the entity could estimate the future cash outflows that market participants would expect to incur in fulfilling the obligation, including any compensation for risk and the profit margin that a market participant would require to undertake the activity. An entity may estimate those future cash outflows using the following steps.

1. Estimate the future cash flows that the entity would expect to incur in fulfilling the obligation.
2. Exclude the cash flows that other market participants would not incur.
3. Include the cash flows that other market participants would incur but that the entity would not incur.
4. Estimate the compensation that a market participant would require to assume the obligation. This compensation incorporates a profit margin at a rate consistent with undertaking the activity, a risk that the actual cash outflows might differ from estimated cash outflows (including credit risk), an assumption of inflation, and a risk-free rate of interest.

For further discussion in the context of an ARO, see Question K80.
Future developments under US GAAP

In October 2017, the FASB published Proposed ASU, Codification Improvements. The proposed update clarifies that when an issuer is valuing its liabilities or equity instruments on the basis of the quoted price of the corresponding asset, restrictions on transfer of such liabilities or equity instruments should not be included as an adjustment to the fair value of the quoted price of the corresponding asset. Additionally, transfer restrictions that are characteristics of an asset should be considered in determining the fair value of the corresponding liability or equity instrument.

The proposed update states that the proposed amendments are not intended to substantively change the application of GAAP. However, the proposed amendments may result in a change to existing practice for some entities. Additionally, the proposed amendments, if finalized, may lead to differences in practice compared to IFRS.

K30. Does an entity consider its own risk of nonperformance in measuring the fair value of its liabilities?

Yes. If an entity has elected or is required to measure its liabilities at fair value, it is required to consider its own nonperformance risk, because it would be considered by market participants, in measuring fair value.

Nonperformance is the risk that an entity will not fulfill an obligation and therefore it encompasses all factors that might influence the likelihood that the obligation will not be fulfilled.

In a fair value measurement, it is assumed that the nonperformance risk remains the same before and after the transfer.

K40. Other than the entity’s own credit risk, what factors are considered in determining nonperformance risk?

In considering nonperformance risk in measuring the fair value of a liability, in addition to own credit risk, an entity takes into account any other factors that might influence the likelihood that the obligation will or will not be fulfilled. That effect depends on the nature of the liability (e.g. whether it is a financial liability or an obligation to deliver a good or perform a service). For example, the risk that the entity will not be able to obtain and deliver a product, such as a commodity, to its counterparty may affect the fair value measurement.

For commodity contracts, nonperformance risk may be mitigated by make-whole or other default provisions in the contract. These factors should be considered in determining any necessary adjustment for nonperformance risk (including credit risk) to the contract’s (or any resulting receivable’s or payable’s) fair value measurement.
K50. How should a restriction on transfer be taken into account in measuring the fair value of a liability or own equity instrument?

In measuring the fair value of a liability or own equity instrument using the quoted price of the item when traded as an asset, a separate input (or adjustment to another input) to reflect a restriction that prevents the transfer of the liability or own equity instrument (or of the related asset) is not applied.

The effect of a restriction that prevents the transfer of a liability or an own equity instrument is either implicitly or explicitly included in the other inputs to the fair value measurement. This is because, at the measurement date, both the creditor and the obligor are willing to accept the transaction price for the liability with full knowledge that the obligation includes a restriction that prevents its transfer.

Therefore, the restriction is already included in the transaction price and a separate input (or adjustment to another input) into the fair value measurement of the liability or own equity instrument is not required to reflect the effect of the restriction on transfer. However, an entity may adjust quoted prices for features that are present in the asset but not present in the liability, or vice versa.

K60. Should an inseparable third-party credit enhancement be included in the fair value measurement of a liability?

Generally, no. The fair value of a liability reflects the effect of nonperformance risk based on its unit of account. The issuer of a liability with an inseparable third-party credit enhancement (e.g. debt that is issued with a financial guarantee from a third party that guarantees the issuer’s payment obligation) generally excludes the credit enhancement from the unit of account in measuring the fair value of the liability. This is because the credit enhancement is not a contractual obligation of the borrower/issuer and because the existence of the guarantee does not change the obligation of the entity.

However, in two situations the inseparable third-party credit enhancement is not accounted for as a separate unit of account (i.e. it is included in the fair value measurement of the liability).
The credit enhancement is granted to the issuer of the liability (e.g. deposit insurance provided by a government or government agency); or

- The credit enhancement is provided between reporting entities within a consolidated or combined group (e.g. between a parent and its subsidiary or between entities under common control).

This guidance generally applies to all liabilities issued with third-party credit enhancements that are measured or disclosed at fair value on a recurring basis, including derivatives.

The guidance prescribing the unit of account is specific to the issuer of the liability and does not apply to the holder of the credit enhanced liability (as an asset). In measuring the fair value of a liability based on the fair value of the corresponding asset, an adjustment may be required to the observed price for the asset to exclude the effect of the third-party credit enhancement (see Question K20).

If you want to measure the fair value of a financial liability with a demand feature (e.g. demand deposits) under IFRS, the fair value is not less than the amount payable on demand, discounted from the first date that the amount could be required to be paid.

K70. **What is the fair value of a liability payable on demand?**

The fair value of demand deposits, savings accounts, and certain money market deposits is measured at the amount payable on demand at the measurement date. The fair value of fixed-maturity certificates of deposit is estimated using the rates currently offered for deposits of similar remaining maturities.
K80. **How is the fair value of an asset retirement obligation (ARO) measured?**

Generally, an expected present value technique is used to measure the fair value of an ARO. An entity is not precluded from using a discount rate adjustment technique (see Question F30) or a technique based on a market approach. However, applying these techniques is rare because observable market prices, including market interest rates for AROs, generally do not exist.

To measure the fair value of a liability for an ARO using an expected present value technique, an entity begins by estimating the expected cash flows that reflect, to the extent possible, a marketplace assessment of the cost and timing of performing the required retirement activities. Considerations in estimating those expected cash flows include developing and incorporating explicit assumptions, to the extent possible, about the following:

- the costs that a third party would incur in performing the tasks necessary to retire the asset;
- other amounts that a third party would include in determining the price of the transfer, including inflation, overhead, equipment charges, profit margin and advances in technology;
- the extent to which the amount or timing of a third party’s costs would vary under different future scenarios and the relative probabilities of those scenarios; and
- the price that a third party would demand and could expect to receive for bearing the uncertainties and unforeseeable circumstances inherent in the obligation (i.e. market risk premium), including consideration of the liquidity, or illiquidity, of the obligation.

To determine the fair value of the ARO, a market risk premium is included as an input into the undiscounted estimated cash flows of the obligation if a market participant would demand one. An entity can include a risk premium in the fair value measurement of the liability in one of two ways. An entity may adjust the cash flows or adjust the rate used to discount the future cash flows to their present value.
Example K80: Fair value measurement of an ARO

Company K assumes an ARO liability in a business combination and is therefore required to measure the liability at fair value in the acquisition accounting. Company K is legally required to remediate a mine pit at the end of its useful life, which is estimated to be in 10 years. Company K uses a present value technique to measure the fair value of the ARO.

If Company K were allowed to transfer its ARO to a market participant, it would conclude that a market participant would use all of the following inputs in estimating the price.

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor costs</td>
<td>100</td>
</tr>
<tr>
<td>Allocated overhead and equipment costs – 60% of labor costs</td>
<td>60</td>
</tr>
<tr>
<td>Third-party contractor margin of 20%, based on margins that contractors in the industry generally receive for similar activities – 160 x 20%</td>
<td>32</td>
</tr>
<tr>
<td>Annual inflation rate of 4%, based on market data for the applicable jurisdiction – 192 x 4% compounded for 10 years</td>
<td>92</td>
</tr>
<tr>
<td>5% risk adjustment that reflects the compensation that an external party would require to accept the risk that the cash flows might differ from those expected given the uncertainty in locking in today’s price for a project that will not occur for 10 years – 284 x 5%</td>
<td>14</td>
</tr>
<tr>
<td>A risk-free rate based on 10-year government bonds in the applicable jurisdiction</td>
<td>5%</td>
</tr>
<tr>
<td>An adjustment to the discount rate to reflect Company K’s nonperformance risk, including its credit risk</td>
<td>3%</td>
</tr>
</tbody>
</table>
The following diagram shows the composition of these costs to give a fair value of the ARO of 138: present value at 8% of 298 (100 + 60 + 32 + 92 + 14) in 10 years.

The adjustment for the time value of money is shown separately from the credit risk adjustment, to illustrate the direction of the adjustment. However, in our experience only one discount rate calculation would be undertaken.

K90. **When an unquoted financial liability is assumed in a business combination, should the assumptions for the fair value measurement be from the perspective of the combined entity?**

It depends. Following the general valuation principles, the assumptions underlying the fair value measurement are consistent with those that a market participant would make in valuing the financial liability at the time of the business combination.

- If, as a result of the business combination, the acquirer becomes a legal obligor of the liability (e.g. by providing a guarantee), in our experience market participants would value the liability on that basis. For example, nonperformance risk would be based on the risk that the combined entity will not fulfil the obligation.

- If the acquiree remains the sole legal obligor after the acquisition, the fair value will reflect a market participant’s view of nonperformance risk subsequent to the acquisition. For example, an acquiree in financial difficulty may be acquired by a group with a good credit rating such that a market participant may consider that the acquirer might support the acquiree in fulfilling its obligations even though the acquirer has no legal obligation to do so.
L. Portfolio measurement exception

Overview

- An entity that holds a group of financial assets and financial liabilities is exposed to market risks (i.e. interest rate risk, currency risk and other price risk) and to the credit risk of each of the counterparties.

- If certain conditions are met, an entity is permitted (but not required) to measure the fair value of a group of financial assets and financial liabilities with offsetting risk positions on the basis of its net exposure.

- Under the exception, the fair value of the group is measured on the basis of the price that would be received to sell a net long position (or paid to transfer a net short position) for a particular risk exposure in an orderly transaction between market participants at the measurement date. Therefore, application of the portfolio measurement exception is considered to be consistent with the way in which market participants would price the net risk position at the measurement date.

L10. When is it appropriate for an entity to measure the fair value of a group of financial assets and financial liabilities on a net portfolio basis?

Measuring on a net-exposure basis is permitted if the conditions in the following diagram are satisfied.

An entity should assess the appropriateness of electing the portfolio measurement exception based on the nature of the portfolio being managed in the context of its risk management or investment strategy.

If the entity is permitted to use the exception, it should choose an accounting policy, to be applied consistently, for a particular portfolio. However, an entity is not required to maintain a static portfolio to use the exception.
L20. When the portfolio measurement exception is applied, how does this affect the unit of account?

In our view, application of the portfolio measurement exception changes the unit of valuation from the individual financial asset or financial liability to the net position for a particular risk exposure. We believe that the size of the net risk exposure is a characteristic to be considered in measuring the fair value of the net risk exposure.

Future developments under IFRS

In September 2014, the IASB published Exposure Draft Measuring Quoted Investments in Subsidiaries, Joint Ventures and Associates at Fair Value – Proposed amendments to IFRS 10, IFRS 12, IAS 27, IAS 28 and IAS 36 and Illustrative Examples for IFRS 13.

The exposure draft included an example illustrating the application of the portfolio measurement exception for portfolios that comprise only Level 1 financial instruments whose market risks are substantially the same, and that are managed on the basis of the net exposure to market risks. The example proposed that the fair value of such a portfolio would be measured on the basis of the Level 1 prices for the individual instruments that comprise the net risk exposure.
During redeliberations, the IASB tentatively decided that the proposed example appropriately illustrates the application of the portfolio measurement exception. The IASB also noted that the proposed illustrative example is non-authoritative, and that the comments received did not reveal significant diversity in practice. The IASB has tentatively concluded that it is unnecessary to include the example in the final amendments.

As part of the second phase of the post implementation review of IFRS 13, in May 2017 the IASB issued a request for information, which includes prioritizing Level 1 inputs or the unit of account as one area of focus.

L30. **When considering whether the exception applies for a group of financial assets and financial liabilities, what degree of risk offsetting is necessary?**

820-10-35-18E(b)  
[IFRS 13.49(b), BC120]

There is no prescribed minimum degree of offsetting risk to qualify for the portfolio measurement exception. Assets in a portfolio do not have to be completely offset by liabilities. Evaluating the degree of offset requires judgment. In making this judgment, the entity considers whether it does in fact manage on the basis of its net (rather than gross) risk exposure and that this is consistent with its documented risk management and internal strategy and is how it provides information to key management personnel.

L40. **What factors need to be considered in determining whether a particular market risk within the group of financial assets and financial liabilities could be offset in measuring fair value on a net portfolio basis?**

820-10-35-18J – 35-18K  
[IFRS 13.54–55, BC123]

In addition to the factors described in Questions L10 and L30, Topic 820 requires that market risks being offset are substantially the same with regard to both their nature (e.g. interest rate risk, currency risk or commodity price risk) and duration. For example, an entity could not combine the interest rate risk associated with a specific financial asset with the commodity price risk associated with a derivative liability. These risks would not qualify as being substantially the same and therefore would not qualify for the portfolio exception.

820-10-35-18J  
[IFRS 13.54, BC123]

Any basis risk resulting from market risk parameters that are not identical is reflected in the fair value of the net position. For example, an entity managing its interest rate risk on a net portfolio basis may include financial instruments with different interest rate bases in one portfolio. However, any difference in the interest rate bases (e.g. LIBOR versus US treasury) will be reflected in the fair value measurement.

820-10-35-18K  
[IFRS 13.55, BC123]

Similarly, to the extent that there are duration differences, adjustments for duration mismatches should be reflected in the fair value of the net position for the entity’s exposure to market risk. For example, if an entity has a five-year financial instrument and is managing the interest rate risk exposure for the first 12 months of the financial instrument’s duration with a 12-month futures contract, the exposure to 12 months of interest rate risk may be measured on a net portfolio basis while the interest rate risk exposure from years two to five would be measured on a gross basis.

© 2017 KPMG LLP, a Delaware limited liability partnership and the U.S. member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative, a Swiss entity. All rights reserved.  
© 2017 KPMG IFRG Limited, a UK company, limited by guarantee. All rights reserved.
L50. Does the portfolio measurement exception also apply to financial statement presentation?

No. The net portfolio measurement exception does not relate to financial statement presentation.

Although application of the exception to financial assets and financial liabilities with offsetting positions changes the fair value measurement basis for a particular market risk(s) or counterparty risk, it does not change the requirements for presentation in the statement of financial position.

Consequently, application of the exception may result in a measurement basis that is different from the basis of presentation of financial instruments in the statement of financial position.

L60. How is a net portfolio basis adjustment resulting from the application of the exception allocated to the individual financial assets and financial liabilities that make up the portfolio?

An entity performs allocations, for presentation and disclosure purposes, on a reasonable and consistent basis using an appropriate methodology. Topic 820 does not prescribe particular allocation methods.

In our experience, for credit risk adjustments, the following allocation methods generally are used for allocating the net portfolio basis adjustment to the individual financial instruments in the portfolio.

– Relative fair value method. Under this method, the portfolio-level credit risk adjustment is allocated to the individual instruments in the portfolio based on their relative fair values. There are two methods that are used in practice:

  - Allocate the adjustment to all instruments in the portfolio based on their relative fair values; or
  
  - Allocate the adjustment only to those instruments that are in the same position (asset or liability) as the net position with the counterparty, based on their relative fair values; for example, if the net position is an asset, the portfolio-level credit risk adjustment is allocated only to the financial assets in the portfolio based on their relative fair values.

– Relative credit adjustment method. Under this method, the portfolio-level credit risk adjustment is allocated to the individual instruments in the portfolio based on their relative stand-alone credit risk adjustment. The application of this method requires the entity to calculate the credit risk adjustment both on a gross basis (assuming that the portfolio measurement exception is not applied) and on a net basis.

However, the appropriate allocation method is affected by the fair value hierarchy of the financial instruments within the portfolio. We understand from conversations with the FASB staff that they believe that the fair value allocated to financial instruments within the portfolio categorized in Level 1 of the fair value hierarchy should be determined using the instrument price times the quantity (i.e. PxQ), which
is consistent with the guidance in Topic 820 for Level 1 inputs (see section G). The FASB staff indicated that the net portfolio measurement exception allows an entity to estimate the fair value of financial instruments at levels different from the unit of account prescribed by other Topics, but does not provide an exception to the other conclusions and concepts of fair value measurement under Topic 820.

If an entity applies the portfolio measurement exception and the portfolio includes multiple counterparties, the credit risk adjustment will be considered separately for each individual counterparty. Therefore, the allocation will need to be performed separately for the individual financial assets and financial liabilities of each counterparty.

**Example L60: Portfolio exception and allocating fair value**

Company L holds 10,000 exchange-traded equity securities and has an offsetting position of forward contracts to sell 6,000 of the same exchange-traded equity securities. In addition, Company L concludes that the portfolio measurement exception criteria have been met and has elected to apply the portfolio measurement exception.

Company L allocates the fair value measurement adjustment that resulted from the valuation of the net portfolio position to the individual forward contracts with no adjustment being allocated to the Level 1 equity securities (i.e. equity securities are valued at PxQ). If allocating the net portfolio adjustment to the forward contracts results in an unreasonable fair value of the forward contracts, Company L should carefully reevaluate the appropriateness of using the exception.

**IFRS different from US GAAP**

The IASB has not addressed the allocation of portfolio level adjustments to instruments that would have a Level 1 measurement on a stand-alone basis.

**Future developments under IFRS**

As discussed in Question L20, a September 2014 exposure draft included an example illustrating that the fair value of a portfolio with the following features would be measured on the basis of the Level 1 prices for the individual instruments that comprise the net risk exposure.

- The portfolio comprises only Level 1 financial instruments whose market risks are substantially the same; and
- The portfolio is managed on the basis of the net exposure to market risks.

As part of the second phase of the post implementation review of IFRS 13, in May 2017 the IASB issued a request for information, which includes prioritizing Level 1 inputs or the unit of account as one area of focus.
L70. **Are net portfolio basis adjustments that have been allocated to the individual financial assets and financial liabilities in the portfolio considered in determining the categorization in the fair value hierarchy for disclosure purposes?**

Yes. In categorizing fair value measurements of the individual financial assets and financial liabilities in the fair value hierarchy for disclosure purposes, net portfolio basis adjustments are considered. Each asset and liability measured at fair value is categorized within the fair value hierarchy on the basis of the lowest level input that has a significant effect on its overall fair value measurement (see section H).

The portfolio measurement exception enables an entity to measure the fair value of a group of financial assets and financial liabilities consistently with how market participants would price the net risk exposure. In our view, an allocated net portfolio basis adjustment is considered an assumption (i.e. input) that market participants would use when pricing the financial assets and financial liabilities that make up the offsetting risk position. Therefore, we believe that an allocated net portfolio basis adjustment is an input to the fair value measurement of the individual asset or liability.

An allocated net portfolio basis adjustment that is an unobservable input and that has a significant effect on the fair value measurement of an individual financial asset or financial liability would cause the entire fair value measurement to be categorized within Level 3.

---

**Example L70: Credit risk adjustment allocation**

Company L holds a group of financial assets and financial liabilities, which it manages on the basis of its net exposure to credit risk to a particular counterparty and applies the net portfolio basis exception. The inputs to the net portfolio basis adjustment for a particular counterparty are unobservable, while all other inputs to the fair value measurement of the group and to the individual financial assets and financial liabilities within the group are Level 2 inputs.

Because the portfolio measurement exception does not apply to financial statement presentation, the counterparty credit risk adjustment is allocated to the financial assets and financial liabilities within the group. The allocation of the counterparty credit risk adjustment to the individual financial assets and financial liabilities may affect the level of the fair value measurements of those financial assets and financial liabilities within the fair value hierarchy.

If the allocated counterparty credit risk adjustment is significant to the fair value measurement of an individual financial asset or financial liability, that fair value measurement would be categorized within Level 3. If the credit risk adjustment allocation is significant only to the fair value measurement of some of the individual financial instruments in the portfolio, and not to others, some would be categorized as Level 2 measurements and some as Level 3 measurements.
L80. **In applying the exception, how should an entity consider the existence of an arrangement that mitigates credit risk exposure in the event of default?**

Question C70 discusses the usual position of how an entity should consider an arrangement that mitigates credit risk exposure in the event of default. However, if an entity applies the portfolio measurement exception to a group of financial assets and financial liabilities entered into with a particular counterparty, the effect of such an agreement would be included in measuring the fair value of the group of financial assets and financial liabilities.

For individual instruments that are actively traded on an exchange, the actual counterparty to the trade transaction in many instances is the exchange entity (e.g. the clearing house for the exchange). For these exchange transactions, we understand that even when there is no master netting agreement between the exchange and the entity, credit risk is usually deemed to be minimal because the operating procedures of the exchanges require the daily posting of collateral which is, in effect, an arrangement that mitigates credit risk exposure in the event of default.

In addition, if the exchange is not the counterparty to the trade transaction, the transaction is a principal-to-principal transaction and an arrangement that mitigates credit risk exposure in the event of default may be considered in determining the appropriate credit adjustment in measuring the fair value of the financial instrument if the entity meets the requirement to and elects to use the portfolio measurement exception.
M. Inactive markets

Overview

- In an active market, transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis.
- An orderly transaction 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.
- A fair value measurement may be affected if there has been a significant decrease in the volume or level of activity for that item compared with its normal market activity. Judgment may be required in determining whether, based on the evidence available, there has been a significant decrease.
- If an entity concludes that the volume or level of activity for an asset or liability has significantly decreased, further analysis of the transactions or quoted prices is required. A decrease in the volume or level of activity on its own might not indicate that a transaction or a quoted price is not representative of fair value, or that a transaction in that market is not orderly.
- It is not appropriate to presume that all transactions in a market in which there has been a decrease in the volume or level of activity are not orderly.

M10. What is considered an active market?

Whether transactions take place with sufficient frequency and volume to constitute an active market is a matter of judgment and depends on the facts and circumstances of the market for the asset or liability. A market with limited activity may still provide relevant pricing information when there is no contrary evidence that the pricing information is not relevant to the fair value of the asset or liability being evaluated, but may result in a lower level measurement within the fair value hierarchy (see section H). This may be the case when the volume or level of activity for an asset or a liability has significantly decreased.

The determination of whether a market is active is not based on the size of the entity’s holdings. For example, a market that trades 100,000 shares of ABC common stock per day may be considered active, even if the entity holds 20,000,000 shares of ABC stock. An active market is not necessarily limited to national exchanges like the NYSE or the LSE. Over-the-counter (OTC) markets (e.g. OTC Pink) can be and often are considered active markets.
M20. How does a decrease in volume or level of activity affect how fair value is measured?

It depends. If the market for identical assets or liabilities is still active and quoted prices in that market continue to be available, the fair value of the asset or liability continues to be measured at the quoted market price on the measurement date (i.e. using a Level 1 input).

An entity might take the following factors into consideration to determine whether there is a significant decrease in the volume or level of activity in relation to normal market activity for the asset or liability.

- There are few recent transactions.
- Price quotations are not developed using current information.
- Price quotations vary substantially either over time or among market makers (e.g. some brokered markets).
- 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.
- 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 nonperformance risk for the asset or liability.
- There is a wide bid-ask spread or significant increase in the bid-ask spread.
- There is a significant decline in the activity of, or there is an absence of, a market for new issuances (i.e. a primary market) for the asset or liability or similar assets or liabilities.
- Little information is publicly available (e.g. transactions that take place in a principal-to-principal market).

An entity should evaluate the significance and relevance of such factors to determine whether, based on the weight of the evidence, there has been a significant decrease in the volume or level of activity for the asset or liability. If an entity concludes that there has been a significant decrease in the volume or level of activity for the asset or liability relative to normal market activity, 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 (e.g. there may be transactions that are not orderly), an adjustment to the transactions or quoted prices will be necessary if it 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 (e.g. when a price for a similar asset requires significant adjustment to make it an appropriate price for the comparable asset being measured or when the price is stale).
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. However, the characteristics of market participants may change. For example, hedge funds and private-equity firms (and similar entities) may become the only potential buyers for certain types of assets, while financial institutions may have been the primary market participants before the significant decrease. A fair value measurement contemplates the rate of return required by current market participants.

If there has been a significant decrease in the volume or level of activity for the asset or liability, a change in valuation approach or technique or the use of multiple valuation approaches or techniques may be appropriate (e.g. the use of a market approach and an income approach).

If multiple valuation approaches or techniques are used, the different indications of fair values are weighted relative to each other to arrive at the estimated exit price for the asset or liability (see section F). There is no particular methodology for weighting the different indications of fair value. However, when an entity weighs different indications of fair value, it should consider the reasonableness of the range of the different fair value indications. The objective of the weighting process 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 estimates may be an indication that further analysis is needed.

M30. What are the characteristics of a transaction that is forced or not orderly?

An orderly transaction is not a forced transaction (e.g. a forced liquidation or distress sale).

Generally, a transaction is forced if it occurs under duress or the seller otherwise is forced to accept a price that a willing market participant would not accept. Whether a transaction is forced is based on the specific facts and circumstances of the transaction and the parties participating. Forced transactions are considered not orderly. See Question G80 for measurement considerations when an entity determines that a transaction is not orderly.

Circumstances that may indicate that a particular transaction is not orderly include the following.

- 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.

- There was a usual and customary marketing period, but the seller marketed the asset or liability to a single market participant.

- The seller is in, or near, bankruptcy or receivership (i.e. is distressed).

- The seller was required to sell to meet regulatory or legal requirements (i.e. was forced to sell).

- The transaction price is an outlier when compared with other recent transactions for the same or a similar asset or liability.
A decrease in the volume or level of activity for an asset or liability on its own may not indicate that a transaction or a quoted price is not representative of fair value, or that a transaction in that market is not orderly. It is not appropriate to presume that all transactions in a market in which there has been a decrease in the volume or level of activity are not orderly.

An orderly transaction assumes sufficient time to market the asset or liability in the usual and customary manner. For certain types of assets such as liquid financial instruments (e.g. actively traded stock) the usual and customary market exposure may be short. In other situations (e.g. real estate assets), a longer market exposure would be required to complete due diligence, generate interest, contact potential buyers, conduct negotiations and complete legal agreements. Therefore, the customary time will depend on the type of asset or liability.

M40. **How extensive is the analysis expected to be to determine whether a transaction is orderly?**

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

A transaction should not be considered not orderly based on current general market conditions. If transactions are occurring between market participants in a manner that is usual and customary under current market conditions, those transactions generally should be considered orderly. It would not be appropriate to assume that all transactions in a market, even a relatively illiquid market, are forced.
N. Disclosures

Overview

The disclosure requirements of Topic 820 are split into two categories.

- Disclosures for assets and liabilities measured at fair value in the statement of financial position after initial recognition. These disclosures are more extensive and distinguish between recurring and nonrecurring fair value measurements.

- Disclosures of fair value measurements that are required or permitted to be disclosed by other Topics/Subtopics, but are not included in the statement of financial position.

N10. What is the difference between recurring and nonrecurring fair value measurements?

Recurring fair value measurements arise from assets and liabilities measured at fair value at the end of each reporting period (e.g., trading securities). Nonrecurring fair value measurements are fair value measurements that are triggered by particular circumstances (e.g., an asset being classified as held-for-sale or an impaired asset resulting in the need for fair value measurement under the applicable Codification Subtopics).

A nonrecurring fair value measurement also may occur during the reporting period. The disclosures required for a nonrecurring fair value measurement are applicable in the financial statements for the period in which the fair value measurement occurred.

N20. What disclosures are required?

The disclosure requirements, which are most extensive for recurring Level 3 measurements, are summarized in the following table.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>Disclosure required for all entities, in tabular format.</td>
</tr>
<tr>
<td>X</td>
<td>Disclosure only required for public entities.</td>
</tr>
<tr>
<td>Y</td>
<td>Disclosure required for public entities, and for financial instruments of nonpublic entities with either total assets of more than $100 million or that have instruments that are accounted as derivative instruments (other than commitments to originate mortgage loans held for sale).</td>
</tr>
<tr>
<td>Requirement</td>
<td>L1</td>
</tr>
<tr>
<td>-------------</td>
<td>----</td>
</tr>
<tr>
<td>820-10-50-2(a)</td>
<td></td>
</tr>
<tr>
<td>[IFRS 13.93(a)]</td>
<td></td>
</tr>
<tr>
<td>820-10-50-2(a)</td>
<td></td>
</tr>
<tr>
<td>[IFRS 13.93(a)]</td>
<td></td>
</tr>
<tr>
<td>820-10-50-2(b), 50-2E</td>
<td></td>
</tr>
<tr>
<td>[IFRS 13.93(b), 97]</td>
<td></td>
</tr>
<tr>
<td>820-10-50-2(bb), 50-2C</td>
<td></td>
</tr>
<tr>
<td>[IFRS 13.93], [95]</td>
<td></td>
</tr>
<tr>
<td>820-10-50-2(bbb), 50-2E</td>
<td></td>
</tr>
<tr>
<td>[IFRS 13.93(d), 97]</td>
<td></td>
</tr>
<tr>
<td>820-10-50-2(bbb)</td>
<td></td>
</tr>
<tr>
<td>[IFRS 13.93(d)]</td>
<td></td>
</tr>
<tr>
<td>820-10-50-2(c), 50-2C</td>
<td></td>
</tr>
<tr>
<td>[IFRS 13.93(e)], [95]</td>
<td></td>
</tr>
<tr>
<td>820-10-50-2(d)</td>
<td></td>
</tr>
<tr>
<td>[IFRS 13.93(f)]</td>
<td></td>
</tr>
<tr>
<td>820-10-50-2(f)</td>
<td></td>
</tr>
<tr>
<td>[IFRS 13.93(g)]</td>
<td></td>
</tr>
<tr>
<td>820-10-50-2(g)</td>
<td></td>
</tr>
<tr>
<td>[IFRS 13.93(h)]</td>
<td></td>
</tr>
<tr>
<td>820-10-50-2(h), 50-2E</td>
<td></td>
</tr>
<tr>
<td>[IFRS 13.93(i), 97]</td>
<td></td>
</tr>
<tr>
<td>820-10-50-4A</td>
<td></td>
</tr>
<tr>
<td>[IFRS 13.98]</td>
<td></td>
</tr>
</tbody>
</table>

**Recurring**

- Fair value at end of reporting period
- Reasons for the measurement
- Level within hierarchy
- Transfers within hierarchy, including the policy for the timing of transfers
- Description of valuation technique
- Changes either to a valuation technique or to both a valuation approach and a valuation technique, and reasons for the changes
- Quantitative information about significant unobservable inputs
- Reconciliation of opening and closing balance (including information on transfers in or out)
- Unrealized gains/losses from remeasurement
- Description of valuation processes and policies
- Sensitivity to changes in unobservable inputs (narrative)
- For nonfinancial assets when highest and best use differs from actual, the reasons why

**Nonrecurring**

- Fair value (FV) recognized in the statement of financial position

**FV only disclosed**

- For a liability measured at fair value, the existence of an inseparable third-party credit enhancement
**IFRS different from US GAAP**

Unlike US GAAP, these disclosures are required for all entities regardless of their public status.

Unlike US GAAP, if financial assets and financial liabilities are categorized as recurring Level 3 fair value measurements, there is a requirement to disclose quantitative sensitivity information if changing one or more unobservable inputs to reflect reasonably possible alternative assumptions would change fair value significantly.

---

**Example N20: Example disclosures**

**Sensitivity to changes in unobservable inputs for nonfinancial assets**

The significant unobservable inputs used in the fair value measurement of Company N’s livestock assets are growth rates and mortality rates. The inputs used for growth and mortality are 12% and 5%, respectively. Significant decreases in growth rates, or increases in mortality rates, in isolation would result in a significantly lower fair value measurement. Generally, a change in the assumption used for growth rates should be accompanied by a change in the assumption for mortality rates in the same direction as excessively fast growth increases the risk of mortality. Therefore, the effects of these changes partially offset each other.

**Asset used differently from its highest and best use**

Company N operates a brewery on a piece of land in an area that has recently been rezoned to allow both residential and industrial use. The highest and best use of the land and buildings of the brewery, based on current land prices at the end of the reporting period, would be to demolish the brewery and build residential property. Company N is using the land and buildings in a manner that differs from its highest and best use to continue its current brewing operations. This is consistent with the long-term strategy and core operations of Company N, which is not in a position to carry out a conversion because the brewery is integral to its operations.
N30. Are all of the disclosures required in interim financial reports?

Yes. The disclosures are required for both interim and annual periods.

**IFRS different from US GAAP**

Unlike US GAAP, IFRS includes two general exemptions from the above disclosures in an entity’s interim financial report. An entity is not required to provide disclosures about the following:

- nonfinancial assets and nonfinancial liabilities (except as may be required if a business combination has occurred in the interim period); and
- classes of financial assets and financial liabilities whose fair value is disclosed, but they are not measured at fair value in the statement of financial position.

In addition, in an interim financial report there is a general requirement for an entity to disclose any changes in business or economic circumstances that have affected the fair value of the entity’s financial assets and financial liabilities, regardless of their basis of measurement. The interim disclosures also include a general disclosure requirement regarding any transfers of financial instruments between levels of the hierarchy.

N35. What should an entity consider in determining an appropriate level of disaggregation for its disclosures?

Topic 820 requires fair value measurement disclosures to be presented for each class of assets and liabilities. Determining an appropriate balance in the level of aggregation or disaggregation of classes of assets and liabilities requires judgment, and will often require a greater level of detail than the line items presented in the statement of financial position. Disclosures that are aggregated too highly can obscure important information about the risks associated with the fair value measurements. However, disclosures that provide excessive detail can be burdensome and may not provide meaningful information to users of the financial statements.

In determining the appropriate classes of assets and liabilities, an entity considers the nature, characteristics, and risks of the asset or liability (e.g. shared activities or business sectors, vintage, geographic concentration, credit quality or other economic characteristics), and the level of the fair value hierarchy within which the fair value measurement is categorized. Generally, the level of disaggregation will be greater for Level 3 measurements, because they include a greater degree of uncertainty and subjectivity in the use of valuation inputs and techniques than for Level 1 and Level 2 measurements.

In our view, other factors that may be relevant considerations include:

- whether another Topic specifies the disclosure class for an asset or liability (e.g. derivative instruments);
– the extent of homogeneous or shared risks within the class of assets or liabilities;
– differences in valuation inputs and techniques used to determine the fair value measurements;
– the ranges in values of significant unobservable inputs; for example, if the range of values for an unobservable input used in measuring the fair value of a class of assets is very wide, this may indicate that the information is not sufficiently disaggregated;
– the sensitivity of measurements to changes in unobservable inputs;
– whether other disclosures in the financial statements provide sufficient information about the classes of assets and liabilities (e.g. a schedule of investments for investment companies); and
– the significance of the class of assets or liabilities relative to the context of the particular disclosure; for example, a class of assets might not be significant to the fair value hierarchy table at the reporting date, but might be significant within the context of the Level 3 rollforward because of significant sales activity and gains and losses incurred during the period.

If disclosures are provided at a greater level of detail than the line items presented in the statement of financial position, the entity provides information sufficient to reconcile the classes of assets and liabilities used for disclosure purposes to the line items presented in the statement of financial condition.

Example N35: Disclosure of sensitivity to changes in unobservable inputs for financial assets

Company Z discloses quantitative information about unobservable volatility inputs used to measure the fair values of a class of equity derivatives. This class includes 100 derivatives, 90 of which are valued using a volatility of 20% per annum with the remaining 10 valued using a volatility of 50% per annum.

Company Z considers whether this difference means that its disclosure of unobservable inputs should be disaggregated to a level of two smaller classes, one with 90 derivatives and one with 10.

If Company Z determines that disclosure at the level of the class that includes all 100 derivatives is appropriate and it proposes to disclose the range of values of the volatilities used (i.e. 20-50%), it should also consider disclosing the weighted average of the inputs (assumed to be 23%); otherwise, its disclosures would not indicate that the significant majority of the inputs used are at the low end of the range and therefore the disclosure objectives of Topic 820 may not be met.
N40. Which fair values should be disclosed if the measurement occurs at a date that is different from the reporting date?

820-10-50-2(a)

The requirements for fair value measurements require the disclosure of amounts as of the reporting date. However, a nonrecurring fair value measurement may have occurred prior to the reporting date. In that case, the fair value measurement disclosures are based on the fair value at which the item is measured at the end of the reporting period, even if that fair value was determined as of an earlier date.

350-30-35

For example, an indefinite-lived intangible asset is measured at fair value (a nonrecurring measurement) at September 30 based on an impairment assessment under Subtopic 350-30 (general intangibles other than goodwill). The entity’s year-end is December 31, and the year-end financial statement disclosures apply to the fair value determined on September 30.

[IFRS different from US GAAP]

[IAS 36.134(e)]

Unlike US GAAP, the IFRS 13 disclosures do not apply when an impairment loss is recognized on the basis of fair value less costs of disposal.

[IFRS 13.93(a), IAS 16.31]

Instead, a relevant example under IFRS would be an item of property, plant and equipment that is revalued to fair value under IAS 16 (property, plant and equipment) at September 30. The entity’s year-end is December 31 and, in our view, the year-end financial statement disclosures apply to the fair value determined on September 30.

N50. At what value should transfers into or out of the levels of the fair value hierarchy be presented?

820-10-50-2C

[IFRS 13.95]

It depends. An entity is required to make an accounting policy choice, to be applied consistently, to determine what value to use when transfers between levels of the fair value hierarchy have occurred. The same accounting policy should be applied for transfers into or out of each level.

820-10-50-2C

[IFRS 13.95]

The following are three examples of policies that may be used to disclose transfers into or out of the levels of the fair value hierarchy:

– at the fair value on the date the event causing the transfer occurs;

– at the fair value measurement at the beginning of the reporting period during which the transfer occurred; or

– using the fair value at the end of the reporting period during which the transfer occurred.

If the end-of-period value is used, the SEC staff recommends disclosure in the MD&A of the realized gains and losses for the period that were excluded from the roll forward disclosures as a result of using the end-of-period amount.\(^\text{11}\)

---

\(^{11}\) SEC Division of Corporate Finance, Sample Letter Sent to Public Companies on MD&A Disclosure Regarding the Application of SFAS 157 (Fair Value Measurements), March 2008.
N60. Does the guidance on how to measure fair value apply to assets and liabilities that are not measured at fair value but for which fair value is disclosed?

Generally, yes. The guidance on how to measure fair value applies to assets and liabilities for which fair value is disclosed even if those assets and liabilities are not recognized at fair value in the statement of financial position, unless the item is specifically scoped out of Topic 820.

IFRS different from US GAAP

[IFRS 13.5]

Like US GAAP, the guidance on how to measure fair value applies to assets and liabilities for which fair value is disclosed even if those assets and liabilities are not recognized at fair value in the statement of financial position, unless the item is specifically scoped out of IFRS 13.

[IAS 40.79(e), IFRS 7.25, 29]

For example, an entity that applies the cost model to measure investment properties generally is required to disclose the fair values of those properties. Similarly, an entity discloses the fair values of financial assets and financial liabilities unless, for example, the carrying amount is a reasonable approximation of fair value. In such circumstances, the fair values for disclosure purposes are measured under IFRS 13.

N70. Is there a disclosure-related practical expedient for measuring the fair value of loan receivables that are not part of a homogeneous category of loans?

Yes. In disclosing the fair value of loan receivables that are not part of a homogeneous category of loans (e.g. residential mortgages, credit card receivables, and other consumer loans), the fair value of the loans for disclosure purposes may be estimated by discounting the future cash flows using the current rates at which similar loans would be made to borrowers with similar credit ratings and the same maturities. This practical expedient, often referred to as an entry-price technique, can be used for disclosure purposes only, and is restricted to loan receivables that are not part of a homogeneous category of loans.

In our view, if an entity uses this practical expedient, disclosure that this amount does not represent an exit price is appropriate.

IFRS different from US GAAP

Unlike US GAAP, there is no practical expedient for the measurement of fair value of any assets or liabilities for disclosure purposes.
106 | Fair value measurement: Questions and answers

**Forthcoming requirements under US GAAP**

In February 2016, the FASB issued ASU 2016-01, Recognition and Measurement of Financial Assets and Financial Liabilities, which requires public business entities that are required to disclose the fair value of financial instruments measured at amortized cost to use the exit price notion under Topic 820 to measure that fair value.

See Appendix: Effective dates – US GAAP for effective date information.

**N80.** For the purpose of disclosures about recurring Level 3 measurements, how should an entity calculate the amount attributable to the change in unrealized gains or losses that is recognized as part of the total gains or losses for the period?

In practice, meeting this disclosure requirement may be straightforward for some types of instruments; however, identifying the change in unrealized gains or losses included in profit or loss for the period may be difficult for those instruments that are subject to periodic cash settlements. In many situations, periodic cash settlements constitute both a realization of gains or losses arising in prior periods (i.e. settlement of the initial carrying amount) and a realization of gains or losses arising in the current period.

In our view, an entity may define the change in unrealized gains or losses as those gains or losses included in earnings for the current period, relating to assets and liabilities held at the end of the reporting period, exclusive of settlements received or paid in the current period for movements in fair value that occurred in the period. In that case, an entity develops a reasonable method to allocate cash settlements received or paid during the period to the:

- unrealized gain or loss as of the beginning of the period or the initial carrying amount (which would not affect the realized gains or losses in the period); and
- change in fair value during the period (which would constitute realization of gains or losses in the period).

To facilitate this separation, these guidelines may be useful in determining the appropriate amount to disclose.

- The total change in fair value, comprising both realized and unrealized gains or losses, is calculated by comparing the beginning of the period fair value of the applicable asset or liability, adjusted for all cash flows received or paid for the asset or liability during the current reporting period, to the end of period fair value for the asset or liability.

- Cash flows received or paid during the current reporting period that relate to either changes in fair value that occurred in a prior reporting period, or settlement of the initial carrying amount, do not represent either realized or unrealized gains or losses in the current reporting period. They represent an adjustment to the related account in the statement of financial position.
Cash flows received or paid during the current reporting period that relate to changes in fair value that occurred in the current reporting period represent realized gains or losses in the current reporting period.

Unrealized gains or losses for the current period for the applicable asset or liability generally are equal to the difference between the total change in fair value and the amount of realized gains or losses for the current period calculated above.

Some have suggested that, as an alternative to the methodology described above, either (a) the periodic amount of cash settlements should be considered to be a realization of the current period gain or loss, or (b) that periodic cash settlements should be excluded in their entirety from the determination of realized gains and losses in the current period (because they are considered to be attributable entirely to the unrealized gain or loss at the beginning of the period). Use of either alternative method may not effectively isolate the unrealized gain or loss included in earnings that relates to assets or liabilities still held at the reporting date.

**Example N80: Determination of unrealized gains and losses**

Company N executes an at-the-money receive fixed-pay floating interest rate swap with Counterparty C on January 22, 20X2. The swap has a term that ends at December 22, 20X5 and a transaction price of zero. The swap requires periodic settlements, which occur on December 22 of each year that the swap is outstanding, beginning in the second year (i.e. December 22, 20X3, 20X4 and 20X5).

Company N uses an income approach to measure the fair value of the swap by calculating the present value of the cash flows expected to occur in each year based on current market data.

| Amount of total FV of the derivative liability that relates to the individual settlement period |
|-----------------------------------------------|-------------------------------|-------------------------------|-------------------------------|---------------|
| As of December 31 | FV of expected payment to be made on December 22: | | | | Total FV |
|                   | 20X3 | 20X4 | 20X5 | |
| 20X2              | $300 | $350 | $350 | $1,000 |
| 20X3              |     |     |     |     |
| 20X4              |     |     |     |     |
| 20X5              |     |     |     |     |
| Actual periodic cash settlements by year: |
| December 22, 20X3: | $375 paid |
| December 22, 20X4: | $580 paid |
| December 22, 20X5: | $750 paid |
Based on this information, Company N discloses the following.

<table>
<thead>
<tr>
<th></th>
<th>20X2</th>
<th>20X3</th>
<th>20X4</th>
<th>20X5</th>
</tr>
</thead>
<tbody>
<tr>
<td>FV at beginning of reporting period</td>
<td>0</td>
<td>1,000</td>
<td>1,100</td>
<td>800</td>
</tr>
<tr>
<td>Purchases</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sales</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Issues</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Settlements</td>
<td>0</td>
<td>(375)</td>
<td>(580)</td>
<td>(750)</td>
</tr>
<tr>
<td>Total (gains) or losses in period</td>
<td>1,000</td>
<td>475</td>
<td>280</td>
<td>(50)</td>
</tr>
<tr>
<td>FV at end of reporting period</td>
<td>1,000</td>
<td>1,100</td>
<td>800</td>
<td>0</td>
</tr>
</tbody>
</table>

However, Company N must also determine the disclosures required for the change in unrealized gains or losses. Therefore, Company N analyzes all settlements paid or received during the year to determine whether they relate to gains or losses originating in the current period or in a prior reporting period.

For the reporting period ended December 31, 20X2, no cash flows were received or paid on the swap; therefore, any gain or loss would be entirely attributable to the change in unrealized gains or losses for the period (i.e. $1,000).

For the reporting period ended December 31, 20X3, Company N performs the following calculation.

<table>
<thead>
<tr>
<th>For the reporting period ended December 31, 20X3</th>
</tr>
</thead>
<tbody>
<tr>
<td>FV attributed to the expected cash outflow of the period</td>
</tr>
<tr>
<td>Actual cash outflow in the period (i.e. settlement)</td>
</tr>
<tr>
<td>Over/(under) estimate, representing the change in FV in the current year</td>
</tr>
<tr>
<td>Total (gain)/loss in the period</td>
</tr>
<tr>
<td>Amount attributable to the change in unrealized (gains) or losses in the current year</td>
</tr>
</tbody>
</table>
Similarly, Company N also performs these calculations at the next two reporting periods.

<table>
<thead>
<tr>
<th>Reporting period ended December 31, 20X4</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FV attributed to the expected cash outflow of the period</td>
<td>500</td>
</tr>
<tr>
<td>Actual cash outflow in the period (i.e. settlement)</td>
<td>580</td>
</tr>
<tr>
<td>Over/(under) estimate, representing the change in FV in the current year</td>
<td>(80)</td>
</tr>
<tr>
<td>Total (gain)/loss in the period</td>
<td>280</td>
</tr>
<tr>
<td>Amount attributable to the change in unrealized (gains) or losses in the current year</td>
<td>200</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reporting period ended December 31, 20X5</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FV attributed to the expected cash outflow of the period</td>
<td>800</td>
</tr>
<tr>
<td>Actual cash outflow in the period (i.e. settlement)</td>
<td>750</td>
</tr>
<tr>
<td>Over/(under) estimate, representing the change in FV in the current year</td>
<td>50</td>
</tr>
<tr>
<td>Total (gain)/loss in the period</td>
<td>(50)</td>
</tr>
<tr>
<td>Amount attributable to the change in unrealized (gains) or losses in the current year</td>
<td>0</td>
</tr>
</tbody>
</table>

As expected, the change in unrealized gains or losses in the final year of the swap would be $0 as the liability is no longer recognized at the end of the reporting period.

Therefore, using this analysis of cash flows, Company N discloses the following information about the change in unrealized gains or losses.

<table>
<thead>
<tr>
<th>Reporting period ended December 31:</th>
<th>20X2</th>
<th>20X3</th>
<th>20X4</th>
<th>20X5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total (gain) or loss in current period (see above)</td>
<td>$1,000</td>
<td>$475</td>
<td>$280</td>
<td>($50)</td>
</tr>
<tr>
<td>Amount attributable to the change in unrealized (gains) or losses relating to those assets and liabilities held at the end of the reporting period</td>
<td>$1,000</td>
<td>$400</td>
<td>$200</td>
<td>$0</td>
</tr>
</tbody>
</table>
N90. **If an entity uses the liquidation basis of accounting, do the disclosures apply?**

It depends. In our view, if an entity uses the liquidation basis of accounting, the disclosures apply to the extent that fair value is used to approximate the estimated amount of cash or other consideration that the entity expects to collect in carrying out its plan of liquidation.

An entity generally prepares its financial statements on the liquidation basis of accounting when liquidation is imminent. In that case, the entity measures its assets to reflect the amount of cash or other consideration that it expects to collect in settling or disposing of those assets in carrying out its plan for liquidation. In some cases, fair value may not differ from the amount that an entity expects to collect.

When the liquidation basis of accounting is applied, an entity makes all disclosures required by other Topics/Subtopics that are relevant to understanding its liquidation basis of accounting. Disclosure is also required of the methods and significant assumptions used to measure assets and liabilities, including subsequent changes to those methods and assumptions. Therefore, if an entity uses fair value to approximate the estimated amount of cash or other consideration that the entity expects to collect in carrying out its plan of liquidation, we believe that the disclosures in Topic 820 apply.

---

**IFRS different from US GAAP**

The liquidation basis of accounting is not an accounting framework that is referred to in IFRS. Instead, in our view, under IFRS there is no general dispensation from the measurement, recognition and disclosure requirements under the applicable standards even if an entity is not expected to continue as a going concern.

---

N100. **Are the disclosures required for a feeder fund whose sole investment is in a master fund?**

Generally, no. Under SEC guidance, a feeder fund is required to attach the financial statements of the master fund to its financial statements. Although not currently required, nonpublic feeder funds generally follow similar practice. In our view, the fair value disclosures in Topic 820 are not required in a feeder fund’s financial statements in respect of (1) the underlying investments of the master fund, and (2) the feeder fund’s investment in the master fund, if the master fund’s financial statements are attached to the feeder fund’s financial statements. In such cases, we believe that the feeder fund’s footnote disclosures should include a reference to the valuation disclosures included in the attached report of the master fund.
When a nonpublic feeder fund does not attach the master fund’s financial statements to its financial statements, we believe that the feeder fund should consider disclosing information sufficient for users to understand the valuation policies of the master fund, which may include disclosures similar to or consistent with those required under Topic 820.

**IFRS different from US GAAP**

Unlike US GAAP, there is no requirement under IFRS for a feeder fund to attach the financial statements of the master fund to its financial statements. Furthermore, there is no specific minimum requirement to provide disclosures under IFRS 13 in respect of the underlying investments of the master fund.

However, a feeder fund needs to consider what disclosures in its financial statements are required to meet the disclosure objectives of IFRS 13 and of the financial instruments disclosure standard. The objectives are to enable users of the feeder fund’s financial statements to understand the valuation techniques and inputs used to develop fair value measurements in those financial statements and to evaluate the significance of the financial instruments held by the feeder fund and the nature and extent of the related risks.

This might include making some or all of the disclosures in IFRS 13 about fair value measurements for the master fund’s investments. For example, the feeder fund might disclose the categorization of the underlying investments of the master fund in the fair value hierarchy, and a description of the valuation techniques and inputs used to measure the fair values of those underlying investments. This may be particularly relevant if:

- the fair values of the master fund’s investments are an input into the fair value measurement of the feeder fund’s investment in the master fund (e.g. the investment in the master fund is valued based on the master fund’s net asset value); or
- the feeder fund’s financial statements otherwise disclose the fair values of the master fund’s investments, or related risk information.

**N110. Is an entity required to make quantitative disclosures about significant unobservable inputs that have not been developed by the entity?**

It depends. Topic 820 includes a general principle that quantitative disclosures about significant unobservable inputs that have not been developed by the entity are not required. However, as explained below, care is required to ensure that this exception is not applied too broadly.

An entity is not required to disclose quantitative information about significant unobservable inputs if the inputs to the valuation were not developed by the reporting entity (e.g. when the entity uses prices from prior transactions or third-party pricing information without adjustment). Fair value measurements that are valued using unobservable inputs that are externally developed, such as third-party pricing information (e.g. broker quotes), might qualify for this exception.
However, an entity cannot ignore other quantitative information that is reasonably available. For example, if an entity develops an adjustment to a broker quote that is significant to the measurement in its entirety, the inputs used to determine the adjustment are included in the quantitative input disclosures, even if the entity excludes the unadjusted portion of the broker quote from the disclosure.

In some circumstances, an entity might use a third-party valuation specialist to measure the fair values of certain assets or liabilities. In that case, management of the entity might provide the specialist with developed inputs and assumptions that are significant to the valuation (e.g. projected financial information prepared by an investee). Significant unobservable valuation inputs provided to third-party valuation specialists by the reporting entity cannot be omitted from the quantitative disclosures.
O. Application issues: Derivatives and hedging

Overview

- The general principles discussed throughout this publication apply equally to derivative instruments.
- This section explores some of the specific application questions that arise in relation to derivative instruments, and also the effect of Topic 820 on hedging.

O10. For derivative instruments that are recognized as liabilities, what should an entity consider in measuring fair value?

The fair value of a liability is defined as the price that would be paid to transfer the liability in an orderly transaction between market participants at the measurement date (see Question K20). Although the fair value measurement objective of a derivative liability is to estimate the price that would be paid to transfer the liability, generally there is no quoted price for this transfer. However, because a derivative liability is a contract between market participants, generally it is held by another party as an asset. Therefore, an entity measures the fair value of a derivative liability from the perspective of a market participant that holds the derivative as an asset.

For derivatives that are exchange traded, the price used for fair value measurement is usually the market exchange price on the measurement date, which is considered a Level 1 input if the market is active.

The fair value measurement of nonexchange traded derivatives (e.g. OTC derivatives) generally is based on an income approach. Valuation techniques that fall under this approach convert future cash flows to a single amount through discounting. A fair value measurement based on a discounted cash flow technique may include adjustments for liquidity, credit risk or any other adjustments if these are based on assumptions that market participants would use.

Some derivatives, such as forwards and swaps, may be liabilities or assets at different points in time and at different interest rates on the yield curve. This adds complexity to the measurement of fair value because the credit risk adjustments may include both the counterparty’s credit risk and the entity’s own nonperformance risk (see Questions K30 and O20). In addition, the credit risk adjustment may be affected by whether and how the nonexchange traded derivative is collateralized (see Questions C80 and O30). Whether the fair value measurement is categorized within Level 2 or Level 3 of the fair value hierarchy depends on whether the measurement
includes unobservable inputs that are significant to the entire measurement (see Question H20).

For a group of financial assets and financial liabilities, including derivatives, an entity is permitted, if certain conditions are met, to measure the fair value of a group of derivatives based on a price that would be received to sell or paid to transfer the net risk position (portfolio measurement exception) (see Question L10). If an entity elects to apply the portfolio measurement exception for a particular market or counterparty’s credit risk, it may affect the liquidity and credit risk adjustments for the instruments in the portfolio because they are measured based on the characteristics of the entity’s net risk position rather than on the characteristics of the individual derivatives (see section L and Question O20).

For a discussion of the effect of the inclusion of credit risk adjustments in measurements of fair value on hedge accounting, see Question O70.

O20. How are credit valuation adjustments (CVA) for counterparty credit risk and debit valuation adjustments (DVA) for an entity’s own nonperformance risk determined in measuring derivatives at fair value?

The fair value of derivative assets should consider the effect of potential nonperformance of the counterparty. In addition, the fair value of derivative liabilities also considers the entity’s own nonperformance risk (see Question K30).

In principle, and assuming no differences in the unit of valuation (see section C), the credit risk adjustments made in the fair value measurement by both counterparties to the financial instrument should be the same.

Derivatives, by their nature, present particular challenges for evaluating own and counterparty credit risk that are not present in other financial instruments, such as debt instruments. In contrast to debt instruments, some derivatives might change from being an asset to a liability or vice versa because: (1) there may be a mixture of expected net cash inflows and expected net cash outflows for different settlement dates; and (2) the amounts and direction of cash flows may change as a result of changes in market underlyings. Therefore, the credit risk of both the entity and the counterparty may be relevant in measuring the fair value of those derivatives regardless of their current classification as assets or liabilities. This is because the calculation of the credit risk adjustments would need to consider all expected cash flows and the potential for the other classification.

For such derivatives, an entity should consider both counterparty credit risk and its own nonperformance risk if market participants would do so in measuring the fair value of these instruments. Therefore, an entity should design and implement a method for appropriately considering credit risk adjustments in valuing these derivatives.

In practice, entities often determine an explicit CVA to incorporate counterparty credit risk and an explicit DVA to incorporate own nonperformance risk, as necessary, into the fair value measurement of derivatives. Determining CVA/DVA can be complex and, in our experience, multiple techniques are used in practice.
A CVA adjusts a derivative valuation to reflect the expected losses due to counterparty credit risk. Expected losses are affected by the probability of default (PD), the credit exposure at the time of default (EAD), and the loss given default (LGD). A DVA adjusts a derivative valuation to reflect the counterparty’s expected losses due to the entity’s own credit risk. DVA can be thought of as CVA from the counterparty’s perspective.

The first step is to assess whether CVA/DVA is necessary for measuring the fair value of a derivative. For some derivatives that are valued using a market approach (e.g. exchange traded futures contracts) the market value already incorporates nonperformance risk so determining a separate CVA/DVA is not necessary. In our experience, centrally cleared over-the-counter (OTC) derivatives (e.g. centrally cleared interest rate swaps) frequently do not have significant CVA/DVA because the margin requirements of the exchange or clearinghouse minimize the credit risk of those contracts. However, for non-centrally cleared OTC derivatives, incorporation of CVA/DVA is often significant because they:

– are often uncollateralized;
– may require collateral to be posted only after a deterioration in one of the parties’ credit risk;
– may only require one of the parties to post collateral; or
– may require collateral to be posted only if a minimum threshold amount is exceeded.

If CVA/DVA is required, the next step is to determine the unit of credit risk measurement. In our experience, some entities evaluate credit risk on an individual derivative-by-derivative basis. Other entities may determine CVA/DVA at a higher unit of measurement, considering the effect of collateral, netting arrangements and other arrangements that mitigate credit risk. Topic 820 permits (but does not require) an entity to measure the fair value of a group of financial assets and financial liabilities on the basis of the net exposure to credit risk of a particular counterparty, only if certain conditions are met (see section L).

Once the unit of credit risk measurement is determined, assumptions and inputs that are consistent with a market participant view are used in a technique to determine the CVA/DVA. No specific technique is required by the accounting standards, and significant judgment is required as to how market participants would determine the CVA/DVA. An entity’s technique to determining CVA/DVA may be influenced by the:

– materiality of its derivative positions to its financial statements;
– number of derivative types and individual positions;
– number of counterparties;
– pricing information and markets to which the entity has access;
– availability and reliability of inputs in the relevant market;
– existence of collateral, netting arrangements or other arrangements that mitigate credit risk if it is part of the unit of valuation; and
– extent to which derivatives are deeply in or out of the money.
In our experience, there are a number of different techniques used in practice, which are tailored to an entity’s particular facts and circumstances.

Expected future exposure techniques are generally the most sophisticated and in our experience are used by many financial institutions with significant derivative portfolios. Under those techniques, both current and future exposures are evaluated. Simulation techniques, such as Monte Carlo analysis, project future positive and negative exposures using assumptions about the volatility of the derivative’s underlying variables and the effect of any collateral, netting arrangements or other arrangements that mitigate credit risk.

While a robust consideration of future credit exposures under multiple scenarios may be an ideal way to determine the CVA/DVA for many derivatives, expected future exposure techniques can be very complex and resource intensive, and therefore in our experience, might not be used by entities whose derivative portfolios are less significant to their financial statements.

In our experience, a variety of other techniques are used in practice that focus primarily on an entity’s current credit exposure, assuming that the potential for future changes in exposure will not have a significant effect on the measurement of fair value at the measurement date. Some entities use a discounted cash flow technique, where the discount rate is adjusted to incorporate credit risk. Other entities estimate CVA/DVA as the cost to purchase protection against default, either assuming a constant or variable exposure over the derivative’s life. These techniques vary widely in sophistication.

In our experience, there are several potential sources of information about the PD that entities use when applying the techniques described above:

- market credit spreads;
- credit default swap (CDS) spreads;
- credit ratings; and
- historical default rates and recovery data.

When selecting inputs to the methodology for determining CVA/DVA, an entity should maximize the use of the relevant observable inputs and minimize the use of unobservable inputs to reflect a market participant’s view at the measurement date. Therefore, if there are relevant observable market inputs, they should be used for the measurement and cannot be ignored in favor of historical information.

Most modern pricing models are based on the assumption that the current price reflects the market’s expectation of future relevant information, and as a result, current CDS quotes or credit spreads reflect the market’s best judgment about how the underlying instruments will perform prospectively. In this context, historical data, if relevant, is already considered in the current market information. Historical information on its own is not a predictor of the future, and in most cases will produce default estimates that are above or below those obtained when using current CDS or credit spreads.

After CVA/DVA is determined, an entity may need to allocate it to individual fair value measurements for certain other financial reporting purposes if it is determined at a unit of measurement that differs from the individual derivative instrument. Allocations may be needed in the following situations:
O. Application issues: Derivatives and hedging

– financial statement presentation (see Question L50).

– an entity applies hedge accounting and allocates CVA/DVA to individual hedge accounting relationships for assessing effectiveness and measuring ineffectiveness or between derivatives in hedge accounting relationships and derivatives not in hedge accounting relationships to separately determine derivative gains and losses recognized in profit and loss (net income) and gains and losses recognized in other comprehensive income (see Question O70).

– an entity allocates CVA/DVA among various elements of derivative disclosures, including levels in the fair value hierarchy (see Question L70) and disclosures of gross derivative balances that are netted in the statement of financial position. See Question L60 on how these allocations are usually made.

Finally, an entity needs to consider the potential overlap between the calculation of CVA/DVA and the calculation of a funding valuation adjustment (FVA) (see Question O35).

Regardless of the technique used to determine and allocate CVA/DVA, an entity should appropriately document its methodology and significant assumptions, including key areas of judgment, and consider the appropriate disclosures.

O30. What discount rates are used in practice to measure the fair value of fully collateralized derivative instruments?

The effect of collateral that is part of the contractual terms of a derivative is a characteristic of the instrument. Therefore, the requirement to provide collateral affects the discount rate that is used in measuring fair value.

For valuing fully collateralized derivatives, in our experience derivative market participants generally discount the estimated cash flows at the rate agreed for cash collateral posted under the respective derivative's Credit Support Annex (CSA), which typically is an overnight benchmark rate in the respective currency (e.g. Sterling Overnight Index Average (SONIA), Euro Overnight Index Average (EONIA) or Federal Funds rate). The overnight index swap (OIS) market reflects assumptions by market participants about the overnight rate.

Entities should monitor developments in valuation techniques to ensure that their own valuation models appropriately reflect the types of inputs that market participants would consider.
O35. What discount rates are used in practice to measure the fair value of uncollateralized or partially collateralized derivative instruments?

In our experience, there is no consensus about the most appropriate discount rate to apply in a valuation model used for measuring the fair value of uncollateralized derivatives. Recently, more banks have begun incorporating funding valuation adjustments (FVA) in their valuations to reflect the cost (or benefit) of funding hedges of these transactions. In our experience, the biggest international over-the-counter derivatives dealers now include FVA, and for this type of business, while methodologies continue to evolve, including this type of adjustment is market practice for these participants.

However, considerable debate remains about the nature of inputs used to determine and calibrate FVA and therefore there is diversity in practice about how entities calculate FVA when it is incorporated in their valuations. Particular complexities include the level at which to net positions, transactions that are partially collateralized, including those subject to one-way collateral requirements (i.e. only one counterparty is required to post collateral) or to collateral thresholds (i.e. collateral amounts are adjusted only when the net exposure exceeds a specified amount), and restrictions exist on the rehypothecation of collateral.

In our experience, in determining whether an adjustment for FVA is needed, and if so how to calculate it, an entity considers the pricing practices that would be used by market participants if the derivatives were being sold at the measurement date. In doing so, an entity considers the funding cost and benefit that market participants would take into account in pricing the instrument, which may differ from the entity’s estimate of its own funding cost or benefit (see section D).

One challenge for calculating FVA is the potential for overlap in a valuation model between an adjustment for a funding rate that a market participant would consider and the adjustments for the counterparty’s credit risk and the entity’s own credit risk (see Question O20) – i.e. an overlap of FVA with a credit valuation adjustment (CVA) and a debit valuation adjustment (DVA). This potential overlap occurs because funding cost discounting techniques usually incorporate both liquidity and credit components, and they may be difficult to separate.

Therefore, when incorporating FVA in the fair value measurement, an entity needs to ensure that the valuation appropriately eliminates any overlap of FVA with DVA and CVA, and that a symmetrical technique is applied to the measurement of derivative assets and liabilities. A symmetrical technique to measurement is consistent with the requirement for the measurement of a liability with no quoted price for the transfer of an identical or a similar liability to be made from the perspective of a market participant that holds the identical item as an asset (see Question K20).

Entities should monitor developments in valuation techniques to ensure that their own valuation models appropriately reflect the types of inputs that market participants would consider.
O40. **For a derivative contract between a dealer and a retail counterparty, if the dealer has a day one difference, does the retail counterparty have the same difference?**

It depends. The difference between the fair value and the transaction price for the retail counterparty is not necessarily the same as for the dealer counterparty. The measurement of fair value should be based on the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants.

As discussed in Question I10, a difference between the transaction price and the fair value at initial recognition may arise if an entity transacts in a market that is different from its principal (or most advantageous) market. An entity (e.g. a dealer) may transact in the retail market with a retail counterparty, while the principal market to which the entity has access for the specific financial instrument is different (e.g. the dealer market). In this case, the fair value measured by reference to transactions in the dealer market may be different from the transaction price in the retail market, which is often zero.

If the dealer’s retail counterparty does not have access to the dealer market, the difference between the transaction price and the fair value at initial recognition will not be the same for the dealer counterparty (for which the principal market is the dealer market) and for the retailer counterparty (for which the principal market is the retail market).

If there is a difference between the transaction price and the fair value at initial recognition for the dealer and/or the retail counterparties, the resulting day one gain or loss is recognized in earnings (see Question I20).

**IFRS different from US GAAP**

Unlike US GAAP, if there is a difference between the transaction price and the fair value at initial recognition for the dealer and/or the retail counterparties, recognition of a day one gain or loss depends on the observability condition (see Question I20).

O45. **In measuring and recognizing the fair value of centrally cleared derivatives for accounting purposes, may an entity rely solely on the variation margin values that are provided by a central clearing organization (e.g. CME, LCH)?**

Generally, no. The variation margin calculation is used by a central clearing organization to determine the daily collateral or settlement amount that is paid by or to a clearing member and may not necessarily be the same as the fair value calculated by market participants. Central clearing organizations have required clearing members and their end-user customers to post cash collateral (i.e. variation margin) based on the daily changes in the amount calculated in accordance with the rules of the clearing organization for derivative contracts.
Recently, several central clearing organizations, including the Chicago Mercantile Exchange (CME) and the London Clearing House (LCH), have changed their rules on the treatment of amounts previously recognized as cash collateral associated with certain derivative contracts. The changes treat certain variation margin payments as the legal settlement (settled-to-market or STM) of the outstanding derivative contract exposure instead of the posting of collateral (collateralized-to-market or CTM) in certain circumstances. However, we understand that the rule changes do not change the total cash flows related to derivative contracts.

The valuation technique used by the central clearing organization for both CTM and STM derivatives might not be consistent with Topic 820 and IFRS 13. This is because each clearing organization may calculate variation margins differently, and the margin may reflect assumptions specific to the clearing organization rather than being consistent with those that a market participant would make. Although for derivative contracts cleared under an STM model the value provided by a central clearing organization may be used for daily settlements, the making of a daily settlement payment does not extinguish the transaction, and future payments and receipts will arise in accordance with its terms and conditions. In addition, the daily settlement amount provided by a central clearing organization is not a quoted transaction price or an exit price in an active market as defined in Topic 820 and IFRS 13, and may not represent a price at which an entity would be able to sell or assign its derivative exposure to another market participant.

Although the clearing organization is not a market maker, the inputs to its calculation of value for variation margin purposes will generally reflect a selection of market data and may be close to but not necessarily the same as a fair value calculated by market participants. Therefore, the value provided by a central clearing organization to determine the variation margin may be a meaningful data point and may serve as a starting point for measuring fair value.

For further discussion of management’s responsibilities when using third-party sources of information, see Question G160.

**O50. How does a day one gain or loss due to a bid-ask spread affect hedging relationships?**

The transaction price to acquire a derivative hedging instrument is an entry price, while a fair value measurement is based on an exit price. When the pricing of a derivative is subject to a bid-ask spread, there could be a difference between the entry and exit price of the derivative and the price that is most representative of fair value may be at a different point within the bid-ask spread from the entry transaction price (see Question G110). For example, an entity might enter into a derivative at the ask price and measure fair value using the bid price. Therefore, a derivative entered into at then current market terms and with a transaction price of zero may have a fair value other than zero at initial recognition. An entity may designate such a derivative as a hedging instrument at initial recognition.

As discussed in Question 120, Topic 820 permits the recognition of a day one gain or loss when an entity’s measurement of fair value is different from the transaction price. The effect of the day one gain or loss due to a bid-ask spread will depend on the type of hedging relationship as described below.
**Shortcut method**

Topic 815 (derivatives and hedging) requires, among other things, that the fair value of the hedging instrument (the interest rate swap) at the inception of the hedging relationship be zero to apply the shortcut method. Therefore, the issue is whether an interest rate swap with a non-zero fair value due to a bid-ask spread meets this criterion and can be used as a hedging instrument in a hedging relationship accounted for under the shortcut method.

Topic 815 clarifies that this criterion would be met for an interest rate swap with all of the following characteristics:

- it is entered into at the inception of the hedging relationship;
- it has a transaction price of zero (exclusive of commissions and other transaction costs as described in Question E40) in the entity’s principal (or most advantageous) market; and
- the difference between the transaction price and fair value is attributable solely to differing prices within the bid-ask spread between the entry transaction and a hypothetical exit transaction.

Therefore, assuming that an interest rate swap designated as the hedging instrument in a hedging relationship that qualifies for the shortcut method meets these criteria, the day one gain or loss on the interest rate swap would not in itself preclude the use of the shortcut method.

**Critical-terms match in cash flow hedging relationships**

Topic 815 requires, among other things, that the fair value of the hedging instrument at the inception of the hedging relationship be zero to apply a critical-terms match. Therefore, the issue is whether a derivative instrument with a non-zero fair value due to a bid-ask spread meets this criterion and can be used as a hedging instrument in a hedging relationship accounted for under a critical-terms match.

In our view, a derivative instrument having a non-zero fair value at inception of the hedging relationship solely due to a bid-ask spread under Topic 820 would not preclude an entity from applying critical-terms match, assuming that all of the other criteria in Topic 815 are met as well as criteria similar to those discussed above for the shortcut method.

If the initial non-zero fair value of the hedging instrument is attributable to other factors (e.g. the terms of the derivative do not reflect current market pricing at the time it is designated), the initial non-zero fair value reflects a source of potential future ineffectiveness that is not consistent with the assumption of high effectiveness that the critical-terms match method involves.
Other hedging relationships

815-20-25-79
[IAS 39.AG105, IFRS 9.6.4.1(c)]

A day one gain or loss on a derivative instrument that is attributable solely to the difference in the bid-ask spread under Topic 820 and recognized in earnings at the transaction date is not considered to be a change in the fair value of the derivative instrument as contemplated in Topic 815. Therefore, this gain or loss would not affect the assessment of effectiveness and the measurement of ineffectiveness.

However, subsequent to day one, changes in the fair value of the derivative instrument would incorporate changes in the bid-ask spread and in the relative position of the price within the bid-ask spread. Therefore, these changes would affect the assessment of effectiveness and the measurement of ineffectiveness.

815-20-25-84(b)

IFS different from US GAAP

[IAS 39.AG76–76A, IFRS 9.B5.1.2A, B5.2.2A]

Unlike US GAAP, as discussed in Question 120, the recognition of a day one gain or loss when an entity’s measurement of fair value is different from the transaction price depends on the observability condition.

Shortcut method

Unlike US GAAP, the shortcut method is not allowed under IFRS.

Critical-terms match – fair value or cash flow hedging relationships

[IAS 39.AG108, IG.F4.7]

Unlike US GAAP, under IAS 39, prospective effectiveness only may be demonstrated on a qualitative basis if the critical terms of the hedging instrument and the hedged item match exactly at inception and in subsequent periods.

However, if the critical terms of a hedging instrument and a hedged item do match exactly, in our view, for a derivative instrument that has a non-zero fair value at inception of the hedging relationship solely due to a bid-ask spread, an entity would not be precluded from applying a qualitative approach for assessing prospective effectiveness, like US GAAP.

Unlike US GAAP, under IAS 39, an entity that uses critical-terms match for prospective effectiveness assessment should also use a long-haul method for assessing retrospective effectiveness and measuring ineffectiveness.
Under IFRS 9, if the critical terms of the hedging instrument and the hedged item match or are closely aligned, it may be possible to use only a qualitative methodology to determine whether an economic relationship exists between the hedged item and the hedging instrument. Furthermore, the fact that a derivative is in or out of the money when it is designated as a hedging instrument does not in itself mean that a qualitative assessment is inappropriate. The appropriateness depends on the circumstances and whether hedge ineffectiveness arising from that fact could be of such a magnitude that a qualitative assessment would not adequately consider it.

IFRS 9 is effective for annual periods beginning on or after January 1, 2018. Early adoption is permitted.

O60. Does the principal market guidance affect the assessment of effectiveness or the measurement of ineffectiveness for hedging relationships?

It depends. In a fair value hedge, an entity applies the fair value measurement concepts of Topic 820 in measuring the fair value of the hedging instrument and the changes in overall fair value or fair value attributable to a specific hedged risk of the hedged item. Therefore, the principal market requirements may affect the assessment of effectiveness and the measurement of ineffectiveness in a fair value hedge (see section E).

For example, if the hedged item is a nonfinancial asset or nonfinancial liability, the principal market requirements may result in a change in fair value that reflects a location different from the principal market. Therefore, transportation costs from the actual location of the hedged item to the principal market need to be considered.

A cash flow hedge is a hedge of the exposure to variability in cash flows. Measurement of the variability of cash flows is not within the scope of Topic 820. Therefore, the principal market requirements do not affect assessment of the effectiveness or the measurement of ineffectiveness of a cash flow hedge if they are based on comparing changes in the present value of the cash flows on the hedged item with changes in the present value of the cash flows on the hedging instrument, or if the effectiveness assessment is based on a qualitative method of comparing the critical terms of the hedging instrument and the hedged item.

However, an entity may apply a method that uses the hedging instrument’s fair value to assess effectiveness and to measure ineffectiveness. In that case, assessment and measurement may be affected by the requirements of Topic 820 about the principal market in which a transaction is assumed to take place in measuring the hedging instrument’s fair value.

Furthermore, the entity may assess effectiveness and measure ineffectiveness based on changes in the fair value of the hedged cash flows, including, for example, by measuring the fair value of a hypothetical derivative as a proxy for changes in the hedged cash flows. In this case, the principal market requirements also may affect the assessment of effectiveness.
Example O60: Wheat futures and market location

Company O purchases wheat futures contracts (for delivery in Amsterdam) to hedge its exposure to the changes in overall fair value of its wheat inventory (fair value hedge) or changes in overall cash flows associated with the forecasted sale of wheat (cash flow hedge).

Company O typically sells its wheat in Amsterdam, but based on Topic 820, the principal market for the wheat is in Frankfurt. The market in which a transaction for the wheat futures is assumed to take place or the location in which delivery would be required under the futures contract is Amsterdam.

**Fair value hedge**

In assessing the effectiveness and measuring the ineffectiveness of a fair value hedge, Company O uses a method based on comparing changes in the fair value of the hedged inventory with changes in the fair value of the futures contract for delivery in Amsterdam.

In this example, although Company O sells its wheat in Amsterdam, the principal market is Frankfurt. Therefore, under Topic 820, the adjustment to the carrying amount of the wheat inventory is based on the price of wheat in Frankfurt less the costs to transport the wheat from its current location to Frankfurt. This would affect the assessment of effectiveness and the measurement of ineffectiveness because the location of the principal market of the inventory is different from the principal market of the futures contract.

**Cash flow hedge**

If Company O assesses effectiveness based on changes in the present value of cash flows (e.g. a statistical model such as a linear regression technique that determines how much of the change in the cash flows of the dependent variable is caused by a change in the cash flows of the independent variable), its effectiveness assessment is not affected because of the application of the principal market guidance.

Even if Company O applies a method that uses the hedging instrument’s fair value change to assess effectiveness, the principal market requirements do not affect the market in which a transaction for the wheat futures is assumed to take place, nor the cash flows of the hedged item.

However, if Company O assesses the effectiveness of the hedge based on changes in the fair value of the hedged cash flows or of a hypothetical derivative, the principal market requirements may affect the assessment of effectiveness and/or the measurement of ineffectiveness. This occurs even though the delivery location of the perfectly effectively derivative would be the delivery location of the hedged sales rather that the principal market of the inventory.
Unlike US GAAP, under IAS 39, a qualitative approach which is based on a conclusion that there is a match between the critical terms of the hedging instrument and those of the hedged item may be used for a fair value hedge to assess prospective effectiveness. Therefore, the principal market requirements may affect the effectiveness assessment in a fair value hedge using a qualitative approach if they result in the critical terms of the hedging instrument and the hedged item not being considered to exactly match.

Under both IAS 39 and IFRS 9, in many cases, the market in which a transaction is assumed to take place in measuring the fair value of the hedging instrument, the hedged item or both may not affect whether the critical-terms match (or are closely aligned). For example, if an entity designates an interest rate swap as a hedge of fair value changes of a fixed-rate bond attributable to changes in a benchmark interest rate, the match would be based on the contractual terms of the bond and the swap and whether the interest rate index underlying the swap matches the hedged risk, and these may not be affected by the market in which a transaction in the bond or the swap would be assumed to take place for fair value measurement purposes.

However, a qualitative effectiveness assessment may be affected and may not be appropriate for a fair value hedge if a difference arises between the market in which the fair value of the hedged item is priced for the purposes of determining fair value changes attributable to the hedged risk and the underlying of the hedging instrument.

Similarly, a qualitative effectiveness assessment may be affected and may not be appropriate if the hedged item in a fair value hedge is of a nonfinancial nature and the location of the hedged item is a characteristic of the hedged item that is relevant to measuring its fair value. In other words, the fair value of the hedged item is measured based on the price in the principal (or most advantageous) market adjusted for the costs that would be incurred to transport the item from its current location to the principal market. In that case, the underlying of the hedging instrument may not exactly match (or be closely aligned to) the hedged item due to differences in location.

In August 2017, the FASB issued ASU 2017-12, Targeted Improvements to Accounting for Hedging Activities, which simplifies and expands the application of hedge accounting. It eliminates the requirement to separately measure and report hedge ineffectiveness.
For a fair value hedge, an entity will continue to report the change in fair value of the hedging instrument and the change in fair value of the hedged item attributable to the hedged risk in earnings. However, for a cash flow hedge and a net investment hedge, an entity will recognize all changes in fair value of the hedging instrument in other comprehensive income until the hedged item affects earnings (i.e., if the hedge is considered highly effective, there will be no ineffectiveness that is measured and recognized in earnings).

See Appendix: Effective dates – US GAAP for effective date information.

**Forthcoming requirements under IFRS**

Under IFRS 9, if the critical terms of the hedging instrument and the hedged item match or are closely aligned, it may be possible to use only a qualitative methodology to determine whether an economic relationship exists between the hedged item and the hedging instrument. Therefore, the principal market requirements may affect the hedge effectiveness assessment in a fair value hedge using a qualitative approach if they result in the critical terms of the hedging instrument and the hedged item not being considered to match or to be closely aligned.

IFRS 9 is effective for annual periods beginning on or after January 1, 2018. Early adoption is permitted.

**070. Do the requirements to include counterparty credit risk and an entity’s own nonperformance risk in measuring the fair values of derivative instruments affect hedging relationships?**

It depends. The requirements to include counterparty credit risk and an entity’s own nonperformance risk in the fair value measurement of derivative instruments may affect hedging relationships.

For all hedges, changes in both counterparty credit risk and an entity’s own nonperformance risk affect the measurement of changes in the fair value of a derivative hedging instrument. These changes likely will have no offsetting effect on the measurement of the changes in the fair value of the hedged item attributable to the hedged risk.

The effectiveness assessment of cash flow hedges also may be affected by changes in counterparty credit risk and an entity’s own nonperformance risk even if effectiveness is not assessed based on a method that uses the hedging instrument’s fair value change. Therefore, the effectiveness assessment and the measurement of ineffectiveness may be affected by the inclusion of counterparty credit risk or an entity’s own nonperformance risk and may lead to a conclusion that the hedging relationship has not been and/or is not expected to be highly effective.

Topic 815 (derivatives and hedging) provides guidance related to cash flow hedges, hedges of net investments in foreign operations, and other specific exceptions for hedges based on the shortcut method or critical-terms match that allow an entity to...
assume perfect effectiveness and thereby ignore the effect of counterparty credit risk in the assessment of effectiveness and/or the measurement of ineffectiveness.

Under this guidance, the requirement to include counterparty credit risk and the entity’s own nonperformance risk in the fair value of derivative assets and liabilities would:

- not affect the assessment of effectiveness and measurement of ineffectiveness in cash flow hedges, hedges of net investments in foreign operations, and fair value hedges applying the shortcut method, unless it is no longer probable that the derivative counterparty or the entity itself will not default; and

- affect the assessment of effectiveness and measurement of ineffectiveness in fair value hedges (excluding those applying the shortcut method).

However, an entity with derivative instruments that are part of cash flow hedging relationships or hedges of net investments in foreign operations needs to determine the amount of the change in the fair value of the derivative instrument related to changes in counterparty credit risk and the entity’s own nonperformance risk that will be recorded in accumulated other comprehensive income (AOCI) or cumulative translation adjustment (CTA). An entity with derivative instruments that are in a fair value shortcut method hedging relationship will need to determine the amount of the change in the fair value of the derivative instrument related to changes in counterparty credit risk and the entity’s own nonperformance risk that will need to be recorded as part of the basis of the hedged item.

The following is a summary of hedge relationships and how each is affected by counterparty credit risk and an entity’s own nonperformance risk in the assessment of effectiveness and measurement of ineffectiveness.

---

**Cash flow hedges – accounted for under long haul**

A general concept in Topic 815 related to cash flow hedges is that the hedging relationship must be highly effective in achieving offsetting changes in the cash flows for the risk being hedged. Therefore, one of the items that an entity must analyze and monitor is whether the counterparty to the derivative will default by failing to make contractually required payments to the entity as scheduled in the derivative contract. Concluding that the counterparty will not default is integral for an entity to determine that the hedging relationship will be highly effective in achieving offsetting changes in the cash flows for the risk being hedged.

Topic 815 further clarifies this general concept by stating that for cash flow hedges an entity must consider the likelihood of the counterparty’s compliance with the terms of the derivative contract, and analyze the effect of counterparty credit risk on the assessment of effectiveness. Although a change in the counterparty's creditworthiness would not necessarily indicate that it would default on its obligation, the change would warrant further evaluation. Also, if the likelihood that the counterparty will not default ceases to be probable, an entity would be unable to conclude that the cash flow hedging relationship is expected to be highly effective in achieving offsetting cash flows.
In our view, based on this general concept of cash flow hedges, as long as the likelihood of the counterparty not defaulting is assessed as being probable, changes in counterparty credit risk would not affect the assessment of effectiveness. Therefore, if there is a change in counterparty credit risk, but it is still probable that the counterparty will not default, the change in counterparty credit risk would not cause the contractual cash flows related to the derivative instrument to change. We also believe that it is appropriate for an entity to ignore the effect of (a) an entity’s own nonperformance risk in the assessment of effectiveness, and (b) counterparty credit risk and an entity’s own nonperformance risk in the measurement of ineffectiveness, assuming that the likelihood of the counterparty or the entity not defaulting is assessed as being probable.

Therefore, changes in counterparty credit risk and an entity’s own nonperformance risk would not affect the assessment of effectiveness or the measurement of ineffectiveness for cash flow hedges as long as it is still probable that neither the derivative counterparty nor the entity will default. Assuming that there are no other sources of ineffectiveness, the total changes in the fair value of the derivative instrument (including changes in counterparty credit risk and an entity’s own nonperformance risk) would be included in AOCI.

However, if the likelihood of the counterparty or the entity not defaulting is assessed as no longer probable, the entity must measure the amount of ineffectiveness to be recognized currently in earnings and assess whether the hedging relationship has been and is expected to continue to be highly effective. Topic 815 presumes that the high effectiveness criterion would not be met under those circumstances. Therefore, the entity would be expected to have strong evidence supporting why the hedging relationship has been and is expected to continue to be highly effective.

Under Topic 815, if an entity uses the critical-terms match in a cash flow hedge, it must assess whether there have been adverse developments related to the risk of counterparty default. If there are no such developments and critical terms continue to match, the entity can conclude that there is no ineffectiveness.

In our view, this guidance could be analogized to allow an entity to ignore its own nonperformance risk in the assumption of no ineffectiveness. The degree of change in the risk of default should be consistent with that under the long-haul method. Therefore, assuming that the likelihood of neither the counterparty nor the entity defaulting is assessed as probable, changes in counterparty credit risk and the entity’s own nonperformance risk will not affect the assessment of effectiveness or the measurement of ineffectiveness and the changes in the fair value of the derivative instrument due to changes in counterparty credit risk and an entity’s own nonperformance risk would be included in AOCI.
However, if the likelihood of the counterparty or the entity not defaulting is assessed as no longer probable, the critical terms no longer match and the entity must measure the amount of ineffectiveness to be recognized currently in earnings. The entity would be expected to have strong evidence supporting why the hedging relationship has been and is expected to continue to be highly effective.

**Fair value hedges – accounted for under long haul or critical-terms match**


Topic 815 states that a change in the counterparty’s creditworthiness of a derivative instrument in a fair value hedging relationship would have an immediate effect on the assessment of effectiveness and the measurement of ineffectiveness. Therefore, changes in either the counterparty’s creditworthiness or the entity’s own nonperformance risk would need to be included in the assessment of effectiveness and measurement of ineffectiveness each period and would be recognized in earnings.

In our view, the application of Topic 820 effectively precludes the use of critical-terms match for fair value hedges. This is because fair value hedging focuses on offsetting the changes in the fair values of the derivative instrument and hedged item for the risk being hedged, and changes in counterparty credit risk and the entity’s own nonperformance risk have a direct effect on the fair value of the derivative hedging instrument but do not affect the fair value of the hedged item.

**Shortcut – Fair value or cash flow hedging relationships**

[815-20-102 – 25-104, 35-18]

Topic 815 states that if a hedging relationship qualifies for the shortcut method, a change in the creditworthiness of the counterparty of the swap would not require recognition of ineffectiveness in earnings or preclude the continued use of the shortcut method.

In our view, this guidance could be analogized to allow an entity to ignore its own nonperformance risk in the assumption of no ineffectiveness.

Therefore, consistent with Topic 820, no ineffectiveness would be recognized and the shortcut method may continue to be used as long as the likelihood that neither the counterparty nor the entity will default continues to be probable. Therefore, changes in counterparty credit risk and the entity’s own nonperformance risk would not affect the assessment of effectiveness or measurement of ineffectiveness. The changes in the fair value of the derivative instrument related to counterparty credit risk and an entity’s own nonperformance risk would be included either in AOCI for cash flow hedging relationships or in earnings. The same amount would be used as a basis adjustment to the hedged item for fair value hedging relationships.

However, if the likelihood of the counterparty or the entity not defaulting is assessed as no longer probable, the use of the shortcut method must be discontinued.
However, the hedging relationship may be able to be redesignated using the long-haul method, if the entity has strong evidence supporting that the new hedging relationship is expected to be highly effective.

Hedges of net investments in foreign operations

Net investment hedges are subject to the criteria of the Foreign Currency Transactions Codification Subtopic, which requires the hedging instrument to be designated and effective as an economic hedge of the net investment.

Assuming that the likelihood of neither the counterparty nor the entity defaulting is assessed as probable, in our view, changes in counterparty credit risk and an entity’s own nonperformance risk would not affect the assessment of whether the hedging instrument is effective as an economic hedge of the net investment and the related measurement of ineffectiveness.

Assuming that there are no other sources of ineffectiveness and that the entity has elected to measure ineffectiveness based on forward rates, the total changes in the fair value of the derivative instrument (including changes in counterparty credit risk and an entity’s own nonperformance risk) would be included in CTA.

However, if the likelihood of the counterparty or the entity not defaulting is assessed as no longer probable, the entity must (1) measure the amount of ineffectiveness in the current period to be recorded in earnings, and (2) assess whether the hedging relationship has been and is expected to continue to be effective as an economic hedge. In this situation, the entity would be expected to have strong evidence supporting why the hedging relationship has been, and is expected to continue to be, effective as an economic hedge.

Interaction with the application of the portfolio measurement exception

If an entity has a group of derivative assets and liabilities with a particular counterparty and the entity applies the portfolio measurement exception to that counterparty’s credit risk (see section L), 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 may result in a portfolio level credit risk adjustment.

However, for assessing hedge effectiveness and recognizing ineffectiveness, an entity needs to determine the individual credit risk adjustments to arrive at the fair values of the individual hedging derivatives or the appropriate credit risk adjustment for a group of derivatives that have been designated together as the hedging instrument in a single hedging relationship.

In our view, the entity should adopt a reasonable and consistently applied methodology for allocating credit risk adjustments determined at a portfolio level to individual derivative instruments for the purpose of measuring the fair values of individual hedging instruments that are used in assessing effectiveness and measuring hedge ineffectiveness (see also Question L60).
Cash flow hedges – long haul method

Unlike US GAAP, under IAS 39, the effectiveness assessment of cash flow hedges may be affected by the inclusion of counterparty credit risk or an entity’s own nonperformance risk in the fair value measurement of derivative hedging instruments, even if the likelihood of neither the counterparty nor the entity defaulting is assessed as being probable.

Unlike US GAAP, under both IAS 39 and IFRS 9, in a cash flow hedge, even if the likelihood of neither the counterparty nor the entity defaulting is assessed as being probable, the inclusion of counterparty credit risk or an entity’s own nonperformance risk in the fair value measurements of derivative hedging instruments may result in ineffectiveness being recognized in profit or loss. However, this only occurs if the cumulative gain or loss on the hedging instrument is greater than the cumulative change in fair value (present value) of the hedged item (i.e. the present value of the cumulative change in the hedged expected future cash flows) from inception of the hedge.

Under IAS 39, if it becomes probable that a counterparty will default, an entity would be unable to conclude that the hedging relationship is expected to be highly effective in achieving offsetting cash flows. As a result, hedge accounting would be discontinued.

Fair value or cash flow hedges – critical-terms match

Unlike US GAAP, under IAS 39, a critical-terms match method can be used both for fair value and cash flow hedges, but only for assessing prospective effectiveness. Under this method, if it is concluded that there is no change in any critical term, such a test would be sufficient to satisfy the prospective effectiveness testing requirements. However, the effect of credit risk should be considered.

Unlike US GAAP, under IAS 39, an entity that uses critical-terms match for prospective effectiveness assessment also should use a long-haul method for assessing retrospective effectiveness and measuring ineffectiveness.

Shortcut – fair value or cash flow hedging relationships

Unlike US GAAP, the shortcut method is not allowed under IFRS.

Hedges of net investments in foreign operations

Unlike US GAAP, under IAS 39, even if the likelihood of neither the counterparty nor the entity defaulting is assessed as being probable, the inclusion of counterparty credit risk or an entity’s own nonperformance risk in the fair value measurements of derivative hedging instruments would affect the assessment of effectiveness and may result in ineffectiveness.
### Forthcoming requirements under US GAAP

**ASU 2017-12**

In August 2017, the FASB issued ASU 2017-12, *Targeted Improvements to Accounting for Hedging Activities*, which simplifies and expands the application of hedge accounting. It eliminates the requirement to separately measure and report hedge ineffectiveness.

For a fair value hedge, an entity will continue to report the change in fair value of the hedging instrument and the change in fair value of the hedged item attributable to the hedged risk in earnings. However, for a cash flow hedge and a net investment hedge, an entity will recognize all changes in fair value of the hedging instrument in other comprehensive income until the hedged item affects earnings (i.e. if the hedge is considered highly effective, there will be no ineffectiveness that is measured and recognized in earnings).

See Appendix: Effective dates – US GAAP for effective date information.

### Forthcoming requirements under IFRS

**Cash flow hedges – long haul method**

[IFRS 9.6.4.1(c)(ii), B6.4.7]

Under IFRS 9, the hedge accounting model is based on a general notion of offset between gains and losses on the hedging instrument and the hedged item. Therefore, the effect of credit risk on the value of the hedging instrument affects hedge effectiveness. Furthermore, for the hedging relationship to be effective, the effect of credit risk cannot dominate the value changes that result from the economic relationship under the hedge.

[IFRS 9.6.4.1(c)(ii), 6.5.6]

Under IFRS 9, if the effect of credit risk dominates the value changes that result from the economic relationship under the hedge, the hedge relationship will not meet the effectiveness requirements and will be discontinued.

**Fair value or cash flow hedges – critical-terms match**

[IFRS 9.6.4.1(c)(ii), B6.4.7 B6.4.14]

Under IFRS 9, if the critical terms of the hedging instrument and the hedged item match or are closely aligned, it may be possible to use only a qualitative methodology to determine whether an economic relationship exists between the hedged item and the hedging instrument. However, the effect of credit risk on the value of both the hedging instrument and the hedged item affects hedge effectiveness. Furthermore, for the hedging relationship to be effective, the effect of credit risk cannot dominate the value changes that result from the economic relationship under the hedge.
Hedges of net investments in foreign operations

Under IFRS 9, the hedge accounting model is based on a general notion of offset between gains and losses on the hedging instrument and the hedged item. Therefore, the effect of credit risk on the value of the hedging instrument affects hedge effectiveness and may result in ineffectiveness. Furthermore, for the hedging relationship to be effective, the effect of credit risk cannot dominate the value changes that result from the economic relationship under the hedge.

IFRS 9 is effective for annual periods beginning on or after January 1, 2018. Early adoption is permitted.
Application issues:
Investments in investment funds

Overview

- The general principles discussed throughout this publication apply equally to investments in investment funds.
- This section explores some of the specific application questions that arise in relation to investments in investment funds (including a fund-of-funds).
- For a discussion of the practical expedient available for investments in investment companies that meet certain criteria, see section Q.

P10. What items should an entity consider in measuring the fair value of an investment in an investment fund?

The fair value guidance in Topic 820 also applies to investments in investment funds. These considerations include exit price, market participants, principal markets, market-based measurements and maximizing the use of observable inputs. Considerations specific to measuring the fair value of an investment in an investment fund include:

- the nature of the investment fund (open-ended versus closed-end funds);
- the underlying assets and liabilities of the fund;
- whether net asset value (NAV) may be representative of fair value;
- actual transactions in units with the fund and in the secondary market;
- overall market conditions;
- the expected future cash flows of the investment, appropriately discounted; and
- other rights and obligations inherent in the ownership interest.

Because the instrument held by the entity is an ownership interest in the fund and not an interest in the underlying assets of the fund, any fair value measurement should consider the rights and obligations inherent in that ownership interest (e.g. requirements to meet possible future cash calls). Any adjustments for rights or obligations should be reflective of the unit of account (see section C).

In many situations, NAV may be an appropriate input in the fair value measurement of the investment. An entity should consider any factors not reflected in the NAV
measurement for the fund and adjust the NAV measurement to arrive at fair value. If NAV is used as an input in an entity’s measurement of fair value (with or without further adjustments), the entity should understand how NAV is calculated, including the key inputs and valuation approaches and techniques used by the fund to value the underlying assets and liabilities.

**P20. When is the NAV of an investment fund representative of fair value?**

The evaluation of whether NAV is representative of fair value encompasses two steps.

- The first step is to assess whether the NAV (or another price) is representative of a quoted price in an active market.

- If there is not a quoted price in an active market, the second step is to assess whether the NAV is otherwise representative of the fair value of the investment in the investment fund.

To assess whether the NAV is representative of a quoted price in an active market, an entity should consider the manner in which the fund is traded (i.e., the principal market). Often units in open-ended funds are traded only with the fund or its agent at a published price, either NAV or NAV plus or minus an adjustment. Depending on the trading volume at these prices, the published prices may represent a quoted price in an active market.

If there is a quoted price in an active market for an investment in a fund (i.e., a Level 1 input), the quoted price is determinative of fair value, whether or not it is equal to the NAV. However, in some circumstances an open-ended fund may suspend redemptions in which case the published NAV would not represent a quoted price in an active market.

In some circumstances, units in open-ended investment funds may be traded both with the fund at NAV and in a secondary market. Units or shares in a fund may trade in secondary markets at a premium or discount to NAV because of supply and demand or other factors specific to the fund. For example, units or shares may trade at a discount because a market participant considers an investment in the fund less attractive than a direct investment in the underlying assets of the fund due to the risk of future investment management changes, the loss of control over portfolio management decisions, or due to lack of liquidity or marketability of the investment. Conversely, market participants may be willing to pay a premium to invest in a fund managed by a specific investment manager.

Although secondary market trading may not be sufficient to constitute an active market, it is still important to consider any secondary market transactions and transaction prices because, regardless of the level of market activity and trading volume, transaction prices that do not represent distressed or forced transactions should not be ignored in measuring fair value.

Even in the absence of an active market (see section M), NAV may represent the fair value of the investment in the investment fund.
However, the following situations may indicate that NAV may not be representative of fair value.

– NAV is not dated as of the entity’s measurement date;
– NAV is not calculated in a manner consistent with the fair value measurement principles of Topic 820;
– The investment cannot currently be redeemed at NAV (e.g. some open-ended funds may suspend redemptions);
– There is a significant decrease in the volume and level of activity of subscriptions or redemptions compared to normal market activity;
– The investment is traded in a secondary market at a significant discount or premium to NAV;
– There are other uncertainties that increase the risk of the investment (e.g. deteriorated financial condition of the investment manager, allegations of fraud or noncompliance with laws and regulations); and
– There are other terms attached to the investment (e.g. a commitment to make future investments).

It also may be important to consider the nature and reliability of the evidence that supports the calculation of NAV.

P30. **If open-ended redeemable funds do not allow daily redemptions at NAV, is NAV representative of fair value?**

It depends. If an open-ended redeemable fund does not allow daily redemptions at NAV, but allows, and actually has, periodic subscriptions and redemptions at NAV, their existence may provide evidence that NAV approximates fair value.

In our experience, NAV would usually be representative of the fair value of investments in open-ended investment funds that are open to new investors and allow redemptions at NAV. In such cases, it is not expected that a market participant would be willing to pay more than the NAV because it is possible to invest directly in the fund or to redeem the investment at NAV.

In addition, new subscriptions to a fund at its reported NAV on or near the entity’s measurement date may provide evidence that market participants are currently not requiring a discount to NAV or paying a premium above NAV.

Similarly, redemptions from the fund at its reported NAV on or near the entity’s measurement date may provide evidence that market participants are currently not demanding a premium over NAV or selling at a discount to NAV. If both subscriptions and redemptions have occurred at NAV near the entity’s measurement date for its investment in the fund, evidence may exist that NAV approximates fair value.

In determining whether NAV approximates fair value, the weight placed on the evidence provided by subscriptions and redemptions should consider:

– market changes since the transaction activity occurred;
– the volume of both subscriptions and redemptions;
– the extent to which subscriptions were received from new investors; and
Fair value measurement: Questions and answers | 137

P. Application issues: Investments in investment funds

– limitations or expected limitations on the entity’s ability to redeem in the future.

However, if no subscriptions and redemptions have occurred close to the end of the reporting period, an assertion that fair value approximates NAV may be more difficult to support.

**P40. Does the sale or purchase of an investment in the fund at a discount to NAV indicate that the transaction is not orderly?**

It depends. When an entity carries its investment in a fund at fair value, it considers all of the inherent rights and obligations in measuring its fair value. This may result in a fair value measurement that differs from the NAV of the investment in the fund.

Therefore, the existence of a discount between the NAV reported by a fund and an entity’s transaction price to sell or purchase the investment does not, in and of itself, result in the transaction being considered not orderly. For example, if the transaction occurred with adequate exposure to the market, with a customary marketing period, and did not occur under duress, it is likely that the transaction would be considered orderly.

For a discussion of inactive markets, see section M.

**P50. What does an entity consider in determining the level of the fair value hierarchy in which an investment in a fund should be categorized?**

When the interest in the fund is the unit of account, the characteristics of the interest in the fund, not the underlying investments, should be considered in determining its level in the fair value hierarchy. Therefore, the measurement of fair value takes into account the rights and obligations inherent in that ownership interest (e.g. an obligation by the entity to meet future cash calls made by the fund). The entity considers any such obligations inherent in the ownership interest in its measurement of fair value.

The fair value measurement for an investment in a fund in which ownership interests in the fund are publicly traded in an active market should be based on the quoted price of the fund, a Level 1 input, if this price is available and accessible.

The units in open-ended redeemable funds are often bought and sold, but only by or to the fund or fund manager; the units are not traded on an exchange and cannot be sold to third parties. Because the fund is not listed, the fund calculates the price of the units only at a specific time each day to facilitate the daily subscriptions and redemptions of units. These transactions also may only take place at a specific time on each day and at the price determined by the fund manager. The fair value of the units may be the price calculated by the fund manager. Whether this is a Level 1 measurement will depend on whether the market is considered active and whether there were significant events that took place after the time of calculation on the measurement date.
Daily pricing is likely to constitute evidence of an active market. If the number of trades occurring is sufficient for the market in these units to be considered an active market, notwithstanding that the units are being purchased and sold by the fund and are not being traded between unrelated third-party market participants, a fair value measurement of the units using the unadjusted daily price for the reporting date would be categorized as a Level 1 measurement. However, if there is a quoted price but the number of trades occurring is not sufficient for the market in these units to be considered active, a fair value measurement of the units using the unadjusted price for the reporting date would not be categorized as Level 1 in the fair value hierarchy.

If NAV does not represent a quoted price, it may continue to be used as an appropriate input for fair value measurement purposes. The appropriate categorization of the resulting fair value measurement within the fair value hierarchy will be within Level 2 or Level 3 based on the observability and significance of:

- the fair values of the underlying investments; and
- any adjustments for rights and obligations inherent within the ownership interest held by the entity, including the frequency with which an investor can redeem investments in the fund.

Because many of the NAV adjustments mentioned above will be based on unobservable inputs, the resulting fair value measurements that are subject to such adjustments generally are Level 3 measurements, unless those inputs are not significant to the measurement as a whole.
Q. Application issues: Practical expedient for investments in investment companies

**Overview**

Topic 820 allows an entity to use net asset value (NAV) as a practical expedient to estimate the fair value when the investment:

- does not have a readily determinable fair value; and
- is in an investment company within the scope of Topic 946 (investment companies), or is an investment in a real estate fund for which it is industry practice to measure investment assets at fair value on a recurring basis and to issue financial statements that are consistent with the measurement principles of Topic 820.

**IFRS different from US GAAP**

Unlike US GAAP, IFRS does not include an exception that allows the use of NAV as a practical expedient. Under IFRS, an entity may only measure investments on the basis of NAV when NAV is representative of fair value (see Questions P20 and P30). Therefore, the questions in this section are only relevant to US GAAP.

**Q10. For the purpose of using NAV as a practical expedient, what is the definition of readily determinable?**

An equity security has a readily determinable fair value if it meets any of the following conditions:

1. Sales prices or bid and ask quotations are currently available on a securities exchange registered with the SEC or in the OTC market, provided that those prices or quotations for the OTC market are publicly reported by the National Association of Securities Dealers Automated Quotations systems or by OTC Pink. Restricted stock meets that definition if the restriction terminates within one year.

For restrictions expiring after one year, the use of NAV as a practical expedient is prohibited if the investment would otherwise have a readily determinable fair value except for that restriction.
(2) For an equity security traded only in a foreign market, that foreign market is of a breadth and scope comparable to one of the US markets referred to in (1).

(3) For an equity security that is an investment in a mutual fund or a structure similar to a mutual fund (i.e. a limited partnership or venture capital entity), the fair value per share (unit) is determined and published and is the basis for current transactions.

Q15. When would an equity security that is an investment in a structure similar to a mutual fund have a readily determinable fair value?

It depends. Condition (c) in the Master Glossary definition of readily determinable fair value (RDFV) specifies that investments in fund types other than mutual funds (e.g. common or collective trust funds, pooled separate accounts, money market funds and certain private open-ended investment companies) have an RDFV when certain criteria are met (see Question Q10). The analysis of the RDFV criteria in condition (c) should be characteristics-based and not form-based. All relevant characteristics of an investment should be considered when making a determination. The application of judgment and consideration of all facts and circumstances are necessary when determining whether these three criteria are met:

(1) the investment is in a structure similar to a mutual fund;
(2) the fair value per share or unit is determined and published; and
(3) the fair value per share or unit is the basis for current transactions.

Structure similar to a mutual fund

The characteristics that should be considered when determining if an investment has a structure similar to a mutual fund include:

946-20-05-1B (a) a mutual fund is an open-ended fund that issues redeemable securities. A mutual fund stands ready to issue and buy back its shares or units at its most recently calculated NAV;

946-320-25-4 (b) a mutual fund typically determines the NAV of its shares or units when it receives an order to purchase or sell its shares or units. NAV is the price per share or unit at which the mutual fund offers to transact; it is not a price resulting from a transaction between buyers and sellers on an exchange;

946-10-15-4 (c) a mutual fund will make the NAV available to the general public or to its current or prospective investors on request;

946-10-15-4 (d) a mutual fund processes subscription or redemption requests received before the close of business at the current NAV per share or unit, and generally has to pay redemption proceeds at NAV to a shareholder or unitholder within seven days of receiving a redemption request from the shareholder or unitholder; and

946-10-15-4 (e) a mutual fund is an investment company that applies specialized industry guidance in Topic 946, Financial Services—Investment Companies.

This list is not exhaustive, nor is it meant to be used as a checklist in determining if an investment is in a structure similar to a mutual fund.
Published

The Master Glossary does not define ‘published’. We believe that it means that investors can obtain price quotes from brokerage or investment firms or their websites or directly from their sponsor or agent on any day that a fund offers to transact. We do not believe that a fund needs to make its NAV available to the general public to meet the definition of published.

Basis for current transactions

Transactions using a fund’s current NAV are the best indicator that it is the basis for current transactions. We believe that a fund that determines, publishes and transacts at the current NAV per share at least monthly would generally be consistent with having a fair value per share or unit that is the basis for current transactions. As the determination of NAV becomes less frequent, significantly more judgment and consideration of all relevant facts and circumstances may be necessary to conclude that it is the basis for current transactions.

Certain funds may place restrictions on transactions. However, the determination of whether an investment in a structure similar to a mutual fund has an RDFV is not influenced by any one investor’s ability to transact on any given day. Instead, the determination is focused on whether the fund publishes its NAV and it is the basis for current transactions.

Q20. What should an entity consider in determining whether NAV reported by the investee may be relied on?

Determining that reliance on the reported NAV as a practical expedient is appropriate requires professional judgment. All factors relevant to the value of equity investments for which market quotations are not readily available should be considered.

Before concluding that the reported NAV is calculated in a manner consistent with the measurement principles of Topic 946 (investment companies), the entity should consider whether the investee fund’s policies and procedures for estimating fair value of underlying investments, and any changes to those policies or procedures, follow the guidelines of Topic 820.

If the last reported NAV is not as of the entity’s measurement date, see Question Q80.

When the entity invests in a fund-of-funds (i.e. the investee fund invests in other funds) that does not have readily determinable fair values, the entity might conclude that the NAV reported by the fund-of-funds manager is calculated in a manner consistent with Topic 946. This conclusion can be made by assessing whether the fund-of-funds manager has a process that considers the previously listed items in the calculation of the NAV reported by the fund-of-funds, and considering whether the fund-of-funds manager has obtained or estimated NAV from underlying fund managers in a manner consistent with Topic 820 as of the measurement date.
Q30. **Can the practical expedient be used when NAV is reported on a tax or cost basis?**

820-10-35-59

No. Funds that use the tax or cost basis of reporting NAV would not satisfy the criteria to qualify for the practical expedient. Therefore, the use of an NAV would require an adjustment for non-GAAP measures.

Q35. **Can the practical expedient be used when NAV is reported under IFRS?**

820-10-15-4, 35-59

It depends. An entity might invest in an investment company within the scope of Topic 946 (investment companies) or a qualifying real estate fund that applies IFRS as its reporting framework. For the purpose of the entity’s financial statements, the criteria to qualify for the practical expedient might be satisfied if the measurements in the investee’s financial statements are consistent with the measurement principles of Topic 946.

820-10-35-59 – 35-60

If the NAV obtained from the investee is not as of the measurement date or is not calculated in a manner consistent with the measurement principles of Topic 946, the entity considers whether an adjustment to the most recent NAV is necessary (see Question Q80). If significant adjustments to NAV are necessary, such adjustments typically would be considered Level 3 inputs and would likely result in a Level 3 classification in the fair value hierarchy.

Q40. **Is the use of NAV to estimate fair value required when the criteria are met?**


No. The practical expedient is not a required measurement technique. It is an optional alternative to measuring fair value for those investments that meet specified conditions. An entity decides on an investment-by-investment basis whether to apply the practical expedient. The practical expedient would be applied to the fair value measurement of the entity’s entire position in a particular investment unless it is probable (see Question Q50) as of the measurement date that a portion of the investment will be sold at an amount other than NAV in a secondary market.

820-10-35

Topic 820 does not address the circumstances and how often an entity can change between the practical expedient and fair value, once the measurement method is selected. In our view, it should be applied consistently for all periods in which the investment is held. However, if subsequent to management’s election to apply the practical expedient to a particular investment, management determines that the investment, or a portion of the investment, is probable of being sold at an amount other than NAV, the practical expedient can no longer be applied to that investment or portion thereof (see Questions Q50 and Q60).
Q50. **When is a sale for an amount other than NAV in a secondary market transaction considered probable?**

A secondary market transaction includes all transactions in the normal course of business that could result in the sale of the interest (e.g. principal-to-principal transactions between private market participants). A sale for an amount other than NAV in a secondary market transaction is considered probable if all of the following conditions are present as of the entity’s measurement date:

- management commits to a plan to sell the investment and has the authority to approve the action;
- an active program to locate a buyer and other actions required to complete the plan to sell the investment have been initiated;
- the investment is available for immediate sale subject only to terms that are usual and customary for sales of such investments (e.g. a requirement to obtain the investee’s approval of the sale); and
- actions required to complete the plan indicate that it is unlikely that significant changes to the plan will be made or that the plan will be withdrawn.

These criteria are similar to those used in assessing whether long-lived assets are held for sale under Topic 360 (property, plant and equipment), except there is no requirement to consider whether the sale will occur within a stated period or to assess the reasonableness of the sales price compared to its fair value. Although the criteria under Topic 360 are not listed as conditions in Topic 820, they may provide some evidence about whether the sale is probable by determining whether significant changes to the plan to sell will be made or possibly withdrawn.

In our experience, the greater the current market sales price over the current estimated fair value or the greater the time period estimated to dispose of the investment, the greater the likelihood of significant changes to the plan or withdrawal of the plan. If these indicators exist, the investment may not meet the conditions of probable of being sold.

Q60. **When a portion of an entity’s investment is probable of being sold, how is the practical expedient applied?**

When a portion of an investment is probable of being sold, the practical expedient may continue to be applied to the portion that is not probable of being sold. The portion to be sold is measured at fair value under Topic 820. As a result, the entity may have two different measurements for investments in the same investee.

In our view, for a group of investments that meet the criteria of probable-of-being-sold (see Question Q50), except that the individual investments in a group have not been identified (e.g. if an entity decides to sell 20 percent of its entire private equity portfolio and the probable-of-being-sold criteria would be met if the individual investments were identified), the practical expedient can continue to be used to the entire portfolio until the individual investments are identified and the individual investments meet the probable-of-being-sold criteria. However, when the individual investments have been identified, the entity must measure the fair value of the investments under Topic 820, excluding the NAV as a practical expedient.
Q70. [Not used]

Q80. Can an entity adjust the NAV reported by the investee?

It depends. Topic 820 addresses two instances in which an adjustment to the NAV reported by the investee may be appropriate when the:

- investee’s reporting date for NAV is different from the entity’s reporting date; and
- NAV reported by the investee was not calculated in a manner consistent with the measurement principles of Topic 946 (investment companies).

**Reported NAV is as of a date different from the entity’s financial reporting date**

An entity may use the practical expedient based on the latest NAV reported by the investee, adjusted for significant market events that have occurred between the date the investee last calculated NAV and the entity’s reporting date. The nature of the investments held by the investee, the period of time from the last calculated NAV, and changes in both the broad economy and the market for similar investments will determine the extent of the entity’s potential adjustments. In some cases, the entity may need to involve the management of the investee to determine possible changes in the NAV that have occurred since the investee’s last NAV reporting date.

For example, funds investing in real estate may go longer than other funds without remeasuring fair value, but these investments typically will have less volatility in fair values over short periods of time. Therefore, significant adjustments may not be necessary unless specific events have occurred. In contrast, investees that hold significant underlying investments in debt and equity securities may experience substantial changes in market prices during short periods of time. The information needed to determine the adjustments may be obtained from market prices for those significant underlying investment positions held by the investee as of the entity’s measurement date as well as analysis of market trends and changes in relevant indices.

**Reported NAV not calculated in a manner consistent with measurement principles of Topic 946**

If the entity has met the conditions to use the practical expedient under Topic 820, but the investee’s reported NAV is not calculated consistent with Topic 946 (investment companies), the entity is required to adjust for all significant differences between the NAV calculated and reported by the investee and the NAV that would be calculated in accordance with Topic 946. Examples of possible adjustments to be recorded as of the reporting date may include:

- recording investments at fair value;
- changes in security positions on a trade-date basis;
- reflecting shares outstanding due to sales and repurchases;
- recognizing expenses, interest and other income;
- allocations of net assets between classes of the fund; and
- other adjustments to reflect the financial statements on the accrual basis of accounting.
To calculate and apply the appropriate adjustments to the investee’s reported NAV, the entity needs an understanding of the investee’s significant accounting policies and must have sufficient information to conform those policies to Topic 946 (investment companies).

The entity also should consider the effect of the adjustments on its proportionate share of NAV to ensure the adjustments are appropriately applied to its investment interest. For example, if the entity’s interest in a fund is part of a waterfall structure, the entity should determine that any necessary adjustments to the underlying assets to conform their measurements to Topic 946 are appropriately considered in light of the waterfall rights and obligations.

**Q85. How should investments be categorized within the fair value hierarchy when an entity has adjusted the NAV reported by the investee?**

It depends. Question Q80 discusses two instances in which an adjustment to the NAV reported by the investee may be appropriate:

- when the investee’s reporting date for NAV is different from the entity’s reporting date; and
- when the NAV reported by the investee was not calculated in a manner consistent with the measurement principles of Topic 946 (investment companies).

Investments for which fair value is measured using the NAV practical expedient, including any adjustments to NAV for the two instances described above, are not categorized in the fair value hierarchy. However, if an entity makes adjustments to the NAV for reasons other than the two instances described above, the investments are no longer measured using the NAV practical expedient and the investments would be categorized in the fair value hierarchy based on the lowest level input that is significant to the entire measurement (see Question P50).

**Q90. What is the unit of account for investments in investment companies when the entity applies the practical expedient?**

The unit of account is the share or its equivalent of the investee entity. Examples of share equivalents include members’ units or partnership interests to which net assets can be proportionately allocated. The NAV per share multiplied by the number of shares represents the extended value of the investment.

In practice, NAV per share may not be specifically reported by an investee that otherwise meets the criteria (including reporting investments on a fair value basis) for the entity to elect the practical expedient. In our view, these cases do not preclude the entity from electing the practical expedient. The entity can calculate the NAV per share (essentially arriving at P in a PxQ relationship) using financial information reported by the investee.
Q100. How should an entity applying the practical expedient account for a purchase for an amount that is different from its currently reported NAV?

If the purchase price is different from NAV, an entity should evaluate whether the recorded NAV is consistent with the measurement principles in Topic 946 (investment companies). If it is, the entity should recognize the difference resulting from purchases at a discount or premium to NAV as an unrealized gain or loss in the period in which the investment is purchased.

Q110. [Not used]

Q120. What disclosures are required for investments measured using the practical expedient?

The general disclosures required for fair value measurements (see section N) are not required for investments measured using the NAV practical expedient. However, additional disclosures are required to help users understand the nature and risks of the investments and whether the investments, if sold, are probable of being sold at amounts different from NAV per share (or its equivalent). They include information about the investees’ significant investment strategies, redemption conditions, and the entity’s unfunded commitments related to the investees.

Because the practical expedient of using NAV is not the same as fair value, the carrying amounts of investments measured using the practical expedient are described in the financial statement disclosures as being reported at NAV under the practical expedient for fair value. This will enable users to reconcile the fair value of investments included in the fair value hierarchy disclosures, and the total investments in the statement of financial position.
Appendix: Index of questions and answers

Questions marked with a * are new in this edition of Questions and Answers. Questions marked with a # were substantially revised, expanded or deleted in this edition, in many cases to include our experience in practice or newly effective requirements. For forthcoming requirements and future developments, see the list in About this Publication (page 3).

<table>
<thead>
<tr>
<th>B. Scope</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>B10.# What are some examples of assets and liabilities that are measured at fair value based on Topic 820?</td>
<td>8</td>
</tr>
<tr>
<td>B20.# Does Topic 820 apply to measurements that are similar to but not the same as fair value?</td>
<td>11</td>
</tr>
<tr>
<td>B30. Are cash equivalents that meet the definition of a security in the scope of Topic 820?</td>
<td>11</td>
</tr>
<tr>
<td>B40.# Does Topic 820 apply to loans measured for impairment testing using the practical expedient in the applicable Subtopic?</td>
<td>12</td>
</tr>
<tr>
<td>B50. In a plan sponsor’s financial statements, does Topic 820 apply to pension plan assets measured at fair value?</td>
<td>13</td>
</tr>
<tr>
<td>B60. Does Topic 820 apply to the financial statements of an employee benefit plan?</td>
<td>14</td>
</tr>
<tr>
<td>B70. Do the fair value concepts apply in measuring the change in the carrying amount of the hedged item in a fair value hedge?</td>
<td>15</td>
</tr>
<tr>
<td>B80.# Does Topic 820 apply to fair value measurements under Topic 840 (leases)?</td>
<td>15</td>
</tr>
<tr>
<td>B90. Does Topic 820 apply to fair value measurements under Topic 605 (revenue recognition)?</td>
<td>16</td>
</tr>
<tr>
<td>B100. Does Topic 820 apply to the measurement of share-based payment transactions?</td>
<td>17</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C. The item being measured and the unit of account</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>C10.# How should an entity determine the appropriate unit of account (unit of valuation) in measuring fair value?</td>
<td>18</td>
</tr>
<tr>
<td>C15.* What is the appropriate unit of account for an investment held through an intermediate entity?</td>
<td>20</td>
</tr>
<tr>
<td>C20. If an asset requires installation in a particular location before it can be used, should the measurement of fair value of the installed asset consider these costs?</td>
<td>21</td>
</tr>
<tr>
<td>C30.# Do restrictions on the sale or transfer of a security affect its fair value?</td>
<td>21</td>
</tr>
<tr>
<td>C40. What are some common restrictions on the sale or transfer of a security?</td>
<td>22</td>
</tr>
<tr>
<td>C50. SEC Rule 144 allows the public resale of certain restricted or control securities if certain conditions are met. During the period before the restrictions lapse, should the fair value measurement reflect such restrictions?</td>
<td>24</td>
</tr>
<tr>
<td>C60. How should executory contracts be considered in measuring the fair value of an asset that is the subject of an executory contract?</td>
<td>25</td>
</tr>
<tr>
<td>C70. In measuring the fair value of a financial instrument, how should an entity consider the existence of a separate arrangement that mitigates credit risk exposure in the event of default?</td>
<td>25</td>
</tr>
<tr>
<td>C80. Does a requirement to post collateral affect the fair value measurement of the underlying instrument?</td>
<td>26</td>
</tr>
<tr>
<td>C90. What is the unit of account for investments in subsidiaries, equity method investees and joint ventures?</td>
<td>26</td>
</tr>
<tr>
<td>D.</td>
<td>Market participants</td>
</tr>
<tr>
<td>----</td>
<td>---------------------</td>
</tr>
<tr>
<td>D10.</td>
<td>Does an entity need to specifically identify market participants?</td>
</tr>
<tr>
<td>D20.</td>
<td>Can a market participant be a related party?</td>
</tr>
<tr>
<td>D30.</td>
<td>How should an entity determine what assumptions a market participant would make in measuring fair value?</td>
</tr>
<tr>
<td>D40.</td>
<td>If the entity is unwilling to transact at a price provided by an external source, should that price be disregarded?</td>
</tr>
<tr>
<td>D50.</td>
<td>How should an entity adjust the fair value measurement for risk inherent in the asset or liability?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E.</th>
<th>Principal and most advantageous markets</th>
<th>32</th>
</tr>
</thead>
<tbody>
<tr>
<td>E10.</td>
<td>If an entity identifies a principal market for the asset or liability, should it disregard the price in that market and instead use the price from the most advantageous market?</td>
<td>32</td>
</tr>
<tr>
<td>E20.</td>
<td>How should an entity determine the principal market, and how frequently should it reevaluate its determination?</td>
<td>34</td>
</tr>
<tr>
<td>E30.</td>
<td>Can an entity have multiple principal or most advantageous markets for identical assets and liabilities within its consolidated operations?</td>
<td>34</td>
</tr>
<tr>
<td>E40.</td>
<td>How are transaction costs and transportation costs treated in identifying the principal or most advantageous market and in measuring fair value?</td>
<td>34</td>
</tr>
<tr>
<td>E50.</td>
<td>Should transportation costs be included in the entity's measurement of fair value using an identified basis differential?</td>
<td>35</td>
</tr>
<tr>
<td>E55.</td>
<td>Should a forward price be used to measure the fair value of an asset that is not located in the principal market when both spot and forward prices are available?</td>
<td>36</td>
</tr>
<tr>
<td>E60.</td>
<td>How should future transaction costs be treated when the fair value is measured using discounted cash flows?</td>
<td>36</td>
</tr>
<tr>
<td>E70.</td>
<td>If an entity sells its loans to market participants that securitize them, should the market for securities issued by these market participants (securitization market) be the principal market?</td>
<td>37</td>
</tr>
<tr>
<td>E80.</td>
<td>How do transaction costs affect the initial measurement of a financial asset or financial liability?</td>
<td>38</td>
</tr>
<tr>
<td>E90.</td>
<td>How is fair value measured when there appears to be no market for an asset or liability?</td>
<td>39</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>F.</th>
<th>Valuation approaches and techniques</th>
<th>40</th>
</tr>
</thead>
<tbody>
<tr>
<td>F10.</td>
<td>What are some examples of the different valuation techniques used?</td>
<td>41</td>
</tr>
<tr>
<td>F20.</td>
<td>When more than one valuation approach or technique is used, what factors should an entity consider in weighting the indications of fair value produced by the different valuation approaches and techniques?</td>
<td>42</td>
</tr>
<tr>
<td>F30.</td>
<td>In using the income approach to measure the fair value of a nonfinancial asset or nonfinancial liability, what are some of the key components that will have the most significant effect on the overall fair value measurement?</td>
<td>43</td>
</tr>
<tr>
<td>F40.</td>
<td>How should the fair value of an intangible asset acquired in a business combination be measured if the acquirer plans to discontinue its active use?</td>
<td>43</td>
</tr>
<tr>
<td>Question</td>
<td>Page</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>------</td>
<td></td>
</tr>
<tr>
<td>F50. Is the cumulative cost of construction an acceptable technique for measuring the fair value of real estate property?</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td>F60. Is the initial cost (transaction price) of an investment in a private operating company an acceptable proxy for fair value at subsequent measurement dates?</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>F70. Is the par amount of a loan an acceptable proxy for fair value at subsequent measurement dates?</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>F80. How should the fair value of loan assets be determined?</td>
<td>46</td>
<td></td>
</tr>
<tr>
<td>F90. Should an entity measure the fair value of a group of loan assets with similar risk characteristics on a pooled basis?</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td>F100. What techniques are used to measure the fair value of a financial guarantee?</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>G. Inputs to valuation techniques</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>G10. If quoted prices in an active market are available and readily accessible, is it permissible for an entity to use a lower level input as a starting point for measuring fair value?</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>G20. If Level 1 inputs are not available, does that change the objective of the fair value measurement?</td>
<td>51</td>
<td></td>
</tr>
<tr>
<td>G30. Should a blockage factor be considered in measuring the fair value of financial assets?</td>
<td>51</td>
<td></td>
</tr>
<tr>
<td>G40. Should a liquidity adjustment be considered in measuring the fair value of financial assets?</td>
<td>51</td>
<td></td>
</tr>
<tr>
<td>G50. [Not used]</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>G60. When an investment company holds a controlling interest in an entity, should it include a control premium (or market participant acquisition premium) in its measurement of fair value?</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>G70. What criteria must be met to qualify for the practical expedient not to use Level 1 inputs?</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td>G80. How is the fair value measurement of an asset or liability affected by the transaction price for similar or identical assets or liabilities?</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td>G90. In measuring the fair value of loans, should an entity consider the current transaction price for the securities that would be issued by a market participant that securitizes the loans?</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td>G100. How should the fair value of a reporting unit that is a subsidiary be measured if the entity owns a 60 percent controlling interest and the remaining noncontrolling interest shares are publicly traded?</td>
<td>54</td>
<td></td>
</tr>
<tr>
<td>G110. If an entity has adopted a convention for prices subject to a bid-ask spread, but evidence exists that the price under the convention is not representative of fair value, should the entity adjust its valuation?</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>G120. Is it appropriate for an entity that historically measured the fair value of individual positions using a mid-market pricing convention to use a different point within the bid-ask spread, to achieve a desired reporting outcome?</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>G130. In measuring the fair value of exchange-traded securities, at what time of the day should the security be priced?</td>
<td>56</td>
<td></td>
</tr>
<tr>
<td>G140. When might a quoted price in an active market not be representative of fair value at the measurement date?</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>G150. How might an entity determine the necessary adjustment when the quoted price is not representative of fair value at the measurement date?</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>Page</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G160. If an entity uses a pricing service to obtain inputs to a fair value measurement, what is management’s responsibility for evaluating the appropriateness of those inputs?</td>
<td>58</td>
<td></td>
</tr>
<tr>
<td>G170. When an IPO is a likely event for a private company, does the expected IPO price represent the fair value of the company’s own equity instruments prior to the IPO?</td>
<td>59</td>
<td></td>
</tr>
<tr>
<td>G180. Should the price established in an orderly, recent round of equity financing be considered in measuring the fair value of an existing equity investment that is similar but not identical?</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td><strong>H. Fair value hierarchy</strong></td>
<td>61</td>
<td></td>
</tr>
<tr>
<td>H10. How are fair value measurements categorized in the fair value hierarchy?</td>
<td>61</td>
<td></td>
</tr>
<tr>
<td>H20. If fair value is measured using inputs from multiple levels of the hierarchy, how should an entity determine the significance of an input for categorizing the fair value measurement within the hierarchy?</td>
<td>62</td>
<td></td>
</tr>
<tr>
<td>H30. When an entity uses the practical expedient in G70 to deviate from a Level 1 input, how is the resulting fair value measurement categorized in the hierarchy?</td>
<td>62</td>
<td></td>
</tr>
<tr>
<td>H40. In what level of the hierarchy should an entity categorize a fair value measurement of a publicly traded equity investment that is subject to a security-specific restriction?</td>
<td>63</td>
<td></td>
</tr>
<tr>
<td>H45.* In what level of the hierarchy should an entity categorize the fair value measurement of publicly traded equity investments held indirectly through an intermediate entity?</td>
<td>63</td>
<td></td>
</tr>
<tr>
<td>H50. In what level of the hierarchy should an entity categorize a fair value measurement of an equity investment in a privately held company?</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>H60. For assets or liabilities that have maturities longer than instruments for which market pricing information is available, how should the fair value measurement be categorized?</td>
<td>65</td>
<td></td>
</tr>
<tr>
<td>H70. How should an entity determine whether entity-derived inputs are corroborated by correlation to observable market data for the purpose of determining whether they are Level 2 inputs?</td>
<td>66</td>
<td></td>
</tr>
<tr>
<td>H80. How does an adjustment for information occurring after the close of the market affect the categorization of the measurement in the hierarchy and an entity’s ability to make other adjustments?</td>
<td>66</td>
<td></td>
</tr>
<tr>
<td>H90. If an entity obtains prices from a third-party pricing service to use in its fair value measurement of an asset or liability, how should it categorize the resulting measurement in the hierarchy?</td>
<td>66</td>
<td></td>
</tr>
<tr>
<td>H100. When prices derived from consensus valuations are used for measuring fair value, where in the hierarchy does the resulting measurement fall?</td>
<td>68</td>
<td></td>
</tr>
<tr>
<td>H110. Should a fair value measurement be categorized in Level 1 of the hierarchy when the asset or liability measured has a bid price and an ask price?</td>
<td>68</td>
<td></td>
</tr>
<tr>
<td>H120. Should executable prices be considered quoted prices?</td>
<td>69</td>
<td></td>
</tr>
<tr>
<td><strong>I. Fair value at initial recognition</strong></td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>I10. Can there be a difference between the transaction price and fair value at initial recognition?</td>
<td>70</td>
<td></td>
</tr>
<tr>
<td>I20. Is an entity required to recognize a day one gain or loss if the transaction price differs from the fair value measurement at initial recognition?</td>
<td>72</td>
<td></td>
</tr>
<tr>
<td>Page</td>
<td>Question</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>--------------------------</td>
<td></td>
</tr>
<tr>
<td>73</td>
<td>I30. Can there be a day one difference for a hybrid instrument if the entity has access to a market for the components of the hybrid that would result in a more advantageous measurement of the entire hybrid instrument?</td>
<td></td>
</tr>
<tr>
<td>74</td>
<td>I40. Can a gain or loss arise at initial measurement for an investment when fair value is measured using a mid-market pricing convention?</td>
<td></td>
</tr>
<tr>
<td>75</td>
<td>J. Highest and best use</td>
<td></td>
</tr>
<tr>
<td>75</td>
<td>J10. Can an entity assume a change in the legal use of a nonfinancial asset in determining its highest and best use?</td>
<td></td>
</tr>
<tr>
<td>77</td>
<td>J20. When an acquirer in a business combination plans to use an acquired intangible asset defensively, who are the market participants?</td>
<td></td>
</tr>
<tr>
<td>77</td>
<td>J30. Should an entity use entity-specific assumptions about its future plans in measuring the fair value of an intangible asset acquired in a business combination?</td>
<td></td>
</tr>
<tr>
<td>78</td>
<td>J40. Can an entity use differing valuation premises for nonfinancial assets within a group of assets and liabilities?</td>
<td></td>
</tr>
<tr>
<td>78</td>
<td>J50. Does the highest and best use concept apply to financial assets?</td>
<td></td>
</tr>
<tr>
<td>79</td>
<td>K. Liabilities and own equity instruments</td>
<td></td>
</tr>
<tr>
<td>79</td>
<td>K10. How does a fair value measurement based on a transfer notion differ from a valuation based on a settlement notion?</td>
<td></td>
</tr>
<tr>
<td>80</td>
<td>K20.# How should an entity measure the fair value of a liability or own equity instrument?</td>
<td></td>
</tr>
<tr>
<td>82</td>
<td>K30. Does an entity consider its own risk of nonperformance in measuring the fair value of its liabilities?</td>
<td></td>
</tr>
<tr>
<td>82</td>
<td>K40. Other than the entity’s own credit risk, what factors are considered in determining nonperformance risk?</td>
<td></td>
</tr>
<tr>
<td>83</td>
<td>K50. How should a restriction on transfer be taken into account in measuring the fair value of a liability or own equity instrument?</td>
<td></td>
</tr>
<tr>
<td>83</td>
<td>K60. Should an inseparable third-party credit enhancement be included in the fair value measurement of a liability?</td>
<td></td>
</tr>
<tr>
<td>84</td>
<td>K70. What is the fair value of a liability payable on demand?</td>
<td></td>
</tr>
<tr>
<td>85</td>
<td>K80. How is the fair value of an asset retirement obligation (ARO) measured?</td>
<td></td>
</tr>
<tr>
<td>87</td>
<td>K90. When an unquoted financial liability is assumed in a business combination, should the assumptions for the fair value measurement be from the perspective of the combined entity?</td>
<td></td>
</tr>
<tr>
<td>88</td>
<td>L. Portfolio measurement exception</td>
<td></td>
</tr>
<tr>
<td>88</td>
<td>L10. When is it appropriate for an entity to measure the fair value of a group of financial assets and financial liabilities on a net portfolio basis?</td>
<td></td>
</tr>
<tr>
<td>89</td>
<td>L20. When the portfolio measurement exception is applied, how does this affect the unit of account?</td>
<td></td>
</tr>
<tr>
<td>90</td>
<td>L30. When considering whether the exception applies for a group of financial assets and financial liabilities, what degree of risk offsetting is necessary?</td>
<td></td>
</tr>
<tr>
<td>Page</td>
<td>Question</td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td>90</td>
<td>L40. What factors need to be considered in determining whether a particular market risk within the group of financial assets and financial liabilities could be offset in measuring fair value on a net portfolio basis?</td>
<td></td>
</tr>
<tr>
<td>91</td>
<td>L50. Does the portfolio measurement exception also apply to financial statement presentation?</td>
<td></td>
</tr>
<tr>
<td>91</td>
<td>L60. How is a net portfolio basis adjustment resulting from the application of the exception allocated to the individual financial assets and financial liabilities that make up the portfolio?</td>
<td></td>
</tr>
<tr>
<td>93</td>
<td>L70. Are net portfolio basis adjustments that have been allocated to the individual financial assets and financial liabilities in the portfolio considered in determining the categorization in the fair value hierarchy for disclosure purposes?</td>
<td></td>
</tr>
<tr>
<td>94</td>
<td>L80. In applying the exception, how should an entity consider the existence of an arrangement that mitigates credit risk exposure in the event of default?</td>
<td></td>
</tr>
<tr>
<td>95</td>
<td>M. Inactive markets</td>
<td></td>
</tr>
<tr>
<td>95</td>
<td>M10. What is considered an active market?</td>
<td></td>
</tr>
<tr>
<td>96</td>
<td>M20. How does a decrease in volume or level of activity affect how fair value is measured?</td>
<td></td>
</tr>
<tr>
<td>97</td>
<td>M30. What are the characteristics of a transaction that is forced or not orderly?</td>
<td></td>
</tr>
<tr>
<td>98</td>
<td>M40. How extensive is the analysis expected to be to determine whether a transaction is orderly?</td>
<td></td>
</tr>
<tr>
<td>99</td>
<td>N. Disclosures</td>
<td></td>
</tr>
<tr>
<td>99</td>
<td>N10. What is the difference between recurring and nonrecurring fair value measurements?</td>
<td></td>
</tr>
<tr>
<td>99</td>
<td>N20. What disclosures are required?</td>
<td></td>
</tr>
<tr>
<td>102</td>
<td>N30. Are all of the disclosures required in interim financial reports?</td>
<td></td>
</tr>
<tr>
<td>102</td>
<td>N35. What should an entity consider in determining an appropriate level of disaggregation for its disclosures?</td>
<td></td>
</tr>
<tr>
<td>104</td>
<td>N40. Which fair values should be disclosed if the measurement occurs at a date that is different from the reporting date?</td>
<td></td>
</tr>
<tr>
<td>104</td>
<td>N50. At what value should transfers into or out of the levels of the fair value hierarchy be presented?</td>
<td></td>
</tr>
<tr>
<td>105</td>
<td>N60. Does the guidance on how to measure fair value apply to assets and liabilities that are not measured at fair value but for which fair value is disclosed?</td>
<td></td>
</tr>
<tr>
<td>105</td>
<td>N70.# Is there a disclosure-related practical expedient for measuring the fair value of loan receivables that are not part of a homogeneous category of loans?</td>
<td></td>
</tr>
<tr>
<td>106</td>
<td>N80. For the purpose of disclosures about recurring Level 3 measurements, how should an entity calculate the amount attributable to the change in unrealized gains or losses that is recognized as part of the total gains or losses for the period?</td>
<td></td>
</tr>
<tr>
<td>110</td>
<td>N90. If an entity uses the liquidation basis of accounting, do the disclosures apply?</td>
<td></td>
</tr>
<tr>
<td>110</td>
<td>N100. Are the disclosures required for a feeder fund whose sole investment is in a master fund?</td>
<td></td>
</tr>
<tr>
<td>Question</td>
<td>Summary</td>
<td></td>
</tr>
<tr>
<td>----------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>N110.</td>
<td>Is an entity required to make quantitative disclosures about significant unobservable inputs that have not been developed by the entity?</td>
<td></td>
</tr>
<tr>
<td>O10.</td>
<td>For derivative instruments that are recognized as liabilities, what should an entity consider in measuring fair value?</td>
<td></td>
</tr>
<tr>
<td>O20.</td>
<td>How are credit valuation adjustments (CVA) for counterparty credit risk and debit valuation adjustments (DVA) for an entity’s own nonperformance risk determined in measuring derivatives at fair value?</td>
<td></td>
</tr>
<tr>
<td>O30.</td>
<td>What discount rates are used in practice to measure the fair value of fully collateralized derivative instruments?</td>
<td></td>
</tr>
<tr>
<td>O35.</td>
<td>What discount rates are used in practice to measure the fair value of uncollateralized or partially collateralized derivative instruments?</td>
<td></td>
</tr>
<tr>
<td>O40.</td>
<td>For a derivative contract between a dealer and a retail counterparty, if the dealer has a day one difference, does the retail counterparty have the same difference?</td>
<td></td>
</tr>
<tr>
<td>O45.#</td>
<td>In measuring and recognizing the fair value of centrally cleared derivatives for accounting purposes, may an entity rely solely on the variation margin values that are provided by a central clearing organization (e.g. CME, LCH)?</td>
<td></td>
</tr>
<tr>
<td>O50.</td>
<td>How does a day one gain or loss due to a bid-ask spread affect hedging relationships?</td>
<td></td>
</tr>
<tr>
<td>O60.#</td>
<td>Does the principal market guidance affect the assessment of effectiveness or the measurement of ineffectiveness for hedging relationships?</td>
<td></td>
</tr>
<tr>
<td>O70.#</td>
<td>Do the requirements to include counterparty credit risk and an entity’s own nonperformance risk in measuring the fair values of derivative instruments affect hedging relationships?</td>
<td></td>
</tr>
<tr>
<td>P10.</td>
<td>What items should an entity consider in measuring the fair value of an investment in an investment fund?</td>
<td></td>
</tr>
<tr>
<td>P20.#</td>
<td>When is the NAV of an investment fund representative of fair value?</td>
<td></td>
</tr>
<tr>
<td>P30.</td>
<td>If open-ended redeemable funds do not allow daily redemptions at NAV, is NAV representative of fair value?</td>
<td></td>
</tr>
<tr>
<td>P40.</td>
<td>Does the sale or purchase of an investment in the fund at a discount to NAV indicate that the transaction is not orderly?</td>
<td></td>
</tr>
<tr>
<td>P50.</td>
<td>What does an entity consider in determining the level of the fair value hierarchy in which an investment in a fund should be categorized?</td>
<td></td>
</tr>
<tr>
<td>Q10.</td>
<td>For the purpose of using NAV as a practical expedient, what is the definition of readily determinable?</td>
<td></td>
</tr>
<tr>
<td>Q15.*</td>
<td>When would an equity security that is an investment in a structure similar to a mutual fund have a readily determinable fair value?</td>
<td></td>
</tr>
<tr>
<td>Q20.</td>
<td>What should an entity consider in determining whether NAV reported by the investee may be relied on?</td>
<td></td>
</tr>
<tr>
<td>Q30.</td>
<td>Can the practical expedient be used when NAV is reported on a tax or cost basis?</td>
<td></td>
</tr>
<tr>
<td>Question</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
<td>------</td>
</tr>
<tr>
<td>Q35.</td>
<td>Can the practical expedient be used when NAV is reported under IFRS?</td>
<td>142</td>
</tr>
<tr>
<td>Q40.</td>
<td>Is the use of NAV to estimate fair value required when the criteria are met?</td>
<td>142</td>
</tr>
<tr>
<td>Q50.</td>
<td>When is a sale for an amount other than NAV in a secondary market transaction considered probable?</td>
<td>143</td>
</tr>
<tr>
<td>Q60.</td>
<td>When a portion of an entity’s investment is probable of being sold, how is the practical expedient applied?</td>
<td>143</td>
</tr>
<tr>
<td>Q70.</td>
<td>[Not used]</td>
<td>144</td>
</tr>
<tr>
<td>Q80.</td>
<td>Can an entity adjust the NAV reported by the investee?</td>
<td>144</td>
</tr>
<tr>
<td>Q85.*</td>
<td>How should investments be categorized within the fair value hierarchy when an entity has adjusted the NAV reported by the investee?</td>
<td>145</td>
</tr>
<tr>
<td>Q90.</td>
<td>What is the unit of account for investments in investment companies when the entity applies the practical expedient?</td>
<td>145</td>
</tr>
<tr>
<td>Q100.</td>
<td>How should an entity applying the practical expedient account for a purchase for an amount that is different from its currently reported NAV?</td>
<td>146</td>
</tr>
<tr>
<td>Q110.</td>
<td>[Not used]</td>
<td>146</td>
</tr>
<tr>
<td>Q120.</td>
<td>What disclosures are required for investments measured using the practical expedient?</td>
<td>146</td>
</tr>
</tbody>
</table>

13. Question or content deleted because it is no longer applicable. ASU 2015-07, Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent), eliminated the requirement to categorize in the fair value hierarchy investments for which the net asset value practical expedient is applied.
This table shows the effective dates of Accounting Standards Updates (ASUs) that are not yet effective for all entities, and affect the guidance in this publication. For completeness, this table also includes the interim periods in which ASUs are effective.

A public business entity is a business entity (which excludes not-for-profit entities and employee benefit plans) that meets any of the following criteria:

- it is required by the SEC to file or furnish financial statements, or does file or furnish financial statements (including voluntary filers), with the SEC (including other entities whose financial statements or financial information are required to be or are included in a filing);
- it is required by the Securities Exchange Act of 1934 (the Act), or rules or regulations promulgated under the Act, to file or furnish financial statements with a regulatory agency other than the SEC;
- it is required to file or furnish financial statements with a foreign or domestic regulatory agency in preparation for the sale of or for purposes of issuing securities that are not subject to contractual restrictions on transfer;
- it has issued, or is a conduit bond obligor for, securities that are traded, listed or quoted on an exchange or an over-the-counter market; or
- it has one or more securities that are not subject to contractual restrictions on transfer, and it is required by law, contract or regulation to prepare US GAAP financial statements (including notes) and make them publicly available on a periodic basis (e.g. interim or annual periods).

An entity must meet both of these conditions to meet this criterion.

An entity may meet the definition of a public business entity solely because its financial statements or financial information is included in another entity’s filing with the SEC. In that case, the entity is only a public business entity for purposes of financial statements that are filed or furnished with the SEC.

Unless otherwise stated, the effective date should be read as periods in fiscal years beginning after the stated date.

<table>
<thead>
<tr>
<th>Ref.</th>
<th>Public business entities:</th>
<th>All other entities</th>
<th>Early adoption?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SEC filers</td>
<td>Not an SEC filer</td>
<td></td>
</tr>
<tr>
<td>ASU 2015-11: Simplifying the measurement of inventory</td>
<td>B204 A Effective Effective Effective</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>I Effective Effective Effective</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Notes:

1. All entities may early adopt ASU 2017-04 for goodwill impairment tests with measurement dates on or after January 1, 2017. Companies need to apply the same impairment model consistently to all goodwill impairment tests performed within a fiscal year, except for interim tests performed as of a date before January 1, 2017.

2. All entities may early adopt ASU 2016-13 in annual and interim periods in fiscal years beginning after December 15, 2018.

3. ASU 2016-01 may be early adopted as follows:
   - All entities may early adopt the provisions related to the recognition of changes in fair value of financial liabilities when the fair value option is elected (paragraphs 825-10-45-5 to 45-7). This includes financial statements of annual or interim periods that have not yet been issued or, for private companies, have not yet been made available for issuance.
   - Entities that are not public business entities may elect to not provide the disclosures related to fair value of financial instruments in paragraphs 825-10-50-10 to 50-19. This includes financial statements of annual or interim periods that have not yet been made available for issuance.
   - Entities that are not public business entities may adopt the standard in annual and interim periods in fiscal years beginning after December 15, 2017.

4. Question B20 was updated December 2017 to reflect the requirements of ASU 2015-11 because it was effective for most entities at that time.
Acknowledgments

This edition of Questions and Answers has been produced jointly by the KPMG International Standards Group (part of KPMG IFRG Limited) and KPMG LLP, the US member firm.

We would like to acknowledge the following contributors to this edition:

**KPMG LLP:** Kimber Bascom, Frederik Bort, Elena Byalik, Jude Fernandes, Michael Hall, Timothy Jinks, Mahesh Narayanasami, BJ Orzechowski, Margaret Ross, Richard Sumida, Robin Van Voorhies.

**Past and present members of the KPMG International Standards Group:**
Jim Calvert, Shandhir Lachman, Sylvie Leger, Chris Spall, Avi Victor.

We would also like to thank other members of the KPMG International Standards Group and the Department of Professional Practice and Economic & Valuation Services of KPMG LLP for the time that they committed to this project.
Keeping in touch

Comparing IFRS and US GAAP

IFRS compared to US GAAP

Issues In-Depth: Revenue from Contracts with Customers

Accounting change

Revenue
- IFRS
- US GAAP

Financial instruments
- IFRS
- US GAAP

Leases
- IFRS
- US GAAP

Insurance contracts
- IFRS
- US GAAP
IFRS: Time for action and toolkit

Delivering insight, analysis and practical guidance on IFRS

Are you good to go?
Sector-specific guidance

Insights into IFRS
Helping you apply IFRS to real transactions and arrangements

Guides to financial statements
Illustrative IFRS disclosures and checklists

US GAAP: Financial Reporting View

US news and views
The latest discussion and analysis

Continuing professional education
Seminars and webcasts

Reference library
In-depth analysis, examples and insights

Newsletter sign-up
Subscribe for timely updates

For access to an extensive range of accounting, auditing and financial reporting guidance and literature, visit KPMG’s Accounting Research Online. This web-based subscription service is a valuable tool for anyone who wants to stay informed in today’s dynamic environment. For a free 30-day trial, go to aro.kpmg.com and register today.