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# Derivatives and hedging

Partially updated July 2022

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# ***About the Derivative and hedging guide***

PwC is pleased to offer our updated *Derivative and hedging* guide. It provides guidance on the accounting for derivatives and hedging.

The FASB first issued its comprehensive standard on the accounting for derivatives and hedging in 1998. Since then, it has been amended numerous times, including a significant amendment issued in August 2017.

- DH 1 – DH 4 discuss derivatives, including the definition of a derivative in ASC 815, *Derivative Instruments and Hedging Activities*, scope exceptions to ASC 815, and guidance on embedded derivatives.
- DH 5 – DH 9 address the requirements for applying hedge accounting and provide guidance on the specific requirements for hedges of financial, nonfinancial and foreign currency risk, and the recognition and measurement of the hedged items and hedging instruments.
- DH 10 discusses the discontinuance of hedge accounting.
- DH 11 discusses guidance specific to private companies.

Discussion of presentation and disclosure requirements is included in FSP 19.

This guide assumes adoption of ASU 2022-01, *Derivatives and Hedging (Topic 815), Fair Value Hedging – Portfolio Layer Method*. This guide also assumes the adoption of ASU 2016-13, *Financial Instruments – Credit Losses (Topic 326), Measurement of Credit Losses on Financial Instruments* and related updates to that guidance.

This guide summarizes the applicable accounting literature, including relevant references to and excerpts from the FASB's Accounting Standards Codification (the Codification). It also provides our insights and perspectives, interpretative and application guidance, illustrative examples, and discussion on emerging practice issues.

This guide should be used in combination with a thorough analysis of the relevant facts and circumstances, review of the authoritative accounting literature, and appropriate professional and technical advice.

## ***References to US GAAP***

Definitions, full paragraphs, and excerpts from the FASB's Accounting Standards Codification are clearly labelled. In some instances, guidance was cited with minor editorial modification to flow in the context of the PwC Guide. The remaining text is PwC's original content.

## ***References to other PwC guidance***

This guide provides general and specific references to chapters in other PwC guides to assist users in finding other relevant information. References to other guides are indicated by the applicable guide

abbreviation followed by the specific section number. The other PwC guides referred to in this guide, including their abbreviations, are:

- *Business combinations and noncontrolling interests (BCG)*
- *Consolidation (CG)*
- *Fair value measurements (FV)*
- *Financial statement presentation (FSP)*
- *Financing transactions (FG)*
- *Income taxes (TX)*
- *Insurance contracts (IG)*
- *Loans and investments (LI)*
- *Reference rate reform (REF)*
- *Utilities and power companies (UP)*

### *Summary of significant changes*

Following is a summary of recent noteworthy revisions to the guide. Additional updates may be made to future versions to keep pace with significant developments.

### **Revisions to guide made in July 2022**

#### **DH 4, *Embedded derivatives***

- Certain illustrative examples and Q&As related to the analysis of embedded derivatives within debt and equity hosts that are also included in **FG 1.6** and **FG 5.4** were removed from this chapter. See PwC's *Financing transactions* guide for additional details.

#### **DH 6, *Hedges of financial assets and liabilities***

- Q&A DH 6-8 was added to **DH 6.3.3.4** to address whether a cash flow hedge of a group of forecasted transactions can include different iterations of SOFR as the hedged item.
- **DH 6.5** was updated for the issuance of ASU 2022-01 and the accounting for portfolio layer method hedges.

#### **DH 7, *Hedges of nonfinancial assets and liabilities***

- Discussion of the presentation of fair value and cash flow hedges related to discontinued operations was moved from **DH 7.3.5.5** and **DH 7.4.3.3** to **FSP 27.4.2.7**.

### **DH 9, *Effectiveness***

- Discussion of considerations for hedge relationships that reference SOFR and the ability to use certain hedge effectiveness methodologies that assume perfect effectiveness was added to **DH 9**.
- **DH 9.11.2** was updated for ASU 2022-01 for effectiveness considerations for portfolio layer method hedges.

### **DH 10, *Discontinuance***

- **DH 10.3.8** was updated for ASU 2022-01 for the allocation of basis adjustments and designation sequence when discontinuing or partially discontinuing a portfolio layer method hedging relationships where multiple relationships are designated against the same closed pool of assets.

### **DH 12, *ASU 2017-12: Effective date and transition***

- **DH 12** was removed as ASU 2017-12 is now effective for all companies.

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***Chapter 1:***  
***Introduction to derivatives***



## 1.1 Introduction to derivatives – overview

This chapter provides an introduction to derivative contracts, including common types of derivatives, ways that derivatives are traded in the market, and ways reporting entities use derivatives.

See DH 2 for information regarding the accounting definition of a derivative under ASC 815, *Derivatives and Hedging*, and DH 3 for information on scope exceptions to derivative accounting under ASC 815.

### 1.1.1 Reference rate reform: Cross-guide applicability

Reference rate reform has the potential to create issues when accounting for contract modifications and hedging relationships. As a result, the FASB issued guidance that introduced ASC 848, *Reference Rate Reform*, to the Codification. The guidance is designed to provide temporary optional expedients when performing certain accounting analysis and assessing the related impacts that may otherwise be required as a result of modifying derivative contracts and other agreements due to reference rate reform. It also provides optional expedients to enable companies to continue to apply hedge accounting to certain hedging relationships impacted by reference rate reform. Users of this guide are encouraged to understand the optional expedients available in ASC 848 to determine whether those optional expedients are eligible to be applied. PwC's *Reference rate reform* guide is intended to assist in the application of the guidance in ASC 848. Figure DH 1-1 outlines the key areas impacted and related guide references.

#### Figure DH 1-1

Topical areas impacted by reference rate reform

Topical area	REF reference	DH reference
<b>General</b>		
Hedge documentation requirements	REF 3.1.2	DH 5.7.1
Changes to the critical terms of a hedging relationship	REF 3.1.3	DH 10.2.2
Excluded components	REF 3.1.5	DH 6.3.1.2
<b>Fair value hedges</b>		
Changes to the designated benchmark interest rate	REF 3.2.1	DH 10.2.2
Shortcut method of assessing hedge effectiveness	REF 3.2.2	DH 9.4.2
Rebalancing hedging relationships	REF 3.1.4.1	DH 10.3.3.1
<b>Cash flow hedges</b>		
Probability of the forecasted transaction	REF 3.3.1	DH 6.3.3.4
Changes to the hedged risk	REF 3.3.3	DH 10.2.2

<b>Topical area</b>	<b>REF reference</b>	<b>DH reference</b>
Hedging a group of forecasted transactions	REF 3.3.4	DH 6.3.3.4
Changes to the designated method of assessing hedge effectiveness	REF 3.3.5	DH 10.2.2
Rebalancing hedging relationships	REF 3.1.4.2	DH 10.4.3.1
Shortcut method of assessing hedge effectiveness	REF 3.3.6.1	DH 9.4.4
Applying the options terminal value method of effectiveness (perfectly effective)	REF 3.3.6.2	DH 9.6
Applying the options terminal value method of effectiveness (not perfectly effective)	REF 3.3.6.3	DH 9.6
Applying the change-in-variable-cash-flows method of effectiveness	REF 3.3.6.4	DH 9.7
Applying the hypothetical derivative method of effectiveness	REF 3.3.6.5	DH 9.8
Applying a quantitative method of effectiveness:		
Hypothetical derivative method	REF 3.3.6.6	DH 9.11.3.1
Change-in-variable-cash flows method	REF 3.3.6.6	DH 9.11.3.2
Change-in-fair-value method	REF 3.3.6.6	DH 9.11.3.3
Applying a qualitative assessment of effectiveness	REF 3.3.6.7	DH 9.12.1
Applying the simplified hedge accounting approach method of effectiveness	REF 3.3.6.8	DH 11.2.3

## **1.2** *Types of derivatives*

A derivative is a contract whose value is dependent upon (or derived from) fluctuations in one or more underlyings. For example, the value of an interest rate swap varies with changes in an interest rate index (e.g., LIBOR). Common underlying assets include investment securities, commodities, currencies, interest rates and other market indices.

There are two broad categories of derivatives: option-based contracts and forward-based contracts.

### 1.2.1 **Option-based derivative contracts**

Option-based derivative contracts provide the holder with the option, but not the obligation, to exercise the contract. The party that sells the option may be referred to as the option writer; the party that buys the option is the option holder. Typically, an option holder will exercise its option when it is in the money (i.e., economically worthwhile), but not when it is out of the money. The following are common types of option-based derivatives:

- A call option gives the holder the right, but not the obligation, to buy an asset at a specified price (strike price or exercise price) on or before a maturity date (expiration date). For example, the holder of a call option on crude oil may have the right to purchase 100,000 barrels of a specific grade of crude oil for \$62 per barrel within the next three months.

A call option is in the money when the price of the underlying asset is greater than the strike price (exercise price) of the option.

- A put option gives the holder the right, but not the obligation, to sell an asset at a specified future price on or before a maturity date. For example, the holder of a put option on an equity security may have the right to sell 700,000 shares of a publicly-traded stock at \$100 per share within the next year.

A put option is in the money when the price of the underlying asset is lower than the strike price (exercise price) of the option.

- A warrant is a call option written by a reporting entity on its own common or preferred equity shares. It grants the holder the right, but not the obligation, to purchase the underlying shares at a specified price on or before the maturity date. For example, the holder of a warrant may have the right to purchase one thousand shares of the issuer's common stock for \$100 per share within two years.

### 1.2.2 **Forward contracts**

Forward derivative contracts require the payment of the agreed-upon forward price in exchange for the underlying asset on or before a maturity date. The following are common types of forward derivatives:

- Swap contracts are instruments that require the counterparties to exchange (or swap) cash flows at specified intervals (e.g., every three months) on or before a maturity date. The underlying cash flows can be based on interest rates, foreign currency exchange rates, or other assets or indices. For example, in an interest rate swap, counterparties will exchange payments based on a specified fixed interest rate and a variable interest rate, such as LIBOR.
- Forward contracts are customized instruments to buy or sell an asset at a specified future date at a predetermined price. For example a reporting entity may agree to purchase 1 million euros one year from now at a fixed price of 1.25 million US dollars.
- Futures contracts are standardized instruments to buy or sell an asset at a specified future date at a predetermined price. For example, a reporting entity may enter into a futures contract to purchase 1,000 barrels of a specific grade of crude oil one year from now at a fixed price of \$62 per barrel.

## 1.3 Derivative categories

There are three primary ways of negotiating and trading derivatives:

- Over-the-counter (OTC) derivatives
- Centrally-cleared derivatives
- Exchange-traded derivatives

Figure DH 1-2 summarizes the key differences between OTC derivatives, centrally-cleared derivatives, and exchange-traded derivatives.

### Figure DH 1-2

Differences between OTC, centrally-cleared, and exchange-traded derivatives

	<b>OTC derivatives</b>	<b>Centrally-cleared derivatives</b>	<b>Exchange-traded derivatives</b>
<b>Trade negotiation</b>	Trades are bilaterally negotiated between the counterparties	Trades are bilaterally negotiated between the counterparties	Trades are executed on organized exchanges
<b>Contract terms</b>	Customized contract terms	Standardized contract terms	Standardized contract terms
<b>Collateral requirements</b>	<ul style="list-style-type: none"> <li>□ Posting of collateral is not required unless each party agrees to it as a requirement for the trade. Collateral agreements are customized</li> </ul>	<ul style="list-style-type: none"> <li>□ Requirements for initial margin are set by the clearing house irrespective of the quality of the counterparty</li> <li>□ Variation margin is subject to daily movement</li> </ul>	<ul style="list-style-type: none"> <li>□ Requirements for initial margin are set by the clearing house irrespective of the quality of the counterparty</li> <li>□ Variation margin is subject to daily movement</li> </ul>

### 1.3.1 Over-the-counter derivatives

OTC derivatives are traded and bilaterally negotiated directly between the counterparties, without going through an exchange or other intermediary. OTC derivatives are customized contracts that allow the counterparties to hedge their specific risks. Common OTC derivatives include swaps, forward rate agreements, and options.

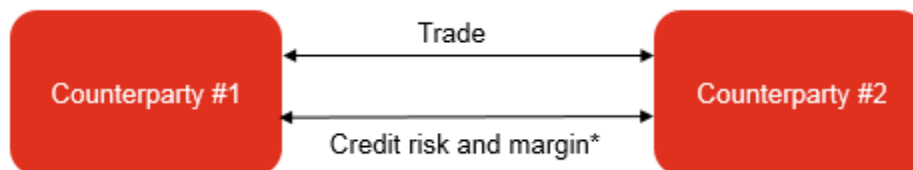
The OTC derivative market is the largest market for derivatives. Because the OTC derivative market includes banks and other sophisticated entities, it is largely unregulated with respect to disclosure of information between the parties. Given the limited regulations, OTC derivatives generally present greater counterparty credit risk. To offset this risk, counterparties may negotiate collateral requirements (sometimes referred to as “margin”). When margin is provided, the derivative contract is considered collateralized; it is uncollateralized when there are no margin requirements.

An OTC derivative generally requires one contract (e.g., an ISDA agreement) between the two parties.

Figure DH 1-3 shows the direct relationship and flows of information and assets between counterparties to OTC derivatives.

### Figure DH 1-3

#### Parties to an OTC derivative



\* Margin and collateral requirements are subject to negotiation

#### 1.3.2 Centrally-cleared derivatives

Centrally-cleared derivatives are negotiated between the counterparties but contain standardized terms and are traded through a central clearing house. The use of standardized terms facilitates the computation of required margin by the clearing house. Because the derivative counterparties are required to post collateral to satisfy the mandatory margin requirements, the counterparties are not subject to counterparty credit risk; instead, they are subject to the credit risk of the clearing house. Centrally-cleared derivatives offer certain advantages over OTC derivatives, including standardization, liquidity, and the elimination of counterparty credit risk.

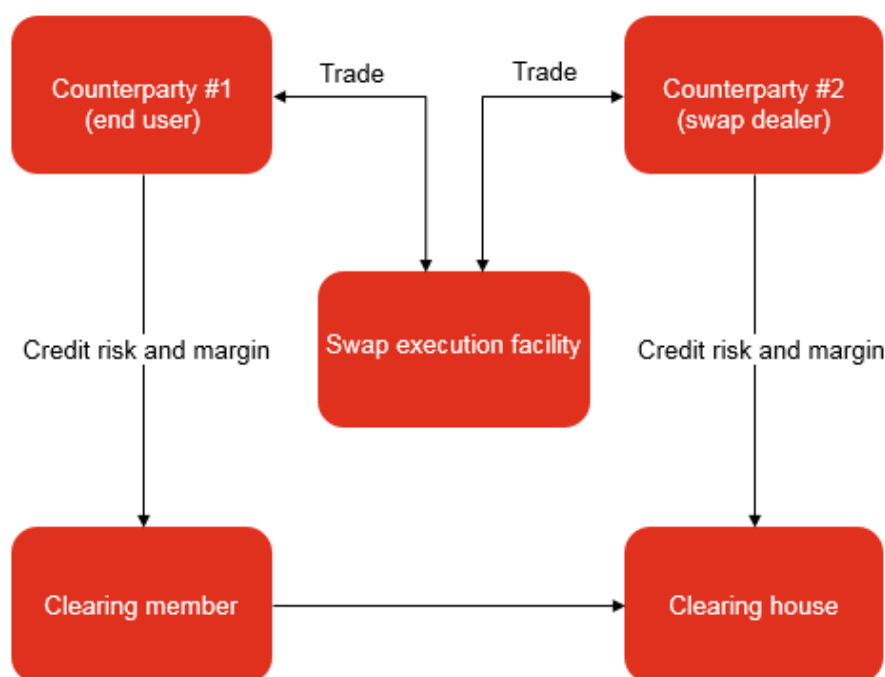
Reforms mandated by the Dodd-Frank Act require certain types of derivatives (e.g., interest rate swaps, credit default swaps) to be processed through designated electronic trading platforms and cleared through registered clearing houses. As a result, derivatives have increasingly been executed through clearing houses rather than transacted bilaterally in an OTC market.

Centrally-cleared derivatives require multiple legal contracts between the various parties involved. The parties involved in a centrally-cleared derivative include:

- End user – the reporting entity hedging its risk
- Swap execution facility – the trading system used to provide pre-trade information (i.e., bid and offer prices) and the mechanism for executing swap transactions
- Swap dealer – the market maker in swaps that regularly enters into swaps with counterparties
- Clearing member – a member firm of a clearing house and a derivative exchange

Figure DH 1-4 shows the relationships and flows of information and assets between parties to a centrally-cleared derivative.

**Figure DH 1-4**  
Parties in a centrally-cleared derivative



### 1.3.2.1 Collateralized-to-market / settled-to-market

Centrally-cleared derivatives can be structured and documented as “collateralized-to-market” or “settled-to-market.” The difference between these two types of derivatives is the mechanism used to limit or settle counterparty credit risk and the characterization of variation margin payments.

While the objective of the collateralized-to-market and settled-to-market provisions are similar, the nature of the rights and obligations between the counterparties are different. Centrally-cleared derivatives require the out-of-the-money counterparty to periodically transfer variation margin equal to the cumulative change in the fair value of the underlying asset of the derivative contract to the in-the-money counterparty. The cash flows exchanged by the counterparties in collateralized-to-market and settled-to-market derivatives are typically identical (and include both an initial and variation margin) but the characterization of the variation margin differs. For collateralized-to-market derivatives, the variation margin transferred is recorded as collateral with a receivable/ payable for the eventual return of the collateral. For settled-to-market derivatives, the variation margin transferred is recorded as a legal settlement of the derivative contract (the variation margin legally settles the outstanding exposure, but does not result in any other change or reset of the contractual terms of the derivative).

See DH 1.3.3.1 for additional information on margin.

### 1.3.3 Exchange-traded derivatives

Exchange-traded derivatives are traded on specialized derivative exchanges or other exchanges that act as the intermediary for the transactions. Similar to centrally-cleared derivatives, exchange-traded

derivatives have standardized terms and margin requirements governed by the clearing house. Common exchange-traded derivatives include futures and options.

### **1.3.3.1 Margin**

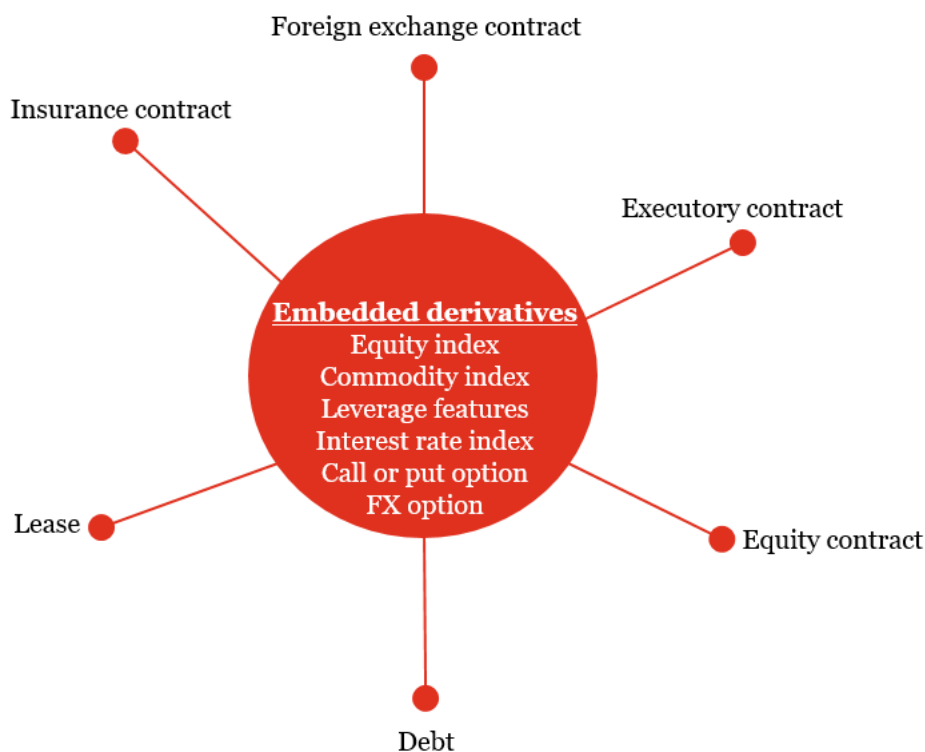
Clearing houses require margin to be posted to mitigate losses as a result of adverse price movements or default by a clearing member or end-user. Initial margin is the amount required to be posted (per trade) to begin transacting through the clearing house. It can consist of cash, securities, or other collateral. Variation margin is the amount required to be paid or received periodically as dictated by the clearing member and/or clearing house. In addition to the change in value of the derivative, a clearing house may decide to incorporate additional amounts to be posted to mitigate nonpayment or other risks. The periodic movements of variation margin are considered either (1) a payment of collateral or (2) a settlement of an open position, depending on the legal determination under the ISDA or other agreements. This is not an accounting election; it requires a legal assessment of the specific terms of each trade and the legal relationship with the clearing member and clearing house. The legal form of the variation margin, whether deemed to be collateral or a settlement payment, may have accounting and reporting implications.

## **1.4 Embedded derivatives**

Derivatives are often found as components of other contractual arrangements. Certain financial instruments and other contracts, including loans and other debt instruments, equity securities, insurance policies, and leases, often contain features that are derivatives. Embedded derivatives can affect the cash flows or value of other exchanges required by the contract in a manner similar to that of a derivative.

Figure DH 1-5 shows examples of common embedded derivatives and host contracts.

**Figure DH 1-5**  
Types of embedded features added to host contracts



See DH 4 for information on the identification of embedded derivatives as well as whether the derivative should be separated from its host contract.

## 1.5 *Uses of derivatives*

Reporting entities commonly use derivatives to manage their exposure to various risks, such as interest rate risk, foreign exchange risk, price risk, and credit risk. They may enter into derivatives to entirely or partially offset risk exposures produced in their operations or other contractual arrangements. See DH 5 for information on hedge accounting, a common risk management activity.

Some reporting entities may use derivatives to acquire risk or speculate on future price changes of an underlying asset. Provided the value of the underlying asset moves as expected, the reporting entity can profit from price changes without having to invest in the underlying asset itself. Reporting entities can also enter into a combination of derivative transactions to take advantage of price differences between two or more markets.



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***Chapter 2:***  
***Definition of a derivative***

## 2.1 Definition of a derivative – overview

ASC 815 establishes a definition of a derivative instrument that is based on specific distinguishing characteristics. While the definition of a derivative is very broad, there are numerous scope exceptions to prevent ASC 815 from being unduly burdensome. This chapter examines the broad definition. Scope exceptions are discussed in DH 3.

When evaluating whether a contract or embedded component meets the definition of a derivative, a reporting entity should assess whether a component is freestanding or embedded in another instrument. See DH 4.2.1.1 for information on that determination.

## 2.2 Scope of derivatives guidance

All reporting entities must apply ASC 815 to all financial instruments or other contracts that meet the definition of a derivative and do not qualify for one of its scope exceptions.

### 2.2.1 Practicability of estimating fair value

All financial instruments that meet the definition and do not qualify for a scope exception are accounted for as derivatives under ASC 815. There is no practicability exception that permits a reporting entity to avoid calculating the required fair value measurements for derivative instruments; the FASB has stated that it believes fair value is the only relevant measurement attribute for derivatives.

### 2.2.2 Unit of account

ASC 815-10-15-9 specifies that two or more derivatives should be viewed as a unit if they are entered into contemporaneously and in contemplation of each other, with the same counterparty, relating to the same risk, with no economic or substantive business purpose for structuring them separately. Therefore, if the two contracts together result in no net exposure, a reporting entity may have created a combined financial instrument that is not in the scope of ASC 815 and its components cannot be separated for hedging purposes.

## 2.3 Definition of a derivative

ASC 815-10-15-83 defines a derivative instrument.

### **ASC 815-10-15-83**

A derivative instrument is a financial instrument or other contract with all of the following characteristics:

- a. Underlying, notional amount, payment provision. The contract has both of the following terms, which determine the amount of the settlement or settlements, and, in some cases, whether or not a settlement is required:
  1. One or more underlyings
  2. One or more notional amounts or payment provisions or both.

- b. Initial net investment. The contract requires no initial net investment or an initial net investment that is smaller than would be required for other types of contracts that would be expected to have a similar response to changes in market factors.
- c. Net settlement. The contract can be settled net by any of the following means:
  - 1. Its terms implicitly or explicitly require or permit net settlement.
  - 2. It can readily be settled net by a means outside the contract.
  - 3. It provides for delivery of an asset that puts the recipient in a position not substantially different from net settlement.

The key terms within the definition are (1) underlying, (2) notional amount, (3) payment provision, (4) initial net investment, and (5) net settlement.

### **2.3.1 Underlying**

ASC 815-10-15-88 defines an underlying.

#### **ASC 815-10-15-88**

An underlying is a variable that, along with either a notional amount or a payment provision, determines the settlement amount of a derivative instrument. An underlying usually is one or a combination of the following:

- a. A security price or security price index
- b. A commodity price or commodity price index
- c. An interest rate or interest rate index
- d. A credit rating or credit index
- e. An exchange rate or exchange rate index
- f. An insurance index or catastrophe loss index
- g. A climatic or geological condition (such as temperature, earthquake severity, or rainfall), another physical variable, or a related index
- h. The occurrence or nonoccurrence of a specified event (such as a scheduled payment under a contract).

An underlying may be the price or rate of an asset or liability but is not the asset or liability itself. Accordingly, the underlying will generally be the referenced rate or index that determines whether or not the derivative has a positive or negative value. For example, the underlying in a contract that provides the holder an option to purchase a security is the price of the security.

ASC 815-10-55-77 through ASC 815-10-55-83 provides an example of determining an underlying if a contract contains a fixed element and variable element. The example illustrates that an agreement between parties to transact (a) at a fixed price in the future, (b) at the prevailing market rate, or (c) at the prevailing market rate plus or minus a fixed basis differential all contain an underlying and meet the definition of a derivative.

An underlying equal to the prevailing market rate will result in the derivative instrument having little to no value as the transaction will happen at the market rate.

### **2.3.2 Notional amount**

ASC 815-10-15-92 defines a notional amount.

#### **Excerpt from ASC 815-10-15-92**

A notional amount is a number of currency units, shares, bushels, pounds, or other units specified in the contract. Other names are used, for example, the notional amount is called a face amount in some contracts.

The notional amount generally represents the second half of the equation that determines the settlement amount under a derivative. Accordingly, the settlement amount of a derivative is often determined by the interaction of the notional amount and the underlying. This interaction may consist of simple multiplication, or it may involve a formula with leverage factors or other constants.

#### **2.3.2.1 Requirements contract**

A requirements contract is defined in ASC 815-10-55-5 as a contract that requires one party to the contract to buy the quantity needed to satisfy its needs. Although this type of contract is entered into to meet the needs of one of the parties to the contract, it may meet the definition of a derivative. A reporting entity will need to analyze the terms of the requirements contract to determine whether it is a derivative instrument; that determination depends in part on whether the contract has a notional amount.

The requirements contract guidance in ASC 815-10-55-5 through ASC 815-10-55-7 is only applicable in cases when the seller is to supply all of the purchaser's needs and the purchaser cannot buy excess units for resale. In a requirements contract, the contract has a notional amount if it includes a reliable means to determine a quantity. Settlement and default provisions may provide that means (e.g., a specified minimum delivery amount based on three-year historical average usage).

In evaluating a requirements contract, there is no notional amount unless either the buyer or seller has the right or ability to enforce a quantity at a specified level or the seller is compelled to perform due to a material penalty provision. Provisions supporting the notional amount should be in the contract itself or a legally-binding side agreement.

When the notional amount is not determinable, making the quantification of an amount highly subjective and relatively unreliable (e.g., if a contract does not contain settlement and default provisions that specifically reference quantities or provide a formula based on historical usage), the contracts are considered to have no notional amount for purposes of applying ASC 815.

ASC 815-10-55-5 through ASC 815-10-55-7 provides guidance on how to evaluate whether a requirements contract has a notional amount. See [UP 3.2.1.1](#) for additional information on the determination of the notional amount in requirements contracts.

### 2.3.3 *Payment provision*

In lieu of specifying a notional amount, some derivatives contain a payment provision, which is defined in ASC 815-10-20.

#### **Definition from ASC 815-10-20**

**Payment Provision:** A payment provision specifies a fixed or determinable settlement to be made if the underlying behaves in a specified manner.

For example, a contract might specify that a \$5 million payment will be made if interest rates increase by 200 basis points or if hurricane damage in Florida exceeds \$300 million during the next 12 months; the contract has a payment provision even though the settlement of the contract is driven by the behavior of the underlying.

### 2.3.4 *Initial net investment*

Many derivative-like instruments do not require an initial cash outlay. Others may require an initial payment as compensation for time value (e.g., a premium on an option) or for terms that are more favorable than market conditions (e.g., a premium on an in-the-money option).

ASC 815-10-15-94 through ASC 815-10-15-98 defines a derivative as either a contract that does not require an initial net investment or a contract that requires an initial net investment that, when adjusted for the time value of money, is less (“by more than a nominal amount”) than the initial net investment that would be required to acquire the asset or incur the obligation related to the underlying.

A derivative does not satisfy this criterion if the initial net investment is equal to the notional amount (or the notional amount plus a premium or minus a discount) or is determined by applying the notional amount to the underlying. See ASC 815-10-55-150, Case A, for an example of this concept.

Question DH 2-1 discusses what is considered more than a nominal amount.

#### **Question DH 2-1**

What amount is considered more than a nominal amount?

#### ***PwC response***

The FASB did not provide a bright line for what constitutes a nominal amount. We believe its intention is for an initial net investment that is less than 90% of the amount that would be exchanged to acquire the asset or incur the obligation related to the underlying to be considered “less, by more than a nominal amount.”

ASC 815-10-55-166 through ASC 815-10-55-168 provide an example that illustrates how to determine the meaning of “less by more than a nominal amount.” The determination should be made on a case by case basis considering the facts and circumstances.

Some derivatives might require a mutual exchange of assets at a contract’s inception, in which case the initial net investment would be the difference between the fair values of the assets exchanged. An exchange of currencies of equal fair values (e.g., in a currency swap contract) is not considered an initial net investment; it is the exchange of one kind of cash for another kind of cash of equal value.

### **2.3.5 Net settlement**

Another key concept in the definition of a derivative is whether a contract can be settled net, which generally means that a contract can be settled at its maturity through an exchange of cash, instead of through physical delivery of the referenced asset. A contract may be considered net settled when its settlement meets one of the criteria in ASC 815-10-15-99.

#### **ASC 815-10-15-99**

A contract fits the description in paragraph 815-10-15-83(c) if its settlement provisions meet criteria for any of the following:

- a. Net settlement under contract terms [DH 2.3.5.1]
- b. Net settlement through a market mechanism [DH 2.3.5.2]
- c. Net settlement by delivery of derivative instrument or asset readily convertible to cash [DH 2.3.5.3]

Most futures, forwards, swaps, and options are considered derivatives because (1) their contract terms call for a net cash settlement, or (2) a mechanism exists in the marketplace that makes it possible to enter into closing contracts with a net cash settlement. Also included under the definition of a derivative are commodity-based contracts that permit settlement through the delivery of either a commodity or cash (e.g., commodity futures, options, swap contracts), commodity purchase and sales contracts that require the delivery of a commodity that is readily convertible to cash (e.g., wheat, oil, gold), and loan commitments from the issuer’s (lender’s) perspective that relate to the origination of mortgage loans that will be held for sale.

Question DH 2-2 discusses whether a forward commitment meets the definition of a derivative.

#### **Question DH 2-2**

If a reporting entity enters into a forward commitment that obliges it to transfer financial assets to a securitization structure for a specified period (e.g., a credit card securitization with a term of 60 months), does the forward commitment meet the definition of a derivative?

#### **PwC response**

Generally, no. Although the commitment has gains or losses based on changes in interest rates, it does not have a net settlement provision or a means outside the contract to meet the net settlement

criterion. A commitment of this type is fulfilled by the transfer of financial assets, such as credit card receivables. Because the financial assets to be delivered are not readily convertible to cash, the commitment does not meet the net settlement criterion. If, however, a market develops, as set out in ASC 815-10-15-118, for the underlying financial instruments, these commitments could meet the net settlement criterion.

### **2.3.5.1 Net settlement under contract terms**

ASC 815-10-15-100 defines this form of net settlement.

#### **Excerpt from ASC 815-10-15-100**

In this form of net settlement, neither party is required to deliver an asset that is associated with the underlying and that has a principal amount, stated amount, face value, number of shares, or other denomination that is equal to the notional amount (or the notional amount plus a premium or minus a discount). (For example, most interest rate swaps do not require that either party deliver interest-bearing assets with a principal amount equal to the notional amount of the contract.) Net settlement may be made in cash or by delivery of any other asset (such as the right to receive future payments...), whether or not that asset is readily convertible to cash.

Contractual net settlement will most often be made in cash, but there are other forms of settlement. Some of the other forms are discussed in the following sections.

#### **Net share settlement**

Net share settlement is a form of net settlement in which the party in the loss position delivers shares with a fair value equal to the loss to the party in the gain position. This is commonly referred to as “cashless exercise,” and it meets the net share settlement criterion in ASC-815-10-15-102. If either counterparty could net share settle the contract, then it would meet the net settlement criterion — regardless of whether the net shares are readily convertible to cash, as described in ASC 815-10-15-119.

The issuer of a contract that meets the definition of a derivative because of a net share settlement provision may qualify for the scope exception for certain contracts involving an entity’s own equity in ASC 815-10-15-74(a). See DH 3.3 for information on this scope exception.

#### **Net settlement in the event of nonperformance or default**

ASC 815-10-15-103 discusses how contracts that contain penalties for nonperformance or default meet the net settlement criterion if the contract’s default provisions call for net settlement upon such nonperformance or default. As a result, reporting entities need to evaluate all default provisions and termination penalties when determining whether a contract includes net settlement provisions.

Figure DH 2-1 summarizes key considerations in evaluating default provisions. See UP 3 for additional information.

**Figure DH 2-1****Evaluating whether default provisions constitute net settlement**

<b>Net settlement provisions</b>	<b>Not net settlement provisions</b>
<ul style="list-style-type: none"> <li>□ Symmetrical default provisions that allow either party to the contract to unilaterally settle the contract in cash without penalty</li> <li>□ A variable penalty for nonperformance based on changes in the price of the underlying (may be a form of net settlement)</li> </ul>	<ul style="list-style-type: none"> <li>□ Asymmetrical default provisions that allow the nondefaulting party to demand payment from the defaulting party in the event of nonperformance, but do not result in the defaulting party receiving payments for the effects of favorable price changes</li> <li>□ A fixed penalty for nonperformance (as the penalty does not change with changes in the underlying)</li> <li>□ A variable penalty for nonperformance based on changes in the price of the underlying if it also includes an incremental penalty of a fixed amount (or fixed amount per unit) that is expected to be significant enough at all dates during the remaining term to make the possibility of nonperformance remote</li> </ul>

***Symmetrical default provisions***

A symmetrical default provision requires an entity to pay a penalty for nonperformance that equals the change in the price of the items that are the subject of the contract. It might be considered a net settlement provision, depending on the specifics of the contract. For example, a liquidating-damages clause that stipulates that if the seller fails to deliver a specified quantity of a particular commodity or buyer fails to accept the delivery of that commodity, the party in an unfavorable position must pay the other party an amount equal to the difference between the spot price on the scheduled delivery date and the contract price, regardless of which party defaulted.

***Asymmetrical default provisions***

An asymmetrical default provision requires the defaulting party to compensate the nondefaulting party for any incurred loss, but does not allow the defaulting party to benefit from favorable price changes.

An asymmetrical default provision does not constitute net settlement. However, the presence of asymmetrical default provisions applied in contracts between the same counterparties indicates the existence of an agreement between those parties that the party in a loss position may elect the default provision, thus incorporating a net settlement provision within the contract.

In addition, a pattern of settlements outside of physical delivery would call into question whether the provision serves as a net settlement mechanism under the contract. It would also call into question whether the full contracted quantity will be delivered under this and similar contracts.

Net settlement of a contract designated as normal purchases and normal sales would result in a tainting event that would need to be evaluated to determine the impact on the contract itself and other



contracts similarly designated as normal. See DH 3.2.4 for information on the normal purchases and normal sales exception.

### ***Penalties for nonperformance***

A fixed penalty for nonperformance is not considered a net settlement provision because the amount does not vary with changes in the underlying.

As discussed in ASC 815-10-15-103(c), a variable penalty for nonperformance is not a form of net settlement if that penalty also contains an incremental fixed penalty in an amount that would be expected to act as a disincentive for nonperformance throughout the term of the contract.

### ***Structured settlement***

In a structured payout, the payout of the net gain or loss is not made immediately. Instead, the holder may receive a financial instrument (e.g., a receivable) whose terms pay out the gain or loss over time.

As discussed in ASC 815-10-15-104, a contract that provides for a structured payout of its gain or loss meets the characteristic of net settlement if the fair value of the cash flows to be received or paid are approximately equal to the amount that would have been received or paid if the contract had provided for an immediate payout.

However, as discussed in ASC 815-10-15-105, a contract cannot be net settled if the holder is required to invest funds in, or borrow funds from, the other party to obtain the benefits of a gain on the contract over time as a traditional adjustment of either the yield on the amount invested or the interest element on the amount borrowed. A fixed-rate mortgage commitment is an example of this type of contract. To benefit from the gain on a loan commitment (due to an increase in interest rates), the holder of the loan commitment must borrow money from the lender.

In contrast, when a contract requires an investment of funds in, or borrowing of funds from, the other party so that the party in a gain position under the contract obtains the value of that gain only over time through a nontraditional or atypical yield, net settlement does exist because the settlement is in substance a structured payout of the contract's gain. ASC 815-10-55-21 illustrates this concept.

#### **Excerpt from ASC 815-10-55-21**

For example, if a contract required the party in a gain position ... to invest \$100 in the other party's debt instrument that paid an abnormally high interest rate of 5,000 percent per day for a term whose length is dependent on the changes in the contract's underlying, an analysis of those terms would lead to the conclusion that the contract's settlement terms were in substance a structured payout of the contract's gain and thus that contract would be considered to have met the characteristic of net settlement ...

### ***Net settlement of debt through exercise of an embedded put or call option***

Settlement of a debtor's obligation to a creditor through exercise of a put or call option embedded within the debt meets the net settlement criterion because neither party is required to deliver an asset that is associated with the underlying. See DH 4.4.3 for additional information.

### 2.3.5.2 *Net settlement through a market mechanism*

Net settlement can also occur when one of the parties to a contract is required to deliver an asset associated with the underlying, but there is an established market mechanism that facilitates net settlement outside the contract. That is, there is a market for the contract itself. For example, an exchange that offers a ready opportunity to sell the contract or to enter into an offsetting contract is a market mechanism.

ASC 815-10-15-118 requires that the assessment of whether a market mechanism exists be performed at inception and on an ongoing basis throughout a contract's life.

Market mechanisms may have different forms. Many derivatives are actively traded and can be closed or settled before the contract's expiration or maturity by net settlement in active markets. Reporting entities should interpret the term *market mechanism* broadly to include any institutional arrangement or other agreement having the requisite characteristics. For example, any institutional arrangement or over-the-counter agreement that permits either party to (1) be relieved of all rights and obligations under the contract, and (2) liquidate its net position in the contract without incurring a significant transaction cost is considered a net settlement. Regardless of its form, an established market mechanism must have all of the primary characteristics in ASC 815-10-15-111.

#### **Excerpt from ASC 815-10-15-111**

The term market mechanism is to be interpreted broadly and includes any institutional arrangement or other agreement having the requisite characteristics. Regardless of its form, an established market mechanism must have all of the following primary characteristics:

- a. It is a means to settle a contract that enables one party to readily liquidate its net position under the contract. A market mechanism is a means to realize the net gain or loss under a particular contract through a net payment. Net settlement may occur in cash or any other asset. A method of settling a contract that results only in a gross exchange or delivery of an asset for cash (or other payment in kind) does not satisfy the requirement that the mechanism facilitate net settlement.

Additional factors that would indicate that the settlement method enables one party to readily liquidate its net position include markets that provide access to potential counterparties regardless of a seller's size or market position, and if the risks assumed by a market maker as a result of acquiring a contract can be transferred by a means other than by repackaging the original contract into a different form.

#### **Excerpt from ASC 815-10-15-111**

- b. It results in one party to the contract becoming fully relieved of its rights and obligations under the contract. A market mechanism enables one party to the contract to surrender all future rights or avoid all future performance obligations under the contract. Contracts that do not permit assignment of the contract from the original issuer to another party do not meet the characteristic of net settlement through a market mechanism. The ability to enter into an offsetting contract, in and of itself, does not constitute a market mechanism because the rights and obligations from the original contract survive. The fact that an entity has offset its rights and obligations under an original contract with a new contract does not by itself indicate that its rights and obligations

under the original contract have been relieved. This applies to contracts regardless of whether either of the following conditions exists:

1. The asset associated with the underlying is financial or nonfinancial.
2. The offsetting contract is entered into with the same counterparty as the original contract or a different counterparty (unless an offsetting contract with the same counterparty relieves the entity of its rights and obligations under the original contract, in which case the arrangement does constitute a market mechanism). (Example 6 [see paragraph 815-10-55-91] illustrates this guidance.)

Generally, an offsetting contract does not replace an original contract's legal rights and obligations. See ASC 815-10-55-91 through ASC 815-10-55-98 (*Example 6: Net Settlement Through a Market Mechanism—Ability to Offset Contracts*) and ASC 815-10-15-117.

Additional factors that indicate that a party to the contract can be fully relieved of its rights and obligations under the contract include:

- Multiple market participants that are willing and able to enter into a transaction at market prices to assume the seller's rights and obligations under a contract
- Sufficient liquidity in the market for the contract, as indicated by the transaction volume and a relatively narrow and observable bid/ask spread

#### **Excerpt from ASC 815-10-15-111**

- c. Liquidation of the net position does not require significant transaction costs. For purposes of assessing whether a market mechanism exists, an entity shall consider transaction costs to be significant if they are 10 percent or more of the fair value of the contract. Whether assets deliverable under a group of futures contracts exceeds the amount of assets that could rapidly be absorbed by the market without significantly affecting the price is not relevant to this characteristic. The lack of a liquid market for a group of contracts does not affect the determination of whether there is a market mechanism that facilitates net settlement because the test focuses on a singular contract. An exchange offers a ready opportunity to sell each contract, thereby providing relief of the rights and obligations under each contract. The possible reduction in price due to selling a large futures position is not considered to be a transaction cost.
- d. Liquidation of the net position under the contract occurs without significant negotiation and due diligence and occurs within a time frame that is customary for settlement of the type of contract. A market mechanism facilitates easy and expedient settlement of the contract. As discussed under the primary characteristic in (a), those qualities of a market mechanism do not preclude net settlement in assets other than cash.

Readily-obtainable binding prices, standardized documentation and settlement procedures, minor negotiation and structuring requirements, and nonextensive closing periods are all indicators that the particular market mechanism provides for easy and expedient settlement of the contract.

Question DH 2-3 asks whether an entity should determine if a market mechanism exists on an individual contract basis.

### Question DH 2-3

Should a reporting entity determine whether a market mechanism exists on an individual contract basis?

#### ***PwC response***

Yes. This assessment should be performed on an individual contract basis, not on an aggregate holdings basis. The lack of a liquid market for a group of contracts does not affect whether a market mechanism exists that facilitates net settlement for an individual contract within that group.

#### **2.3.5.3 Net settlement delivery of an asset readily convertible to cash**

Delivery of an asset that is readily convertible to cash puts the receiving party in a position that is equivalent to a net settlement.

#### **ASC 815-10-15-120**

An example of a contract with this form of net settlement is a forward contract that requires delivery of an exchange-traded equity security. Even though the number of shares to be delivered is the same as the notional amount of the contract and the price of the shares is the underlying, an exchange-traded security is readily convertible to cash. Another example is a swaption—an option to require delivery of a swap contract, which is a derivative instrument.

When a contract is net settled, neither party accepts the risks and costs customarily associated with owning and delivering the asset associated with the underlying (e.g., storage, maintenance, resale costs). If the asset to be delivered is readily convertible to cash, those risks are minimal. Therefore, the parties should be indifferent as to whether there is a gross physical exchange of the asset or a net settlement in cash.

The ASC Master Glossary defines “readily convertible to cash.”

#### **Definition from ASC Master Glossary**

Readily Convertible to Cash: Assets that are readily convertible to cash have both of the following:

- a. Interchangeable (fungible) units
- b. Quoted prices available in an active market that can rapidly absorb the quantity held by the entity without significantly affecting the price.

Based on this concept, examples of assets that are readily convertible to cash include:

- A security or commodity that is traded in a deep and active market
- A unit of foreign currency that is readily convertible to the functional currency of the reporting entity

Conversely, securities that are not actively traded, or an unusually large block of thinly traded securities, would not be considered readily convertible to cash in most circumstances, even though the owner might be able to use such securities as collateral in a borrowing arrangement. Therefore, an asset (whether financial or nonfinancial) is considered to be readily convertible to cash if the net amount of cash that would be received from a sale of the asset in an active market is equal to or not significantly less than the amount the entity would typically have received under a net settlement provision. Parties generally should be indifferent as to whether they exchange cash or the assets associated with the underlying.

A reporting entity must assess the estimated costs that would be incurred to immediately convert the asset to cash. If those costs are significant, then the asset is not considered readily convertible to cash and would not meet the definition of net settlement. Estimated conversion costs are considered significant if they are 10% or more of the gross sales proceeds (based on the spot price at the inception of the contract) that would be received from the sale of those assets in the closest or most economical active market.

ASC 815-10-55-99 through ASC 815-10-55-110 (*Example 7: Net Settlement—Readily Convertible to Cash—Effect of Daily Transaction Volumes*) illustrates how to assess whether contracts that can be contractually settled in increments meet the net settlement criterion. A reporting entity must determine whether or not the quantity of the asset to be received from the settlement of one increment is considered readily convertible to cash. If the contract can be settled in increments and those increments are considered readily convertible to cash, the entire contract meets the definition of net settlement.

Question DH 2-4 discusses whether contracts that can be contractually settled in increments meets the net settlement criterion.

### Question DH 2-4

A reporting entity has an option to purchase one million shares of a publicly-traded stock, which can be exercised in increments of 25,000 shares. To determine whether the shares can be rapidly absorbed in the market without significantly affecting the price, should the reporting entity base its assessment on the exercise of a 25,000 share increment?

#### ***PwC response***

Yes. When determining whether the shares can be rapidly absorbed in the market without significantly affecting the price, the reporting entity should base its assessment on the exercise of the smallest increment (25,000 shares), not on the entire option's notional amount (one million shares).

#### ***Considerations for warrants***

As discussed in ASC 815-10-15-131, publicly-traded shares of stock are not considered readily convertible to cash when they are received through the exercise of a warrant issued by a reporting entity on its own stock and cannot be sold or transferred (other than in connection with being pledged as collateral) for a period of 32 days or more from the date the warrant is exercised.

### 2.3.6 *Reassessing a contract meeting the definition of a derivative*

Whether a contract meets the definition of a derivative and, if it does, whether it qualifies for a scope exception should be revisited each reporting period, unless otherwise provided in ASC 815-10-15. For example, ASC 815-10-15-103(c) states that contracts with both variable and fixed nonperformance penalties should be evaluated only at inception to determine whether the penalties constitute net settlement.

Contract terms or customary practices may change, affecting the determination of whether a particular contract meets the definition of a derivative instrument or qualifies for a scope exception.

A contract that subsequently meets the definition of a derivative (or no longer qualifies for a scope exception) should be carried at fair value prospectively from the time it is determined to be a derivative.

Question DH 2-5 asks how a reporting entity accounts for a contract that was not a derivative at inception but later meets the definition of a derivative.

#### **Question DH 2-5**

How should a reporting entity account for a contract that was not a derivative contract at its inception but later meets the definition of a derivative?

#### ***PwC response***

ASC 815-10-15-3 requires a contract that meets the definition of a derivative subsequent to its acquisition to be immediately recognized as a derivative. It should be recorded at its then current fair value, with the offsetting entry recorded in earnings. Subsequently, the contract should be recorded at its fair value each period with changes in its fair value recorded through earnings unless the requirements for hedge accounting are met.

## 2.4 *Accounting for a derivative*

ASC 815 requires that derivative instruments within its scope be recognized and subsequently measured on the balance sheet at fair value in accordance with ASC 820, *Fair Value Measurement*. If a derivative is not designated as a hedge, changes in its fair value are recorded in current earnings. The accounting treatment of a derivative designated as a hedge depends on the type of hedging relationship. See DH 5 for information on hedge accounting.

A contract that meets the definition of a derivative may not be within the scope of ASC 815. See DH 3 for information on ASC 815's scope exceptions.

## 2.5 *Types of derivatives*

Figure DH 2-2 summarizes whether certain contracts meet the definition of a derivative.

**Figure DH 2-2**  
Types of derivatives

<b>Contract</b>	<b>Underlying?</b>	<b>Notional or payment provision?</b>	<b>Smaller initial net investment?</b>	<b>Net settlement?</b>	<b>Does the contract meet the definition of a derivative?</b>	<b>Is the contract within the scope of ASC 815?</b>
Equity security	No	Yes	No. An initial net investment is required to purchase an equity security.	No	No	No. The contract does not meet the definition of a derivative.
Debt security or loan	No	Yes	No. A debt security or loan requires an initial net investment of the principal amount or (if purchased at a discount or premium) an amount calculated to yield a market rate of interest.	No	No	No. The contract does not meet the definition of a derivative.
Regular-way security trade (e.g., trade of a debt or equity security)	Yes, the price of the security	Yes, a specified number of securities or a specified principal or face amount	Yes	It depends on whether or not the security can be net settled through explicit contract terms or is readily convertible to cash.	It depends on whether or not there is net settlement.	Not typically. See DH 3.2.3 for discussion of the regular-way trade exception.
Forward contract to purchase or sell securities other than the equity securities of the parties involved in the transaction	Yes, the price of the security	Yes, a specified number of securities or a specified principal or face amount	Yes	It depends on whether or not the security can be net settled through explicit contract terms or is readily convertible to cash.	It depends on whether or not there is net settlement.	Yes, provided it meets the definition of a derivative and does not qualify for the regular-way security-trade scope exception. See DH 3.2.3.
Lease	Yes, the value of the leased property	Yes, its periodic rent	Yes. A benefit of a lease is that it requires a smaller initial net investment.	No. A lease requires a payment equal to the value of the right to use the property.	No	No. The contract does not meet the definition of a derivative.
Mortgage-backed security	Yes	Yes	No. This type of security requires an initial net investment equal to the fair value of the instrument.	No	No	No. The contract does not meet the definition of a derivative.

<b>Contract</b>	<b>Underlying?</b>	<b>Notional or payment provision?</b>	<b>Smaller initial net investment?</b>	<b>Net settlement?</b>	<b>Does the contract meet the definition of a derivative?</b>	<b>Is the contract within the scope of ASC 815?</b>
Option to purchase or sell real estate	Yes, the price of the real estate	Yes, a specified property	Yes. The option premium is less than the value of the real estate.	No, unless there are explicit market settlement terms	No	Not typically. See DH 3.2.7 for discussion of scope exception for contracts not traded on an exchange.
Option to purchase or sell an exchange-traded security	Yes, the price of the security	Yes, a specified number of securities	Yes. The option premium is less than the value of the security.	Yes. The underlying is readily convertible to cash as the security is traded on an exchange.	Yes	Yes
Option to purchase or sell a security not traded on an exchange	Yes, the price of the security	Yes, a specified number of securities	Yes. The option premium is less than the value of the security.	It depends on whether or not the security can be net settled through explicit contract terms.	It depends on whether or not there is net settlement.	Yes, provided it meets the definition of a derivative.
Employee stock option	Yes, the price of the security	Yes, a specified number of securities	Yes. The option premium is less than the value of the security.	It depends on whether or not the security can be net settled through explicit contract terms or is readily convertible to cash.	It depends on whether or not there is net settlement.	Not typically. See DH 3.3.1 for discussion of scope exception for share-based payments.
Futures contract	Yes, the price of a commodity or financial instrument	Yes, a specified quantity or face amount	Yes	Yes. A clearinghouse (a market mechanism) exists to facilitate net settlement.	Yes	Yes
Forward contract to purchase or sell manufactured goods	Yes, the price of manufactured goods	Yes, a specified quantity	Yes	It depends. The contract may be net settled if it contains symmetrical default provisions and/or the manufactured goods are readily convertible into cash.	It depends on whether or not there is net settlement.	Not typically. If the contract meets the definition of a derivative, it may qualify for the normal purchases and normal sales or contracts not traded on an exchange scope exceptions. See DH 3.2.4 and DH 3.2.7.
Nonexchange-traded forward contract to purchase or sell a commodity	Yes, the price of the commodity	Yes, a specified quantity or face amount	Yes	It depends on whether or not the contracted amount of the commodity is readily convertible to cash.	It depends on whether or not there is net settlement.	It depends. If the contract meets the definition of a derivative, it may qualify for the normal purchases and normal sales scope exception. See DH 3.2.4.



<b>Contract</b>	<b>Underlying?</b>	<b>Notional or payment provision?</b>	<b>Smaller initial net investment?</b>	<b>Net settlement?</b>	<b>Does the contract meet the definition of a derivative?</b>	<b>Is the contract within the scope of ASC 815?</b>
Forward contract to return securities under a repurchase agreement accounted for as a sale	Yes, the price of the security	Yes, a specified number of securities or a specified principal or face amount	Yes	It depends on whether or not the security can be net settled through explicit contract terms or is readily convertible to cash.	It depends on whether or not there is net settlement.	Yes, provided it meets the definition of a derivative and does not qualify for the regular-way security-trade scope exception. See DH 3.2.3.
Forward contract to return securities under a repurchase agreement accounted for as a secured borrowing	No. The contract is to return a pledged asset.	No	No	No	No	No. In addition, if the contract contains an embedded derivative that is an impediment to sale accounting (e.g., call option allowing transferor to repurchase transferred assets), that would also qualify for a scope exception. See DH 3.2.8.
Interest rate swap	Yes, an interest rate	Yes, a specified amount on which the exchanged interest rates are based	Yes	Yes, periodic payments	Yes	Yes
Currency swap	Yes, an exchange rate	Yes, a specified currency amount	Yes	Yes	Yes	Yes
Forward starting swap or swaption	Yes, the value of the swap	Yes, the notional amount of the swap	Yes	Yes. Settlement requires the delivery of a derivative (a swap contract).	Yes	Yes
Stock-purchase warrant	Yes, the price of stock	Yes, a specified number of shares	Yes	It depends on whether the warrant contains a net share or net cash settlement provision, can be net settled through a market mechanism or the underlying shares are readily convertible to cash.	It depends on whether or not there is net settlement.	For the holder, it is within the scope of ASC 815 if it meets the definition of a derivative.  For the issuer, even if it meets the definition of a derivative, it may qualify for the scope exception for certain contracts involving an entity's own equity.  See DH 3.3.

<b>Contract</b>	<b>Underlying?</b>	<b>Notional or payment provision?</b>	<b>Smaller initial net investment?</b>	<b>Net settlement?</b>	<b>Does the contract meet the definition of a derivative?</b>	<b>Is the contract within the scope of ASC 815?</b>
Mortgage loan commitment	Yes, an interest rate	Yes, principal amount of the loan commitment	Yes	Yes, if the loan commitment can readily be settled net through terms outside of the contract or is readily convertible into cash	Yes	For the lender, yes, if the originated loan will be classified as held for sale. See DH 3.2.11.  For the borrower, no. See DH 3.2.11.
Traditional property/casualty insurance contract	Yes, the occurrence of an identifiable insurable event	Yes, contract value (i.e., the insured amount)	Yes	Yes	Yes	No. See DH 3.2.5 for discussion of the insurance contracts scope exception.
Traditional life insurance	Yes, the mortality of the insured	Yes, contract value (i.e., the death benefit)	Yes	Yes	Yes	No. See DH 3.2.5 for discussion of the insurance contracts scope exception.
Financial guarantee contract — payment occurs if a specific debtor fails to pay the guaranteed party	Yes, failure by the debtor to make payment	Yes	Yes	Yes	Yes	It depends. See DH 3.2.6 for discussion of the financial guarantee scope exception.
Financial guarantee contract — payment occurs if there is a change in another underlying such as a decrease in a specified debtor's creditworthiness	Yes, the decrease in specified debtor's creditworthiness	Yes	Yes	Yes	Yes	Yes. This type of contract does not qualify for the financial guarantee scope exception. See DH 3.2.6.
Credit-indexed contract — payment occurs if a credit index (or the creditworthiness of a specified debtor) varies in a specified way	Yes, the credit index or credit rating	Yes, a specified payment amount that may (1) vary, depending on the degree of change or (2) be fixed	Yes	Yes, for the change in fair value	Yes	Yes
Royalty agreement	Yes, the volume of sales	Yes. Payment is based on a percentage of sales/output.	Yes. Payment occurs if sales are made.	Yes	Yes	Not typically. A royalty agreement usually qualifies for the nonexchange traded contract scope exception. See DH 3.2.7.3.
Interest rate cap	Yes, an interest rate	Yes, a specified amount	Yes	Yes	Yes	Yes
Interest rate floor	Yes, an interest rate	Yes, a specified amount	Yes	Yes	Yes	Yes

<b>Contract</b>	<b>Underlying?</b>	<b>Notional or payment provision?</b>	<b>Smaller initial net investment?</b>	<b>Net settlement?</b>	<b>Does the contract meet the definition of a derivative?</b>	<b>Is the contract within the scope of ASC 815?</b>
Interest rate collar	Yes, an interest rate	Yes, a specified amount	Yes	Yes	Yes	Yes
Synthetic guaranteed-investment contracts	Yes, the formula by which interest is calculated	Yes, a specified amount	Yes	Yes	Yes	Yes
Nonexchange traded contract, payment occurs if a weather variable occurs	Yes, a climatic or geologic variable or other physical attribute	Yes, a specified amount	Yes. Payment occurs if a weather variable occurs.	Yes. Payment is made in cash.	Yes	No. Climatic and geologic variables qualify for the nonexchange traded contract scope exception. See DH 3.2.7.1.

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# ***Chapter 3:*** ***Scope exceptions***

### 3.1 Scope exceptions – overview

This chapter addresses the scope exceptions in ASC 815, *Derivatives and Hedging*. Certain contracts that meet the definition of a derivative are not accounted for as derivatives because they qualify for a scope exception. In providing scope exceptions, the FASB's goal was to prevent ASC 815 from being unduly burdensome to certain industries and markets in which contracts to purchase and sell financial instruments and nonfinancial assets often meet the definition of a derivative but traditionally had not been treated as such.

Contracts that meet the definition of a derivative that do not qualify for a scope exception should be recognized and subsequently measured on the balance sheet at fair value in accordance with ASC 820, *Fair Value Measurement*. If a derivative is not designated as a hedge, changes in its fair value are recorded in current earnings. The accounting treatment of a derivative designated as a hedge depends on the type of hedging relationship.

Guidance specific to financial, nonfinancial, and foreign currency hedges are addressed in DH 6, DH 7, and DH 8, respectively.

### 3.2 Contracts excluded from ASC 815's scope

Figure DH 3-1 summarizes the scope exceptions provided in ASC 815 with literature references and relevant section references within this chapter of the guide and other PwC guides.

**Figure DH 3-1**  
ASC 815 scope exceptions

Scope exception	ASC reference	Section reference
Regular-way security trades	ASC 815-10-15-15 to ASC 815-10-15-21	DH 3.2.3
Normal purchases and normal sales	ASC 815-10-15-22 to ASC 815-10-15-51	DH 3.2.4 UP 3.3
Certain insurance contracts	ASC 815-10-15-52 to ASC 815-10-15-57	DH 3.2.5
Certain financial guarantee contracts	ASC 815-10-15-58	DH 3.2.6
Certain contracts that are not traded on an exchange	ASC 815-10-15-59 to ASC 815-10-15-62	DH 3.2.7 UP 3.3
Derivative instruments that impede sales accounting	ASC 815-10-15-63 to ASC 815-10-15-64	DH 3.2.8
Investments in life insurance	ASC 815-10-15-67	DH 3.2.9
Certain investment contracts	ASC 815-10-15-68	DH 3.2.10

<b>Scope exception</b>	<b>ASC reference</b>	<b>Section reference</b>
Certain loan commitments	ASC 815-10-15-69 to ASC 815-10-15-71	DH 3.2.11
Certain interest-only strips and principal-only strips	ASC 815-10-15-72 to ASC 815-10-15-73	DH 3.2.12
Certain contracts involving an entity's own equity	ASC 815-10-15-74 to ASC 815-10-15-78 ASC 815-40	DH 3.3 FG 5
Leases	ASC 815-10-15-79	DH 3.2.13
Residual value guarantees	ASC 815-10-15-80 to ASC 815-10-15-81	DH 3.2.14
Registration payment arrangements	ASC 815-10-15-82	DH 3.2.15
Fixed-odds wagering contracts	ASC 815-10-15-82A	

### **3.2.1** *Asymmetric accounting treatment*

The criteria for a contract to meet the definition of a derivative are the same for both parties to an agreement. However, the scope exceptions are unique to each party. Therefore, while all of the parties to an agreement should come to the same conclusion as to whether a contract meets the definition of a derivative, they may arrive at different conclusions as to whether a scope exception under ASC 815 applies. For example, if the seller sold commodities that it produced in the normal course of business and the buyer purchased them for trading purposes, a commodity contract may meet the normal purchases and normal sales criteria for the seller, but not the buyer.

### **3.2.2** *Revisiting application of scope exceptions*

Reporting entities should revisit the use of a scope exception at each reporting period. The terms of the contract or customary practices may change, thereby affecting the determination of whether a contract meets a particular scope exception.

Figure DH 3-2 provides guidance for accounting for contracts that move in or out of the scope of ASC 815.

**Figure DH 3-2**  
Revisiting scope exceptions

<b>Type of change</b>	<b>Guidance</b>
A contract is initially accounted for as a derivative, but subsequently meets one of the scope exceptions in ASC 815	<p>The contract is initially recorded at fair value, with changes in fair value recorded in earnings.</p> <p>When the contract qualifies for a scope exception, the fair value at that date remains as an asset or liability and is recognized in income when the items underlying the contract are recognized in income.</p> <p>The contract is subsequently accounted for in accordance with applicable GAAP.</p>
A contract that meets the definition of a derivative initially qualifies for a scope exception in ASC 815. Upon reassessment, the contract no longer qualifies for a scope exception.	<p>The contract is initially accounted for in accordance with applicable GAAP.</p> <p>Once the contract no longer meets a scope exception, it is recorded at fair value with changes in fair value recorded in earnings (unless it is designated in a hedging relationship).</p>

### **3.2.3 Regular-way security trades**

Regular-way security trades are contracts that provide for delivery of a security within the period of time (after the trade date) generally established by regulations or conventions in the marketplace or exchange in which the transaction is executed. These trades often are recorded as completed purchases or sales of securities on the trade date.

Regular-way security trades are exempted from being accounted for as derivatives. The scope exception is not elective. It applies to trades in securities that (1) require the delivery of securities that are readily convertible to cash (this may be through a market mechanism outside of the contract) and (2) customarily do not settle on the trade date but shortly thereafter, but still within a normal settlement period.

#### **3.2.3.1 Normal settlement period**

Settlement periods vary depending on the instrument. A US government security trade typically settles in one day and an equity security trade on the New York Stock Exchange (NYSE) settles within two days, while a secondary market trade of an equity security in foreign markets settles in three to twenty days. Contracts containing provisions that allow for settlement extending beyond the minimum period for the applicable market would be considered derivatives that do not qualify for this scope exception.

#### **3.2.3.2 Forward contracts on securities that do not yet exist**

This scope exception would also apply to forward purchases and sales of when-issued and other securities that do not yet exist (to-be-announced or TBA securities) if a reporting entity is required to, or has a continuing policy of, accounting for those contracts on a trade-date basis rather than a settlement date basis (because it is required by other relevant GAAP, like an AICPA Industry Accounting and Audit Guide). Thus, the reporting entity recognizes the acquisition or disposition of

the securities at the inception of the contract on a gross basis, with an offsetting payable for the settlement amount.

The scope exception for forward purchases and sales is available to reporting entities that use settlement-date accounting as long as the three requirements have been satisfied. Even though an outright exception may not be available to a reporting entity because it is not required to account for the contract on a trade-date basis, or does not have a policy of trade-date accounting, the contract may still be eligible for this scope exception, provided that all of the following conditions are met: (1) there is no other way to purchase or sell that security, (2) delivery of that security and settlement will occur within the shortest period possible for that type of security, and (3) it is probable at inception and throughout the term of the individual contract that the contract will not settle net and will result in physical delivery of a security when it is issued. The reporting entity should document the basis for concluding that it is probable that the contract will not settle net and will result in physical delivery.

#### ***Shortest time period***

A TBA security may be available under multiple settlement periods. As illustrated in Example 9 beginning in ASC 815-10-55-118, the regular-way security trade exception may be applied only to forward contracts for the TBA security that requires delivery in the shortest period permitted for that type of security. For example, if a TBA security provides for a choice of settlement dates in November, December, and January, only the security that settles in November is eligible for the regular-way security exception.

#### ***Net settlement***

Net settling contracts that were previously considered eligible for this scope exception would call into question application of the scope exception to other similar contracts.

### **3.2.4 Normal purchases and normal sales**

Normal purchases and normal sales contracts provide for the purchase or sale of something other than a financial instrument or derivative instrument that will be delivered in quantities expected to be used or sold by the reporting entity over a reasonable period in the normal course of business. ASC 815 includes an elective scope exception for such contracts because they are viewed as similar to binding purchase orders or other similar contracts to which the guidance in ASC 815 was not intended to apply.

To designate one or more contracts as normal purchases or normal sales, the reporting entity should evaluate the contracts within the context of its business and operational requirements. In addition, each contract should be further evaluated to ensure that it meets the technical requirements for designation under the scope exception. ASC 815-10-15-25 and ASC 815-10-15-26 summarize the key elements needed to qualify for the normal purchases and normal sales scope exception, and discuss the types of contracts that may have unique considerations. Figure DH 3-3 highlights these requirements.



**Figure DH 3-3****Requirements for the normal purchases and normal sales scope exception**

<b>Element</b>	<b>Key considerations</b>
Normal terms (DH 3.2.4.1)	<ul style="list-style-type: none"> <li>□ The contract involves quantities that are expected to be used or sold by the reporting entity in the normal course of business.</li> </ul>
Clearly and closely related underlying (DH 3.2.4.2)	<ul style="list-style-type: none"> <li>□ Contract pricing is clearly and closely related to the asset being purchased or sold.</li> <li>□ The criteria for clearly and closely related for the normal purchases and normal sales scope exception are different than the clearly and closely related criteria in an embedded derivative analysis (discussed in DH 4).</li> </ul>
Probable physical settlement (DH 3.2.4.3)	<ul style="list-style-type: none"> <li>□ It is probable that the contract will gross physically settle throughout the term of the contract (no net cash settlement).</li> <li>□ Changes in counterparty credit should be considered in the ongoing evaluation of whether gross physical delivery is probable.</li> <li>□ Net settlement of a contract will result in loss of application of the exception for that contract; it will also call into question whether other similar contracts still qualify.</li> </ul>
Designation and documentation (DH 3.2.4.4)	<ul style="list-style-type: none"> <li>□ Designation: <ul style="list-style-type: none"> <li>○ Is elective, but irrevocable</li> <li>○ May also be conditional</li> <li>○ Is permitted at inception or at a later date; however, documentation must be completed contemporaneously with election</li> </ul> </li> <li>□ Documentation: <ul style="list-style-type: none"> <li>○ Should include the basis for the conclusion that the contract qualifies for the scope exception</li> <li>○ Can be maintained for individual contracts or groups of similar contracts</li> </ul> </li> <li>□ Failure to meet the documentation requirements precludes application</li> </ul>
Type of contract	<ul style="list-style-type: none"> <li>□ The contract must be a forward contract without volumetric optionality or a power purchase or sale agreement that meets certain criteria</li> </ul>

All of the relevant criteria should be met to qualify for the normal purchases and normal sales scope exception. Each is further discussed in the following sections.

**3.2.4.1 Normal terms**

To qualify for the normal purchases and normal sales scope exception, management should evaluate the reasonableness of the contract quantities and terms in relation to the reporting entity's underlying business requirements. This evaluation requires judgment and a two-step conclusion that (1) the reporting entity intends to take physical delivery and (2) the quantity delivered will be used in its normal business activities.

ASC 815 provides a series of relevant factors that should be considered when making these determinations.

#### **ASC 815-10-15-28**

In making those judgments, an entity should consider all relevant factors, including all of the following:

- a. The quantities provided under the contract and the entity's need for the related assets
- b. The locations to which delivery of the items will be made
- c. The period of time between entering into the contract and delivery
- d. The entity's prior practices with regard to such contracts.

In addition to these factors, ASC 815-10-15-29 provides further examples of evidence that may assist in identifying contracts that qualify for the normal purchases and normal sales scope exception, including: past trends, expected future demand, other contracts for delivery of similar items, the entity's practice for acquiring and storing the related commodities, and operating locations.

To designate a contract under the normal purchases and normal sales scope exception, the reporting entity should be able to assert that it is buying or selling goods as part of its normal business activities. In making this assessment, a reporting entity should consider all of its sources of supply of the item provided by the contract in relation to its needs for that item.

#### **3.2.4.2 *Clearly and closely related underlying***

Another criterion in the evaluation of the normal purchases and normal sales scope exception is that the pricing in the contract must be indexed to an underlying that is clearly and closely related to the asset that is being purchased or sold.

The guidance on clearly and closely related for the normal purchases and normal sales scope exception is included in ASC 815-10-15-30 through ASC 815-10-15-34 and requires both qualitative and quantitative considerations. ASC 815-10-15-32 states that a pricing adjustment would not be clearly and closely related to the asset being sold in certain specified circumstances.

#### **ASC 815-10-15-32**

The underlying in a price adjustment incorporated into a contract that otherwise satisfies the requirements for the normal purchases and normal sales scope exception shall be considered to be not clearly and closely related to the asset being sold or purchased in any of the following circumstances:

- a. The underlying is extraneous (that is, irrelevant and not pertinent) to both the changes in the cost and the changes in the fair value of the asset being sold or purchased, including being extraneous to an ingredient or direct factor in the customary or specific production of that asset.
- b. If the underlying is not extraneous as discussed in (a), the magnitude and direction of the impact of the price adjustment are not consistent with the relevancy of the underlying. That is, the magnitude of the price adjustment based on the underlying is significantly disproportionate to the impact of the underlying on the fair value or cost of the asset being purchased or sold (or of an ingredient or direct factor, as appropriate).

- c. The underlying is a currency exchange rate involving a foreign currency that meets none of the criteria in paragraph 815-15-15-10(b) for that reporting entity.

ASC 815-10-15-33 provides further guidance for evaluating contracts in which the price adjustment focuses on changes in the fair value of the asset being purchased or sold. In accordance with this guidance, a price adjustment should be expected, at contract inception, to impact the price in a manner comparable to the outcome that would be obtained if, at each delivery date, the parties were to reprice under then-existing conditions. This guidance can be applied to the cost or fair value of the asset being sold or purchased.

In addition to these pricing factors, ASC 815-15-15-10(b) states that the purchase or sale contract must be denominated in a currency that is:

- the functional currency of one of the substantial parties to the contract,
- a currency in which such contracts are routinely denominated in international commerce,
- the local currency of any substantial party to the contract, or
- the currency used by a substantial party to the contract as if it were the functional currency because the primary economic environment in which the party operates is highly inflationary.

A contract in any other currency is a compound derivative comprising (1) a functional currency forward purchase of the commodity and (2) an embedded foreign currency swap. Since a compound derivative cannot be separated into its components, the entire contract must be accounted for as a single derivative under ASC 815 and is not eligible for the normal purchases and normal sales scope exception.

Question DH 3-1 discusses the interpretation of clearly and closely related for embedded derivatives and normal purchases and sales scope exception.

### Question DH 3-1

How does the interpretation of clearly and closely related for embedded derivatives relate to the clearly and closely related criterion applied in the normal purchases and normal sales scope exception?

#### ***PwC response***

ASC 815-10-15-30 through ASC 815-10-15-34 establish a qualitative and quantitative approach for assessing whether a pricing feature is clearly and closely related in application of the normal purchases and normal sales scope exception. However, it also clarifies that the phrase conveys a different meaning than in the embedded derivative analysis.

#### **Excerpt from ASC 815-10-15-31**

The phrase not clearly and closely related...with respect to the normal purchases and normal sales scope exception is used to convey a different meaning than in paragraphs 815-15-25-1(a) and 815-15-

25-16 through 25-51 with respect to the relationship between an embedded derivative and the host contract in which it is embedded.

In general, the normal purchases and normal sales scope exception establishes a more structured approach compared to the analysis performed in the embedded derivative evaluation. Specifically, the clearly and closely related analysis for purposes of applying the normal purchases and normal sales scope exception requires a qualitative and quantitative analysis of pricing features within the contract. To apply the exception, at contract inception the price adjustment should be expected to impact the price in a manner comparable to the outcome that would be obtained if, at each delivery date, the parties were to reprice the contract under then-existing conditions. In contrast, the analysis of potential embedded derivatives (discussed in DH 4) does not require explicit comparison of the pricing but instead focuses on the overall economic risks and characteristics of the potential embedded derivative and the host.

### **3.2.4.3 Probable physical settlement**

Another criterion for application of the normal purchases and normal sales scope exception is that physical delivery should be probable at inception and throughout the term of the contract. As a result, this criterion should be evaluated at the time the contract is initially designated as a normal purchase or normal sale as well as on an ongoing basis throughout the life of the contract. This section discusses considerations in assessing physical settlement and the impact if net settlement occurs (referred to as tainting).

#### **Contract characteristics**

Some contracts require physical delivery by their contract terms (i.e., those contracts meet the net settlement criterion because they require delivery of an asset that is readily convertible to cash). However, other contracts permit physical or financial settlement. Therefore, to qualify for the normal purchases and normal sales scope exception, ASC 815-10-15-35 has specific requirements for contracts that meet the characteristic of net settlement because of the terms of the contract itself or because there is a market mechanism to facilitate net settlement.

#### **Excerpt from ASC 815-10-15-35**

To qualify for the normal purchases and normal sales scope exception, it must be probable at inception and throughout the term of the individual contract that the contract will not settle net and will result in physical delivery.

Specific consideration of physical delivery is required for these contracts because the parties to the contract have alternative options for cash settlement (whether through the contract itself or through the ability to be relieved of the contract rights and obligations through a market transaction).

See *Subsequent accounting* for discussion of the accounting implications if there is a change in the assessment of whether a contract will be physically settled.

Question DH 3-2 discusses whether the normal purchases and normal sales scope exception is available to commodity contracts that require periodic cash settlements of gains and losses.

### Question DH 3-2

Is the normal purchases and normal sales scope exception available to commodity contracts that require periodic cash settlements of gains and losses?

#### ***PwC response***

No. ASC 815-10-15-36 states that the normal purchases and normal sales scope exception applies to contracts that result in gross delivery of the commodity under the contract, but it should not be applied to contracts that require periodic cash settlements of gains and losses. Futures contracts traded on an exchange are examples of contracts that are derivatives that may result in physical delivery of a commodity (i.e., the contract may be physically settled at termination). However, the exchange typically requires daily cash settlements relative to the net gain or loss on the contract. Such periodic settlements with the futures exchange preclude the contract from qualifying for the normal purchases and normal sales scope exception.

Question DH 3-3 discusses whether take-or-pay contracts qualify for the normal purchases and normal sales scope exception.

### Question DH 3-3

Can take-or-pay contracts qualify for the normal purchases and normal sales scope exception?

#### ***PwC response***

Possibly. Each contract must be evaluated based on its own terms. A take-or-pay contract is one in which an entity agrees to (1) purchase a commodity or service from another entity, and (2) pay for the commodity or service even if the entity does not take delivery of the commodity or use the service.

When a take-or-pay contract meets the definition of a derivative, it may qualify for the normal purchases and normal sales scope exception if all of the criteria are met. For example, assume that a contract provides for the delivery of a commodity in an amount that is expected to be used in the normal course of business, and it is probable that the contract at inception and throughout its term will physically settle (not net settle). To qualify for the normal purchases and normal sales scope exception, the purchaser of the commodity must assert that it will both (1) accept the physical delivery of the commodity and (2) use that commodity in the normal course of business.

#### ***Subsequent accounting***

On an ongoing basis, a reporting entity should monitor whether it continues to expect contracts designated under the normal purchases and normal sales scope exception to result in physical delivery. ASC 815-10-15-41 discusses the impact of net settlement on the normal purchases and normal sales designation.

**Excerpt from ASC 815-10-15-41**

Net settlement ... of contracts in a group of contracts similarly designated as normal purchases and normal sales would call into question the classification of all such contracts as normal purchases or normal sales.

This section discusses factors to consider in monitoring the probability of physical delivery, the timing of recognition if net settlement is expected to occur, and the subsequent accounting if there is a tainting event.

*Ongoing monitoring of the physical delivery assertion*

One way to support the continued expectation that the transaction will result in physical delivery is to perform back testing of contracts that settled during the period that were designated under the normal purchases and normal sales scope exception. Another approach is to review the forecast of production, or physical purchases and sales, and compare the forecast to the current portfolio of contracts that are designated under the normal purchases and normal sales scope exception. If a reporting entity has multiple contracts for which the normal purchases and normal sales scope exception has been elected, it should ensure that physical delivery of the volumes for all of those contracts is probable.

Factors that may change the assessment that a contract will result in physical delivery include:

- Changes in the reporting entity's expected production levels
- Changes in markets and demand or supply in the region
- Changes in the reporting entity's or the counterparty's creditworthiness
- Macro changes in the overall economy

The ongoing evaluation of whether physical delivery is probable should incorporate information about any changes to the reporting entity's business, net settlement of any contracts, changes in market conditions, and other relevant factors.

*Counterparty creditworthiness*

Because gross physical delivery is required for the normal purchases and normal sales scope exception, at inception and throughout the term of the contract, a reporting entity should assess the creditworthiness of its counterparty. Poor counterparty credit quality at the inception of the arrangement, or subsequent deterioration of the counterparty's credit quality (which may result from issues relating to the counterparty itself and/or broad economic factors) may call into question whether it is probable that the counterparty will fulfill its performance obligations under the contract (i.e., make physical delivery throughout the contract and upon its maturity). As a result, a reporting entity should monitor and consider the impact of the counterparty's credit risk, as well as its own credit, in assessing whether physical delivery is probable.

*Timing of recognition when physical delivery is no longer probable*

Once a reporting entity elects the normal purchases and normal sales scope exception, it is irrevocable. However, if a reporting entity determines that it is no longer probable that a contract will result in physical delivery, it may need to discontinue its application. Whether and when a reporting entity should discontinue application of the normal purchases and normal sales scope exception partially depends on the form of net settlement applicable to the contract.

Figure DH 3-4 shows the impact of the form of net settlement on the requirement or ability to discontinue the application of the normal purchases and normal sales scope exception.

**Figure DH 3-4**

**Impact of the form of net settlement on the requirement or ability to discontinue the application of the normal purchases and normal sales scope exception**

<b>Method of net settlement</b>	<b>Timing of change in designation</b>
Net settlement under contract terms (ASC 815-10-15-99a)	The normal purchases and normal sales scope exception will cease to apply when physical delivery is no longer probable; this could occur prior to the actual net settlement.
Net settlement through a market mechanism (ASC 815-10-15-99b)	
Net settlement by delivery of asset that is readily convertible to cash (ASC 815-10-15-99c)	The normal purchases and normal sales scope exception will continue to apply until the contract is financially settled, even if management intends or otherwise knows that physical delivery is no longer probable.

If a reporting entity determines it is no longer probable that a contract will result in physical delivery and the contract allows for net settlement via the contract or through a market mechanism, the reporting entity should immediately cease to apply the normal purchases and normal sales scope exception to the contract. Once it is no longer able to make this assertion, the contract no longer meets the criteria for the exception. Accordingly, the contract would be recorded at fair value in the financial statements in the period in which it no longer meets the probability requirement, with an immediate impact to earnings. In addition, subsequent changes in fair value of the derivative would also be recognized in earnings.

If, however, the contract meets the net settlement criterion of the definition of a derivative because it requires delivery of an asset that is readily convertible to cash, then the contract will not be accounted for as a derivative unless a financial settlement occurs. This type of contract requires gross physical delivery under the contract terms; therefore, physical delivery is presumed in assessing whether the normal purchases and normal sales scope exception applies. Because the normal purchases and normal sales scope exception is irrevocable, a reporting entity cannot change the designation of a contract even if it determines that physical delivery is no longer probable. However, if such a contract is financially settled, it is immediately tainted and should be recorded at fair value through earnings.

If a reporting entity determines that one contract no longer qualifies for the normal purchases and normal sales scope exception, this may call into question its ability to assert probable physical delivery for other similar contracts or contracts within a group. It may also call into question the entity's initial election of the normal purchases and normal sales scope exception.

### *Subsequent impact of net settlement (tainting)*

The normal purchases and normal sales scope exception applies solely to contracts that result in gross physical delivery of nonfinancial items. Therefore, net settlement of a particular contract would preclude application of the normal purchases and normal sales scope exception to that contract (i.e., the contract should be recorded at fair value in earnings at the time the exception is no longer applicable. In addition, it may “taint” the ability to apply the normal purchases and normal sales scope exception to other similar contracts and to the business in its entirety.

To assess whether net settlement of a contract taints other similar contracts, a reporting entity should evaluate the reasons that led to the net settlement. Net settlement or cancellation of a contract as a result of events that are reasonably unexpected at inception of the contract and outside the reporting entity’s control (e.g., a force majeure event) likely would not taint other contracts unless they are similarly impacted by the same event. In contrast, net settlement as a result of a discretionary decision to net settle would result in tainting. For example, if a reporting entity decides to net settle a contract to take advantage of a favorable price change, application of the normal purchases and normal sales scope exception to other similar contracts would no longer be appropriate.

#### **3.2.4.4 Designating and documenting normal purchases and normal sales**

Reporting entities electing the normal purchases and normal sales scope exception should maintain appropriate documentation to distinguish those contracts designated as normal purchases and normal sales. In accordance with ASC 815-10-15-38, failure to comply with the documentation requirements precludes application of the exception, even if the contract would otherwise qualify. ASC 815-10-15-37 specifies the minimum documentation requirements for a contract designated as a normal purchase or normal sale.

#### **ASC 815-10-15-37**

For contracts that qualify for the normal purchases and normal sales exception under any provision of paragraphs 815-10-15-22 through 15-51, the entity shall document the designation of the contract as a normal purchase or normal sale, including either of the following:

- a. For contracts that qualify for the normal purchases and normal sales exception under paragraph 815-10-15-41 or 815-10-15-42 through 15-44, the entity shall document the basis for concluding that it is probable that the contract will not settle net and will result in physical delivery.
- b. For contracts that qualify for the normal purchases and normal sales exception under paragraphs 815-10-15-45 through 15-51, the entity shall document the basis for concluding that the agreement meets the criteria in that paragraph, including the basis for concluding that the agreement is a capacity contract.

#### **Designation method**

ASC 815-10-15-38 specifies that the documentation required to designate a contract as normal purchases and normal sales can be applied to individual contracts or to groups of contracts. Designation of individual contracts may provide more flexibility; however, it also increases the documentation requirements.



Potential bases for global designation include chronology, time of year, and trading point. However, the global designation policy should be based on objectively-determinable criteria with sufficient specificity such that there is no ambiguity in the classification of a particular contract. A reporting entity that applies a global methodology of electing contracts for the normal purchases and normal sales scope exception should do so consistently for similar contracts.

The rationale a reporting entity uses in its grouping of contracts for purposes of designating the normal purchases and normal sales scope exception is important because it could impact decisions about tainting.

### ***Timing of election***

Although application of the normal purchases and normal sales scope exception is elective, once made, the election is irrevocable.

#### **Excerpt from ASC 815-10-15-39**

The normal purchases and normal sales scope exception could effectively be interpreted as an election in all cases. However, once an entity documents compliance with the requirements of paragraphs 815-10-15-22 through 15-51, which could be done at the inception of the contract or at a later date, the entity is not permitted at a later date to change its election and treat the contract as a derivative instrument.

In accordance with ASC 815-10-15-23, the assessment of whether a contract qualifies for the normal purchases and normal sales scope exception should be performed only at the inception of the contract; however, a reporting entity may designate and document the exception at inception or a later date. Although ASC 815 does not specify documentation requirements, we believe the documentation must be completed contemporaneously with application of the exception.

Failure to complete the documentation requirements would preclude application of the scope exception, even if the contract would otherwise qualify. If a reporting entity designates a contract subsequent to inception, the normal purchases and normal sales scope exception will apply as of the date of designation.

Question DH 3-4 discusses what the accounting is for the carrying value of a contract that is designated under the normal purchases and normal sales scope exceptions on a date subsequent to inception.

#### **Question DH 3-4**

What is the accounting for the carrying value of a contract that is designated under the normal purchases and normal sales scope exception on a date subsequent to inception?

#### ***PwC response***

If a contract qualifies as a derivative and is designated as a normal purchase or normal sale subsequent to the contract execution date, the reporting entity will have an asset or liability on its balance sheet equal to the fair value of the contract on the date the election is made. After designation as a normal purchase or normal sale, the contract will no longer be recorded at fair value. The pre-existing fair

value, however, will remain as an asset or liability and should be recognized in income at the same time as the items underlying the contract. The carrying value of the contract is subject to impairment analysis.

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Question DH 3-5 discusses whether the normal purchases and normal sales scope exception can be elected for a contract that is not a derivative at inception but could be one in the future.

### Question DH 3-5

Can the normal purchases and normal sales scope exception be elected for a contract that is not a derivative at inception but could potentially become one in the future (conditional designation)?

#### *PwC response*

Yes. Provided the normal purchases and normal sales criteria are met, a contract could be designated under the exception prior to the time it becomes a derivative.

We believe the ability to conditionally designate a contract is reasonable in consideration of the guidance in ASC 815-10-55-84 through ASC 815-10-55-89, which allows for conditional hedging designations. If a conditionally-designated normal purchases and normal sales contract meets the definition of a derivative at a later date, it would be accounted for as a normal purchases and normal sales contract from the time the contract becomes a derivative. Absent such a designation, the reporting entity would be required to initially fair value the contract when it meets the definition of a derivative. However, the reporting entity may subsequently designate the contract as a normal purchase or normal sale if all of the requirements for the scope exception have been met.

From a practical perspective, often the reporting entity will not know the exact date a contract meets the definition of a derivative. As a result, the contract could meet the definition of a derivative prior to a contemporaneous election of the normal purchases and normal sales scope exception. A conditional designation avoids this issue and allows for continued accounting for the contract as an executory contract. If a reporting entity conditionally designates one or more contracts, it should maintain appropriate documentation to distinguish those contracts designated as normal purchases and normal sales. In addition, all documentation requirements to qualify for the election should be met. Contracts that are conditionally designated under this scope exception should not be net settled. Net settlement of a conditionally-designated contract would result in the specific contract no longer qualifying for the normal purchases and normal sales scope exception and could result in tainting of other designated contracts that are considered similar.

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Question DH 3-6 discusses whether a component of a contract that does not meet the definition of a derivative in its entirety can qualify for the normal purchases and sales scope exception.

## Question DH 3-6

Can a component of a contract that does not meet the definition of a derivative in its entirety qualify for the normal purchases and normal sales scope exception?

### ***PwC response***

Yes. A contract that is not a derivative in its entirety should be assessed to determine if it includes certain components that require separation and accounting as derivatives. An embedded derivative should be separated from the host contract and accounted for as a derivative only if all of the criteria in ASC 815-15-25-1 are met. One of these requirements is that a separate instrument with the same terms as the embedded derivative would meet the requirements to be accounted for as a derivative. However, a reporting entity may elect to apply the normal purchases and normal sales scope exception to an embedded derivative if all of the criteria for election are met. The embedded derivative would not be subject to the accounting requirements of ASC 815 if the reporting entity elects the normal purchases and normal sales scope exception. See ASC 815-15-55-15 to ASC 815-15-55-22 for an example of the application of the normal purchases and normal sales scope exception to an embedded derivative that would otherwise require separation from the host contract.

### **3.2.4.5 Contracts that may qualify for normal purchases and normal sales**

ASC 815-10-15-40 through ASC 815-10-15-51 describe the types of contracts that may qualify for the normal purchases and normal scope exception, as summarized in Figure DH 3-5.

### **Figure DH 3-5**

Applicability of normal purchases and normal sales scope exception to certain types of contracts

<b>Type of contract</b>	<b>Key considerations</b>
Freestanding option contracts	<ul style="list-style-type: none"> <li>□ Not eligible except for the limited exception for power contracts as defined in ASC 815-10-15-45</li> </ul>
Forward contracts (non-option-based)	<ul style="list-style-type: none"> <li>□ Applies to forward contracts with no volumetric optionality</li> <li>□ Must be probable at inception and throughout the contractual period that physical delivery will occur</li> <li>□ Contracts subject to unplanned netting (i.e., book-out) are not eligible for designation as normal purchases or normal sales, except for the specific exception for power purchase or sale agreements subject to book-out</li> </ul>

Type of contract	Key considerations
Forward contracts with optionality features	<ul style="list-style-type: none"> <li>□ Generally, contracts with volumetric optionality are not eligible for the normal purchases and normal sales scope exception, except for the limited exception for power contracts, as defined in ASC 815-10-15-45</li> <li>□ Contracts with a cap or floor on the price, but in which delivery of the originally-contracted quantity is always required may be eligible</li> <li>□ Contracts with other types of optionality (e.g., market price) may be eligible for normal purchases and normal sales if the criteria in ASC 815-10-15-42 through ASC 815-10-15-43 are met</li> <li>□ Cannot separate a combined contract into the forward component and the option component and then assert that the forward component is eligible for normal purchases and normal sales</li> <li>□ If volumetric option features within a forward contract have expired or been completely and irrevocably exercised (even if delivery has not yet occurred), there is no longer any uncertainty as to the quantity to be delivered, and the forward contract would be eligible for normal purchases and normal sales, provided that the other conditions are met, including full physical delivery of the exercised option quantity</li> </ul>
Power purchase or sale agreements	<ul style="list-style-type: none"> <li>□ Due to unique characteristics in the electric power industry, ASC 815 provides a specific scope exception within the normal purchases and normal sales scope exception for certain qualifying power contracts (for both the buyer and the seller). Guidance on application of the power contract exception is provided in ASC 815-10-15-45 through ASC 815-10-15-51 as well as ASC 815-10-55-31</li> </ul>

The considerations for applying the normal purchases and normal sales scope exception to each of these types of contracts are discussed in UP 3.3.1.5.

### 3.2.5 **Certain insurance contracts**

This scope exception applies to certain insurance contracts. Generally, insurance contracts that are within the scope of ASC 944, *Financial Services—Insurance*, would qualify. A contract is eligible for this scope exception for both the issuer and the holder only if the holder is compensated as a result of an identifiable insurable event (e.g., damage to insured property). ASC 815-10-15-52 provides guidance for assessing whether an insurance contract meets this scope exception.

**ASC 815-10-15-52**

A contract is not subject to the requirements of this Subtopic if it entitles the holder to be compensated only if, as a result of an identifiable insurable event (other than a change in price), the holder incurs a liability or there is an adverse change in the value of a specific asset or liability for which the holder is at risk. Only those contracts for which payment of a claim is triggered only by a bona fide insurable exposure (that is, contracts comprising either solely insurance or both an insurance component and a derivative instrument) may qualify for this scope exception. To qualify, the contract must provide for a legitimate transfer of risk, not simply constitute a deposit or form of self-insurance.

Traditional life insurance and traditional property and casualty contracts meet this scope exception.

*Certain property and casualty contracts*

A property and casualty contract that compensates the holder as a result of both an identifiable insurable event and changes in a variable is in its entirety exempt from the requirements of ASC 815, provided that all of the following conditions are met:

- Benefits or claims are paid only if an identifiable insurable event occurs (e.g., theft or fire)
- The amount of the payment is limited to the amount of the policyholder's incurred insured loss
- The contract does not involve essentially assured amounts of cash flows (regardless of the timing of those cash flows) based on insurable events highly probable of occurrence because the insured would nearly always receive the benefits (or suffer the detriment) of changes in the variable

This is illustrated in an example in ASC 815-10-55-134.

**Excerpt from ASC 815-10-55-134**

Insured Entity has received at least \$2 million in claim payments from its insurance entity (or at least \$2 million in claim payments were made by the insurance entity on the insured entity's behalf) for each of the previous 5 years related to specific types of insured events that occur each year. That minimum level of coverage would not qualify for the insurance contract scope exclusion.

*Contracts with actuarially-determined minimum amount of expected claim payments*

If a contract includes an actuarially-determined minimum amount of expected claim payments from insurable events that are highly probable of occurring, that portion of the contract does not qualify for this scope exception if the following conditions are met:

- The minimum payment cash flows are indexed to or altered by changes in a variable
- The minimum payment amounts are expected to be paid either each policy year or on another predictable basis

### 3.2.6 *Certain financial guarantee contracts*

Financial guarantee contracts are not subject to ASC 815 if they meet all of the conditions in ASC 815-10-15-58.

#### **Excerpt from ASC 815-10-15-58**

- a. They provide for payments to be made solely to reimburse the guaranteed party for failure of the debtor to satisfy its required payment obligations under a nonderivative contract, either:
  1. At prespecified payment dates
  2. At accelerated payment dates as a result of either the occurrence of an event of default (as defined in the financial obligation covered by the guarantee contract) or notice of acceleration being made to the debtor by the creditor.
- b. Payment under the financial guarantee contract is made only if the debtor's obligation to make payments as a result of conditions as described in (a) is past due.
- c. The guaranteed party is... exposed to the risk of nonpayment both at inception of the financial guarantee contract and throughout its term...

A reporting entity should consider the following when assessing whether a financial guarantee contract qualifies for this scope exception:

- The contract must specify that the guaranteed party will be entitled to compensation as a result of an identifiable insurable event, i.e., it is entitled to be compensated for failure to pay on specific assets for which the holder is at risk, rather than as a result of a credit event. If the terms of the contract require payment to the guaranteed party, irrespective of whether the guaranteed party is exposed to a risk of non-payment on the reference asset, the contract will not qualify.
- A guaranteed party must demand payment from the debtor prior to collecting any payment from the guarantor.
- The guarantor must either receive the rights to any payments subsequently advanced to the guaranteed party or delivery of the defaulted receivable. A contract that promises to pay the guaranteed party the difference between the post-credit-event fair value and the book value would not qualify.
- Financial guarantee contracts that guarantee performance under derivatives (e.g., as a result of a decrease in a specified debtor's creditworthiness) do not qualify for this scope exception.

### 3.2.7 *Certain contracts that are not traded on an exchange*

Certain non-exchange-traded contracts are not subject to the requirements of ASC 815 if the underlying on which settlement of the contract is based is any of the following:

- A climatic or geological variable or other physical variable
- The price or value of a nonfinancial asset that is not readily convertible to cash

- The price or value of a nonfinancial liability if the liability does not require delivery of an asset that is readily convertible to cash
- Specified volumes of sales or service revenues of one of the parties to the contract

### 3.2.7.1 *Climatic or geological variables*

This scope exception applies to non-exchange-traded contracts with an underlying based on a climatic, geological, or other physical variable.

#### **Excerpt from ASC 815-10-15-59(a)**

Climatic, geological, and other physical variables include things like the number of inches of rainfall or snow in a particular area and the severity of an earthquake as measured by the Richter scale.

Physical variables include temperature, wind speed, or other weather-related factors. For example, a power contract with pricing based on cooling-degree days would meet the exception. Market-related volumes of a commodity (e.g., the total volume on NYMEX) would not qualify because the volume on an exchange or other market is not a physical variable.

Figure DH 3-6 includes considerations on how to distinguish between physical and financial variables. See additional discussion beginning in ASC 815-10-55-135.

### **Figure DH 3-6**

#### *Distinguishing between physical and financial variables*

<b>Contract contains</b>	<b>Considerations</b>
<p><b>Physical and financial variable</b></p> <p>Contract specifies that the issuer will pay the holder \$10 million if aggregate property damage from all hurricanes in Florida exceeds \$50 million during 20X7.</p>	<p>Contract contains two underlyings: physical variable (occurrence of at least one hurricane) and financial variable (aggregate property damage exceeding a specified dollar limit).</p> <p>Because of the presence of the financial variable as an underlying, the derivative does not qualify for the scope exception in ASC 815-10-15-59(a).</p>
<p><b>Physical variable only</b></p> <p>Contract specifies that the issuer will pay the holder \$10 million in the event that a hurricane occurs in Florida in 20X7.</p>	<p>In this case, the payment provision is triggered if a hurricane occurs in Florida in 20X7. The underlying is a physical variable (the occurrence of a hurricane); therefore, the contract qualifies for the scope exception in ASC 815-10-15-59(a).</p>
<p><b>Financial variable only</b></p> <p>Contract requires payment only if the holder incurs a decline in revenue or an increase in expense as a result of an event (e.g., a hurricane) and the amount of the payoff is solely compensation for the amount of the holder's loss.</p>	<p>This type of contract is a traditional insurance contract that is provided a scope exception in ASC 815-10-15-52. See DH 3.2.5.</p>

### Weather contracts

The scope exception for non-exchange-traded contracts with an underlying based on a climatic or geological variable includes weather-related contracts with pricing based on the number of cooling-degree days. Consistent with this exception, derivative accounting is only applicable to weather-related contracts traded on an exchange.

ASC 815-45 provides specific nonderivative guidance on accounting for non-exchange-traded weather derivatives. The guidance includes two different accounting models, depending on the reporting entity's purpose for executing the contracts. The models are summarized in Figure DH 3-7.

### Figure DH 3-7

#### Weather derivative contract accounting models

Intent	Product	Initial accounting	Subsequent accounting
Nontrading activity	Forward contract	Typically no day one accounting	Apply the intrinsic value method (ASC 815-45-35-1)
	Purchased option	Recognize an asset measured initially at the amount of premium paid (ASC 815-45-30-1)	Use the intrinsic value method at each measurement date  Amortize the option premium to expense in a rational and systematic manner (ASC 815-45-35-4)
	Written option	Recognize a liability measured initially based on the option premium received (ASC 815-45-30-2)	Recognize any subsequent changes in fair value in earnings  Do not amortize the option premium (ASC 815-45-35-5)
Trading or speculative activity	Forwards and options	Account for all contracts as assets or liabilities at fair value (ASC 815-45-30-4)	Recognize all subsequent changes in fair value in earnings (ASC 815-45-35-7)

As illustrated in Figure DH 3-7, the accounting model applied largely depends on whether a non-exchange-traded weather derivative was executed as part of a reporting entity's trading activities. ASC 815-45-55-1 through ASC 815-45-55-6 provides guidance on identifying trading activities relating to weather derivatives, including fundamental and secondary indicators, and the entity's intent for entering into a weather derivative contract.

Overall, a reporting entity is considered to be involved in trading activities related to weather derivatives if it enters into the contracts with an objective of generating short-term profits from the contracts. In accordance with ASC 815-45-55-1, reporting entities should evaluate trading versus nontrading based on the activities of an organization or legal entity. However, if a reporting entity conducts both trading and nontrading activities and those activities are not segregated in such a manner, it should evaluate the contracts at inception in accordance with the indicators outlined in ASC 815-45-55-1 through ASC 815-45-55-6 to determine if they are trading or nontrading.

In general, nontrading purchased weather derivatives are accounted for using the intrinsic value method described in ASC 815-45-35-2. ASC 815-45-55-7 through ASC 815-45-55-11 provide



application examples, including sample calculations and accounting assuming that the contracts were executed as part of a reporting entity's nontrading operations. In addition, reporting entities should recognize subsequent changes in the fair value of nontrading written option contracts instead of following the intrinsic value method.

### **3.2.7.2 Price or value of a nonfinancial asset or nonfinancial liability**

This scope exception applies to non-exchange-traded contracts with an underlying based on the price or value of a nonfinancial asset or nonfinancial liability of one of the parties to the contract if the asset is not readily convertible to cash.

#### **Excerpt from ASC 815-10-15-59(b)**

This scope exception applies only if both of the following are true:

1. The nonfinancial assets are unique.
2. The nonfinancial asset related to the underlying is owned by the party that would not benefit under the contract from an increase in the fair value of the nonfinancial asset.

This scope exception may apply to unique works of art or certain custom manufactured goods. As markets evolve and new markets develop (e.g., online markets), the reporting entity's determination that an asset is not readily convertible to cash may change.

Question DH 3-7 discusses whether a fixed-price purchase option for a property underlying an operating lease or a capital/finance lease is accounted for as a derivative.

#### **Question DH 3-7**

Is a fixed-price purchase option for a property underlying an operating lease or a capital/finance lease accounted for as a derivative?

#### ***PwC response***

Generally, no. ASC 815-10-15-59 through ASC 815-10-15-62 state that contracts that are not exchange traded do not fall within the scope of ASC 815 when the underlying on which the settlement is based is the price or value of a nonfinancial asset of one of the parties to the contract, provided that the asset is not readily convertible to cash. In most situations of this kind, the contracts are not exchange traded, and the property underlying the lease represents a nonfinancial asset that would not be considered readily convertible to cash; therefore, such contracts are excluded from the scope of ASC 815.

### **3.2.7.3 Specified volumes of sales or service revenues**

This exception is intended to apply to contracts providing for settlements that are based on the volume of items sold or services rendered (e.g., royalty agreements or leases stipulating that rental payments be based on sales volume), not those based on changes in sales or revenues due to changes in market prices.

This exception may also be extended to net income or EBITDA unless the income measure is due predominantly to the movement of the fair value of a portfolio of assets. The exception is not intended

to apply to contracts with settlements based on changes that are due principally to changes in market prices. Accordingly, a contract to pay a counterparty 3% of its net sales of gold would qualify for the scope exception, but a contract to pay a counterparty 3% of a price increase that raises the market price of gold to above \$1,000 per ounce would not qualify.

### ***Royalties***

Royalty agreements can vary significantly and may include any number of variables in the calculation of the royalty payment. For instance, in the mining industry, royalties may be calculated as a percentage of the total mineral extraction at a preset dollar rate per extraction unit. In other cases, the rate that is to be applied to the percentage of the total extraction may be based on actual sales prices for that mineral, making the royalty a function of the units extracted as well as a variable price. In the technology industry, a royalty may be calculated as a stated percentage of sales (e.g., a combination of units sold and the price per unit).

Question DH 3-8 discusses whether royalty payments that vary based on revenues qualify for the specified volumes of sales or service revenue scope exception.

### **Question DH 3-8**

Do royalty payments that vary based on revenues (that in turn vary because of movements in market prices and the number of units sold) qualify for the specified volumes of sales or service revenues scope exception?

#### ***PwC response***

Yes. We believe that the conditions for this scope exception can be satisfied by royalty agreements that provide for payments based on changes in either sales or revenues that are due to both changes in the market price per unit and changes in the number of units. We believe that by including the phrase “changes in sales or revenues due to changes in market prices,” the FASB did not intend to exclude royalty agreements with payment based on changes in revenues due to changes in market prices when those changes are applied to the volume of items sold or services rendered from the ASC 815-10-15-59(d) scope exception.

The FASB’s intention was to prohibit entities from applying the scope exception to (1) contracts that have as their sole variable the change in sales or revenues that is due to changes in market prices, and (2) contracts that have variables based on (a) a change in market prices and (b) a trivial change in the number of units. Reporting entities should consider the guidance in ASC 815-10-15-60 for contracts with more than one underlying when evaluating the type of contract described in item (2). The purpose of this guidance is to prevent entities from circumventing the requirements of ASC 815 merely by establishing payment terms in their royalty agreements that are based predominantly on market price with insignificant change in volume.

#### **3.2.7.4 *Derivative contracts with more than one underlying***

Many derivative contracts have more than one underlying. A derivative contract might have some underlyings that qualify for a scope exception while also having other underlyings that do not qualify (e.g., a structured insurance contract with an interest rate swap and a climatic variable). The guidance in ASC 815-10-15-60 indicates that in a situation such as this, the holder of the derivative should evaluate the contract based on its predominant characteristics. That is, if a derivative contract’s value,

when considering the underlyings in combination, is expected to behave in a manner similar to how the underlyings that do not meet the scope exception would behave, the derivative would not qualify for the scope exception.

### **3.2.8** *Derivatives that impede sale accounting*

ASC 815-10-15-63 through ASC 815-10-15-64 provide a scope exception for certain instruments that impede sale accounting. For example, if a call option were to prevent a transfer of receivables from being accounted for as a sale under ASC 860, *Transfers and Servicing*, the call option would be excluded from the scope of ASC 815 and accounted for under ASC 860 as a component of the financing.

ASC 815-10-15-64 clarifies that a derivative held by a transferor that relates to assets transferred in a transaction accounted for as a financing under ASC 860, but that does not itself serve as an impediment to sale accounting, is not subject to ASC 815 if recognizing both the derivative and either the transferred asset or the liability arising from the transfer would result in counting the same transaction twice in the transferor's balance sheet. However, if recognizing both the derivative and either the transferred asset or the liability arising from the transfer would *not* result in counting the same transaction twice in the transferor's balance sheet, the derivative should be accounted for in accordance with ASC 815.

The guidance in ASC 815-10-55-41 illustrates the application of this scope exception when the transferor accounts for the transfer as financing.

### **3.2.9** *Investments in life insurance*

ASC 815-10-15-67 addresses a scope exception for investments in life insurance. Under this guidance, a policyholder's investment in a life insurance contract (e.g., a corporate-owned life insurance policy) that is accounted for under ASC 325-30, *Investments—Other, Investments in Insurance Contracts*, is not subject to ASC 815. This scope exception is provided to the policyholder and does not affect the accounting by the issuer of the life insurance contract.

### **3.2.10** *Certain investment contracts*

ASC 815-10-15-68 provides a scope exception for certain investment contracts held by defined benefit pension plans. Contracts that are accounted for under either ASC 960-325-35-1 (plan investments) or ASC 960-325-35-3 (insurance contracts) are not subject to ASC 815. This scope exception applies only to the party that accounts for the contract under ASC 960, *Plan Accounting—Defined Benefit Pension Plans*.

### **3.2.11** *Certain loan commitments*

ASC 815-10-15-69 through ASC 815-10-15-71 address a scope exception for certain loan commitments. The ASC Master Glossary defines a loan commitment.

#### **Definition from ASC Master Glossary**

**Loan Commitment:** Loan commitments are legally binding commitments to extend credit to a counterparty under certain prespecified terms and conditions.

Examples of loan commitments include residential mortgage loan commitments, commercial loan commitments, credit card lines of credit, automobile financing, and subprime lending. Understanding certain characteristics of loan commitments is necessary to apply this exception appropriately. Questions that are useful to consider include:

- Is the entity the issuer or the holder of the loan commitment?
- Is the loan commitment related to loans that will be held for sale or held for investment?
- Is the loan commitment originated or purchased?
- Is the loan commitment related to a mortgage loan or a nonmortgage loan?

Whether the commitment is accounted for as a derivative depends on the type of loan that will be originated under the loan commitment and how the loan will be classified once it is originated. Figure DH 3-8 summarizes which loan commitments are accounted for as derivatives by the issuer (the potential lender) under the guidance in ASC 815. For the holder of a commitment to originate a loan (the potential borrower), that commitment is not subject to the requirements of ASC 815.

### **Figure DH 3-8**

Application of ASC 815 in the context of loan commitments

	<b>Originated loan will be held for sale</b>	<b>Originated loan will be held for investment</b>
Mortgage loans	Derivative (ASC 815-10-15-71)	Not a derivative (ASC 815-10-15-69)
Non-mortgage loans	Not a derivative (ASC 815-10-15-69)	Not a derivative (ASC 815-10-15-69)

This scope exception does not affect the accounting for loan commitments to purchase or sell mortgage loans (or other types of loans) at a future date. Such commitments must be evaluated under the definition of a derivative to determine whether they should be accounted for in accordance with ASC 815. If they do, they are not afforded any scope exception.

#### **3.2.12 Certain interest-only and principal-only strips**

This scope exception is designed to be narrow and only applies to the simplest separations of interest payments and principal payments if the instrument is not a derivative in its entirety. The exception is limited to interest-only strips (IOs) and principal-only strips (POs) that (1) represent a right to receive specified contractual interest or principal cash flows of a specific debt instrument and (2) do not incorporate any terms not included in that debt instrument.

For example, the allocation of a portion of the interest and principal cash flows of a debt instrument to compensate another entity for stripping (i.e., separating the principal and interest cash flows) or servicing the instrument would meet the exception, as long as the servicing compensation was not greater than “adequate compensation,” as defined in the ASC Master Glossary. If the allocation of a portion of the interest or principal cash flows to provide for a guarantee or for servicing is greater than adequate compensation, the IO/PO would not meet the exception.

### **3.2.13 Leases**

Per ASC 815-10-15-79, leases that are within the scope of ASC 840, *Leases* (ASC 842 after its effective date) are not derivatives subject to ASC 815. However, a lease may contain an embedded derivative feature that requires separate accounting under ASC 815-15-25-1. See a discussion of embedded derivatives in lease hosts in DH 4.6.3.

### **3.2.14 Residual value guarantees**

A residual value guarantee is a guarantee made to a lessor that the value of an underlying asset returned to the lessor at the end of a lease will be at least a specified amount. A residual value guarantee contract meets the definition of a derivative because it:

- has an underlying and a notional amount,
- requires no initial net investment, and
- calls for net settlement in that the insured (the lessor) will receive a net payment for any difference between the residual value of the leased asset and the guaranteed amount.

However, ASC 815-10-15-80 exempts residual value guarantees that are subject to ASC 840 (ASC 842 after its effective date) from the requirements of ASC 815.

As stated in ASC 815-10-15-81, all other residual value guarantees need to be evaluated to determine whether they (1) are derivatives and (2) qualify for any of the scope exceptions in ASC 815. Certain residual value guarantee contracts issued by third-party guarantors, such as insurance companies, may qualify for the financial guarantee contracts scope exception discussed in DH 3.2.6; however, many may not meet the scope exception if they reference bluebook value or some other valuation not specific to the asset. If the guarantee obligation is not accounted for as a derivative within the scope of ASC 815, it is accounted for in accordance with ASC 460, *Guarantees*, which is discussed in [FG 2](#).

### **3.2.15 Registration payment arrangements**

Registration rights allow the holder to require that a reporting entity file a registration statement for the resale of specified instruments. They may be provided to lenders in the form of a separate agreement, such as a registration rights agreement, or included as part of an investment agreement, such as an investment purchase agreement, warrant agreement, debt indenture, or preferred stock indenture. These arrangements may require the issuer to pay additional interest if a registration statement is not filed or is no longer effective.

A contingent obligation to make future payments or otherwise transfer consideration under a registration payment arrangement may meet the definition of a derivative. A payment provision could disallow the associated instrument or conversion feature from being afforded the scope exception for certain contracts for indexed to a reporting entity's own equity.

To address this, the FASB provided a scope exception for such arrangements that are instead required to be separately recognized and measured in accordance with ASC 450-20-25. This scope exception applies to both the issuer of the arrangement and the counterparty. For further discussion of registration payment arrangements, see FG 1.7.1.

### 3.3 Certain contracts involving an entity's own equity

One of the fundamental principles of ASC 815 is that derivatives represent rights or obligations that meet the definitions of assets or liabilities. Consequently, items classified as equity are not within the scope of ASC 815. The following contracts that involve an entity's own equity are explicitly excluded from the scope of ASC 815:

- Contracts issued or held by that reporting entity that are both (1) indexed to its own stock and (2) classified in stockholders' equity in its balance sheet (FG 5.6)
- Contracts issued by an entity that are subject to the share-based payment guidance in ASC 718, *Compensation – Stock Compensation* (DH 3.3.1)
- Forward contracts to enter into a business combination (DH 3.3.2)
- Certain financial instruments within the scope of ASC 480, *Distinguishing Liabilities From Equity* (DH 3.3.3)

These scope exceptions are available to the issuer of such contracts, provided certain criteria are met, but do not apply to the counterparty to these contracts. For example, nonemployees who have received stock options in exchange for goods and services would not be eligible for the share-based payment scope exception under the exclusion in (b).

#### 3.3.1 Share-based payments

Another scope exception applicable to contracts involving an entity's own equity is for stock-based compensation contracts accounted for in accordance with ASC 718. Figure DH 3-9 summarizes guidance relating to assessing whether an instrument is within the scope of these standards. Once a contract ceases to be subject to ASC 718, it may be within the scope of ASC 815.

This scope exception does not apply to the counterparty to the contract; for example, equity instruments (including stock options) that are received by nonemployees as compensation for goods and services in share-based payment transactions are subject to ASC 815.

#### Figure DH 3-9

##### Scope considerations for issuers of stock-based compensation

Guidance	Scope guidance
Instruments within the scope of ASC 718	<p>Instrument ceases to be within the scope of ASC 718 if the terms are modified when the grantee is no longer an employee or after a nonemployee vests in the award and is no longer providing goods or services (ASC 718-10-35-11), other than those instruments described in ASC 718-10-35-10.</p> <p>Subsequent to the modification, recognition and measurement of the instrument should be determined through reference to other applicable GAAP (e.g., ASC 480 or ASC 815).</p>

Accounting matters relating to instruments within the scope of ASC 718 are discussed in PwC's *Stock-based compensation* guide.

### **3.3.2 *Forward contracts to enter into a business combination***

A contract between an acquirer and a seller to enter into a business combination at a future date is not subject to ASC 815. However, an acquiree's contracts need to be re-evaluated at the acquisition date to determine if any contracts are derivatives or contain embedded derivatives that need to be separated and accounted for as derivatives. This includes reviewing contracts that qualify for the normal purchases and normal sales exception and documenting the basis for making such an election. The determination is made based on the facts and circumstances at the date of the acquisition. Accounting for business combinations is discussed in PwC's *Business combinations and noncontrolling interests* guide.

### **3.3.3 *Financial instruments within the scope of ASC 480***

A forward repurchase contract that, by its terms, must be physically settled by delivering cash in exchange for a fixed number of the reporting entity's shares should be recorded as a liability under the guidance in ASC 480-10.

The FASB considered such contracts to be more akin to a treasury stock purchase using borrowed funds than a derivative and excluded them from the scope of ASC 815. However, if a reporting entity either can or must settle a contract by issuing its own equity instruments, but the contract is indexed to something other than the entity's own stock (e.g., a warrant that is exercisable only if the S&P 500 increases by 5%), the contract should be accounted for as a derivative by the issuer and the holder.

Application of ASC 480 is discussed in FG 5.5.

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***Chapter 4:  
Embedded derivative  
instruments—updated July  
2022***



## 4.1 *Embedded derivative instruments – chapter overview*

ASC 815, *Derivatives and Hedging*, generally requires a derivative embedded in an instrument or contract (that does not meet the definition of a derivative), to be separated from that host instrument and accounted for as a derivative, unless it is clearly and closely related to its host. An embedded derivative does not have to be separated from a hybrid instrument accounted for at fair value with changes in fair value recorded in earnings.

Many instruments and contracts contain embedded components (e.g., termination options, variable pricing provisions, conversion options) that need to be assessed to determine whether they meet the definition of a derivative in ASC 815. If an embedded component is determined to be an embedded derivative (and is not eligible for a scope exception), then a reporting entity should assess whether the embedded derivative is clearly and closely related to its host instrument.

This chapter discusses the framework for determining whether an embedded component meets the definition of a derivative within the scope of ASC 815 and how to determine whether it is clearly and closely related to its host instrument. This chapter also discusses the accounting for embedded derivatives that are separated from their host instruments.

See DH 2 for information on the ASC 815 definition of a derivative. See DH 3 for information on the scope exceptions in ASC 815.

## 4.2 *Overview of embedded derivatives and terminology*

ASC 815-15-20 provides the definition of a hybrid instrument.

### **Definition from ASC 815-15-20**

Hybrid Instrument: A contract that embodies both an embedded derivative and a host contract.

The host contract is the contract or instrument to which an embedded derivative is “added.” Together, they are considered a hybrid instrument. An example of a hybrid instrument is a structured note that pays interest based on changes in the S&P 500 Index; the component of the contract that adjusts the interest payments based on changes in the S&P 500 Index is the embedded derivative. The debt instrument that pays interest (without the S&P 500 Index adjustment) and will repay the principal amount is the host contract.

Sometimes, the determination of the host contract and embedded derivative will be straightforward. More often, this will require judgment. Figure DH 4-1 lists some embedded components commonly found in contracts and instruments.

### **Figure DH 4-1**

*Examples of embedded components that may be embedded derivatives*

<b>Type of contract or instrument</b>	<b>Potential embedded derivatives</b>
Debt instrument	Put or call option Interest rate indexation or leverage

Type of contract or instrument	Potential embedded derivatives
	Credit indexation Conversion option Foreign exchange indexation
Preferred stock	Put or call option Conversion option
Insurance	Equity indexation Variable annuity minimum guarantees
Lease	Interest rate indexation or leverage Credit indexation
Purchase contract	Interest rate indexation or leverage Credit indexation Commodity price risk

### Question DH 4-1

Should a reporting entity assess contracts that are reported at fair value with changes in value recorded in earnings to determine whether they contain embedded derivatives?

#### *PwC response*

No. A reporting entity does not have to assess whether contracts measured at fair value through earnings contain embedded derivatives. Separating an embedded derivative from a host contract measured at fair value through earnings is unnecessary since the hybrid instrument (which combines the host contract and the derivative) is already reported at fair value through earnings.

### Question DH 4-2

Can a reporting entity separate a separately identifiable derivative from a contract that meets the definition of a derivative in its entirety (i.e., can it separate a compound derivative into its components)?

#### *PwC response*

No. ASC 815 does not allow a reporting entity to separate a compound derivative into its components. The entire derivative should be measured at fair value through earnings. Certain insurance contracts may meet the definition of a derivative, but qualify for a scope exception, and must be assessed for embedded derivatives.

### Question DH 4-3

May a reporting entity elect to separate an embedded derivative from a hybrid instrument if ASC 815 does not require it to be separated?

#### ***PwC response***

No. As discussed in ASC 815-15-25-1, an embedded derivative should be separated from its host contract and accounted for as a derivative instrument “if and only if” all of the specified criteria are met. Accordingly, a reporting entity may not separate an embedded derivative instrument from a hybrid instrument unless the criteria for separation in ASC 815 are met. However, a reporting entity may be allowed to apply the fair value option to the entire hybrid instrument. See DH 4.3.2.1 and FV 5 for information on the fair value option.

#### **4.2.1 Identifying an embedded derivative**

Determining whether a contract contains an embedded derivative, and the terms of that embedded derivative, can be complicated. Because few contracts actually use the term “derivative,” a thorough evaluation of the contractual and implicit terms of an instrument or contract is needed to determine whether an embedded derivative exists. Certain terms and phrases, however, may indicate the presence of an embedded derivative. Such terms and phrases include:

- Right to put / call / redeem / repurchase / return
- Right to prepay / repay early / accelerate repayment / early exercise
- Right to purchase / sell additional units
- Right to terminate / cancel / extend
- Right to exchange / exchangeable into
- Right to convert / convertible into
- Indexed to / adjusted by / referenced to
- Pricing based on the following formula
- Option between / choice between
- Notional / underlying / strike / premium
- Conditional / contingent / optional

One method of determining whether a contract has an embedded derivative is to compare the terms of the contract (e.g., interest rate, maturity date, cancellation provisions) with the corresponding terms of a similar, plain-vanilla version of the contract. This comparison may uncover one or more embedded derivatives. However, even instruments with typical market terms may contain embedded derivatives.

#### 4.2.1.1 *Determining whether a component is freestanding or embedded*

A component can be embedded in a host instrument or contract that has economic value other than the component (e.g., a debt instrument). Alternatively, an instrument can comprise only the component, as is the case with a freestanding warrant. The term “freestanding” also applies to a single financial instrument that comprises more than one option or forward component, for example, a collar, which consists of a written put option and a purchased call option.

Determining whether a component is freestanding or embedded is important because although both may be subject to the guidance in ASC 815, the criteria used to determine the accounting recognition and measurement for freestanding instruments differs from the criteria for embedded components.

The ASC Master Glossary provides a definition of a freestanding financial instrument.

##### **Definition from ASC Master Glossary**

**Freestanding Financial Instrument:** A financial instrument that meets either of the following conditions:

- a. It is entered into separately and apart from any of the entity’s other financial instruments or equity transactions.
- b. It is entered into in conjunction with some other transaction and is legally detachable and separately exercisable.

In determining whether a component is a freestanding financial instrument or embedded in a host instrument, a reporting entity should consider all substantive terms. A reporting entity should first determine whether the components are issued (1) contemporaneously and in contemplation of each other or (2) separately and at different points in time. A put or call exercisable with a third party (whether added contemporaneously with or after issuance) would be accounted for separately. ASC 815-10-15-6 discusses the accounting for a put or call option added by a third party.

##### **ASC 815-10-15-6**

A put or call option that is added or attached to a debt instrument by a third party contemporaneously with or after the issuance of a debt instrument shall be separately accounted for as a derivative instrument under this Subtopic by the investor (that is, by the creditor). An option that is added or attached to an existing debt instrument by another party results in the investor having different counterparties for the option and the debt instrument and, thus, the option shall not be considered an embedded derivative. Paragraph 815-15-25-2 states that notion of an embedded derivative in a hybrid instrument refers to provisions incorporated into a single contract, and not to provisions in separate contracts between different counterparties.

Next, a reporting entity should consider whether the components (1) may be legally transferred separately, or (2) must be transferred with the instrument with which they were issued or associated. Components that may be legally transferred separately are generally freestanding. However, a component that must be transferred with the instrument with which it was issued or associated is not necessarily embedded; it may merely be attached.

A reporting entity should also consider whether (1) a right in a component may be exercised separately from other components that remain outstanding or (2) if, once a right in a component is exercised, the other components are no longer outstanding. Since separate exercisability invariably requires the component to first be detached prior to exercise, this is a strong indicator that the component is freestanding.

See FG 5.3 for an example illustrating an evaluation of whether a component is a freestanding financial instrument or embedded in a host contract.

#### 4.2.2 *Identifying the host contract*

A host contract is the instrument or contract that would have been issued if the hybrid instrument did not contain an embedded derivative. Each embedded derivative is compared to its host contract to determine if it should be accounted for separately from the host instrument. Therefore, it is necessary to determine the nature of the host contract based on its underlying economic characteristics and risks.

Figure DH 4-2 lists some common host contracts and where they are discussed in this chapter.

**Figure DH 4-2**  
Types of host contracts

Type of contract or instrument	Chapter reference
Debt instrument	DH 4.4, FG 1.6
Equity instrument	DH 4.5, FG 5.4
Executory contract	DH 4.6.1
Insurance policy	DH 4.6.2
Lease	DH 4.6.3

Financial instruments classified as liabilities on the issuer's balance sheet are generally debt hosts; financial instruments classified as equity on the issuer's balance sheet may be equity or debt hosts. See FG 5.4 for information on determining whether an equity instrument is a debt or equity host.

### 4.3 *Determining if an embedded component should be separated*

ASC 815-15-25-1 provides guidance on when an embedded component should be separated from its host instrument and accounted for separately as a derivative.

#### **ASC 815-15-25-1**

An embedded derivative shall be separated from the host contract and accounted for as a derivative instrument pursuant to Subtopic 815-10 if and only if all of the following criteria are met:

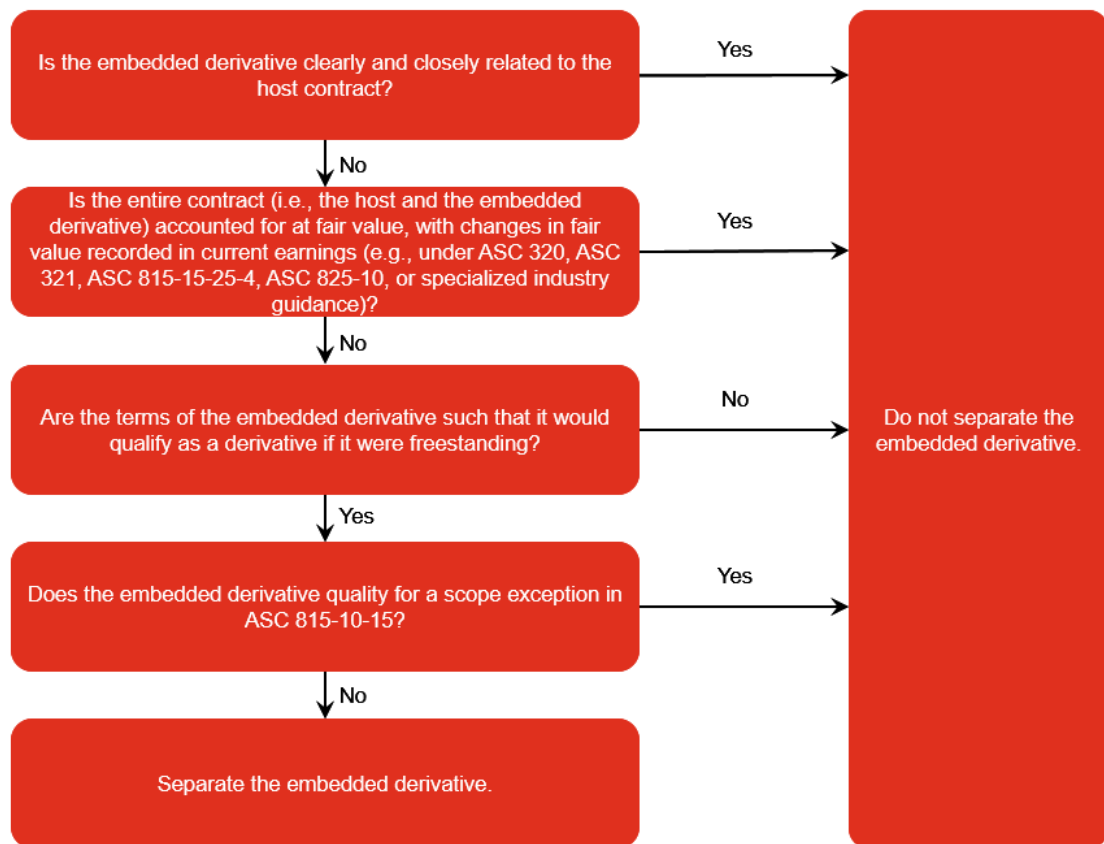
- a. The economic characteristics and risks of the embedded derivative are not clearly and closely related to the economic characteristics and risks of the host contract.

- b. The hybrid instrument is not remeasured at fair value under otherwise applicable generally accepted accounting principles (GAAP) with changes in fair value reported in earnings as they occur.
- c. A separate instrument with the same terms as the embedded derivative would, pursuant to Section 815-10-15, be a derivative instrument subject to the requirements of this Subtopic. (The initial net investment for the hybrid instrument shall not be considered to be the initial net investment for the embedded derivative.)

Figure DH 4-3 illustrates the application of this guidance.

**Figure DH 4-3**

Decision tree for determining whether or not to separate an embedded derivative from a hybrid instrument



The following sections provide guidance on each of these criteria. For information on interest-only and principal-only strips see DH 3.2.12.

#### 4.3.1 *Clearly and closely related to the host contract*

An embedded derivative is clearly and closely related to its host contract when its underlying economic characteristics and risks (i.e., the factors that cause a derivative to fluctuate in value) are clearly and closely related to the economic characteristics and risks of the host contract. That is, the clearly and closely related criterion simply asks whether the attributes of a derivative behave in a manner similar to the attributes of its host contract. For example, if an embedded component in a debt instrument pays a rate of return tied to the S&P 500 Index, the economic characteristics of the embedded derivative (e.g., equity-price risk) and the economic characteristics of the host contract (e.g., interest rate risk and issuer credit risk) are not clearly and closely related.

The application of the phrase “clearly and closely related” in the context of an embedded derivative analysis is different than it is in the context of the normal purchases and normal sales scope exception. See Question DH 3-1.

#### **Question DH 4-4**

When evaluating whether an equity-linked feature is considered clearly and closely related to an equity host, should a reporting entity consider whether the feature is considered indexed to the entity’s own stock, as discussed in ASC 815-40-15-5 through 15-8?

#### ***PwC response***

Yes. Although the guidance for determining whether an instrument is considered indexed to a reporting entity’s own stock in ASC 815-40-15-5 through ASC 815-40-15-8 is not required to be used in the assessment of clearly and closely related under ASC 815-15-25-1(a), it may provide additional evidence for making the determination. We believe that when an embedded feature is considered indexed to stock price, it may be considered clearly and closely related to the equity host contract for the issuer.

#### 4.3.2 *Instrument is not measured at fair value*

It is not necessary to separate a hybrid instrument measured at fair value through earnings into individual components that are both measured at fair value with changes in fair value reported in earnings. This provision simplifies the impact of ASC 815 for reporting entities in certain specialized industries (e.g., investment companies, pension plans, broker dealers). Since many of the instruments in those industries are measured at fair value in their entirety, no further accounting is required for embedded derivatives. This provision also applies to:

- Investment securities that are classified as trading under ASC 320-10
- Instruments for which the fair value option has been applied pursuant to ASC 815-15 or ASC 825-10

#### 4.3.2.1 *Fair value option for hybrid instruments*

The fair value option (FVO) for financial instruments under ASC 825-10 can generally be applied to hybrid instruments, subject to certain limitations. In addition, ASC 815 provides an instrument-by-instrument fair value election for hybrid financial instruments that would require an embedded derivative to be bifurcated. Under either election, the hybrid financial instrument is carried at fair

value with the change in fair value recognized currently in earnings, except for the effect of changes in own credit, which are recognized in other comprehensive income. See FV 5 for information on the FVO.

#### **ASC 815-15-25-4**

An entity that initially recognizes a hybrid financial instrument that under paragraph 815-15-25-1 would be required to be separated into a host contract and a derivative instrument may irrevocably elect to initially and subsequently measure that hybrid financial instrument in its entirety at fair value (with changes in fair value recognized in earnings). A financial instrument shall be evaluated to determine that it has an embedded derivative requiring bifurcation before the instrument can become a candidate for the fair value election.

#### **ASC 815-15-25-5**

The fair value election shall be supported by concurrent documentation or a preexisting documented policy for automatic election. That recognized hybrid financial instrument could be an asset or a liability and it could be acquired or issued by the entity. The fair value election is also available when a previously recognized financial instrument is subject to a remeasurement event (new basis event) and the separate recognition of an embedded derivative. The fair value election may be made instrument by instrument. For purposes of this paragraph, a remeasurement event (new basis event) is an event identified in generally accepted accounting principles, other than the recording of a credit loss under Topic 326, or measurement of an impairment loss through earnings under Topic 321 on equity investments, that requires a financial instrument to be remeasured to its fair value at the time of the event but does not require that instrument to be reported at fair value on a continuous basis with the change in fair value recognized in earnings. Examples of remeasurement events are business combinations and significant modifications of debt as defined in Subtopic 470-50.

The fair value election within ASC 815 is applicable only to a hybrid financial instrument in which both the host contract and embedded derivative are financial instruments. Examples of financial instruments include loans, securities, debt, foreign currency arrangements, and commodity contracts that require cash settlement. Examples of instruments that do not meet the definition include certain commodity contracts that allow settlement by delivery of the physical commodity, un-guaranteed lease residual interests, lease residual values that were guaranteed after inception, treasury stock, sales tax receivables, servicing rights, and unresolved legal settlements. See FV 5.5 for the election and application of the FVO within ASC 825.

Certain hybrid financial instruments that contain an embedded derivative required to be separated from the host contract can be accounted for by using one of the following methods..

- Separate the embedded derivative and account for it as a derivative under the guidance in ASC 815 (i.e., measure it at fair value with changes in fair value recognized currently in earnings) and account for the host contract based on GAAP applicable to similar instruments that do not contain embedded derivatives (e.g., ASC 320-10, *Investments—Debt Securities*).
- Irrevocably elect to apply the FVO and measure the entire hybrid financial instrument (including the embedded derivative) at fair value with changes in fair value recognized currently in earnings, except for the effect of changes in own credit, which are recognized in other comprehensive



income. This fair value election can be made only when the hybrid financial instrument is acquired or issued or when it is subject to a remeasurement (i.e., new basis) event.

### Question DH 4-5

Are all hybrid financial instruments that meet the definition of a financial instrument in their entirety (i.e., both the host contract and the embedded derivative are financial instruments) afforded the fair value option under ASC 815-15-25-4?

#### *PwC response*

No. ASC 815-15-25-6 scopes out those hybrid financial instruments described in ASC 825-10-50-8.

#### **Excerpt from ASC 825-10-50-8**

- a. Employers' and plans' obligations for pension benefits, other postretirement benefits including health care and life insurance benefits, postemployment benefits, employee stock option and stock purchase plans, and other forms of deferred compensation arrangements (see Topics 710, 712, 715, 718, and 960)
- b. Substantively extinguished debt subject to the disclosure requirements of Subtopic 405-20
- c. Insurance contracts, other than financial guarantees (including financial guarantee insurance contracts within the scope of Topic 944) and investment contracts, as discussed in Subtopic 944-20
- d. Lease contracts as defined in Topic 842 (a contingent obligation arising out of a cancelled lease and a guarantee of a third-party lease obligation are not lease contracts and are subject to the disclosure requirements in this Subsection)
- e. Warranty obligations (see Topic 450 and the Product Warranties Subsections of Topic 460)
- f. Unconditional purchase obligations as defined in paragraph 440-10-50-2
- g. Investments accounted for under the equity method in accordance with the requirements of Topic 323
- h. Noncontrolling interests and equity investments in consolidated subsidiaries (see Topic 810)
- i. Equity instruments issued by the entity and classified in stockholders' equity in the statement of financial position (see Topic 505)
- j. Receive-variable, pay-fixed interest rate swaps for which the simplified hedge accounting approach is applied (see Topic 815)
- k. Fully benefit-responsive investment contracts held by an employee benefit plan.
- l. Investments in equity securities accounted for under the measurement guidance for equity securities without readily determinable fair values (see Topic 321)

- m. Trade receivables and payables due in one year or less
- n. Deposit liabilities with no defined or contractual maturities.
- o. Liabilities resulting from the sale of prepaid stored-value products within the scope of paragraph 405-20-40-3.

#### **4.3.3 *Embedded component would be accounted for as a derivative***

An embedded derivative meets the criterion in ASC 815-15-25-1(c) if it would meet the definition of a derivative in ASC 815-10-15-83 and would not be subject to any of the scope exceptions in ASC 815-10-15-13 or ASC 815-15-15-3 if it were a freestanding instrument. See DH 2 for information on the definition of a derivative and DH 3 for information on the related scope exceptions.

While the analysis under ASC 815-15-25-1(c) is generally performed as if the embedded derivative is a freestanding instrument, there is one important exception to this approach. ASC 815-15-25-14 clarifies that the guidance in ASC 480-10-25-4 through ASC 480-10-25-14 for distinguishing liabilities from equity should not be considered in determining whether an embedded derivative would be classified in equity for purposes of applying the scope exception in ASC 815-10-15-74(a). This is because ASC 480, *Distinguishing Liabilities from Equity*, only applies to freestanding instruments. ASC 480 requires certain instrument indexed to an issuer's own stock to be accounted for as liabilities. See FG 5.5 for information on the scope and application of ASC 480.

#### **4.3.4 *Application exception for foreign exchange contracts***

As described in ASC 815-15-15-10, some foreign currency derivatives embedded in nonfinancial contracts do not have to be separated from their hosts.

##### **ASC 815-15-15-10**

An embedded foreign currency derivative shall not be separated from the host contract and considered a derivative instrument under 815-15-25-1 if all of the following criteria are met:

- a. The host contract is not a financial instrument.
- b. The host contract requires payment(s) denominated in any of the following currencies:
  1. The functional currency of any substantial party to that contract
  2. The currency in which the price of the related good or service that is acquired or delivered is routinely denominated in international commerce (for example, the U.S. dollar for crude oil transactions)
  3. The local currency of any substantial party to the contract
  4. The currency used by a substantial party to the contract as if it were the functional currency because the primary economic environment which the party operates is highly inflationary (as discussed in paragraph 830-10-45-11).

- c. Other aspects of the embedded foreign currency derivative are clearly and closely related to the host contract.

The evaluation of whether a contract qualifies for the exception in this paragraph should be performed only at inception of the contract.

ASC 815-15-15-11 clarifies that the determination of a counterparty's functional currency should be made "based on available information and reasonable assumptions about the counterparty; representations from the counterparty are not required." See ASC 815-15-55-213 through ASC 815-15-55-215 for a case study illustrating this determination.

ASC 830-10-55-5 provides guidance on economic factors that should be considered when determining the functional currency of a reporting entity. These include indicators relating to cash flows, sales prices, sales market, expenses, financing, and intra-entity transactions and arrangements. A reporting entity should not necessarily rely on a single indicator, such as the currency in which the counterparty's sales prices are denominated; all relevant available information should be considered when determining the functional currency of a counterparty.

### Question DH 4-6

Is a guarantor considered a "substantial party to a contract" under ASC 815-15-15-10?

#### ***PwC response***

No. The implementation guidance in ASC 815-15-55-84 through ASC 815-15-55-86 clarifies that a guarantor is not a substantial party to a contract even if the guarantor is a related party (e.g., parent company). The evaluation of embedded derivatives should be conducted by the legal entity that is party to the contract.

### Question DH 4-7

Does the fact that an index is quoted in a particular currency mean that it is routinely denominated in that currency? For example, if a coal index is quoted in US dollars, does that mean that coal is traded primarily in US dollars?

#### ***PwC response***

No. This analysis will involve more than reviewing in what currency the product or service is typically quoted. Example 2 in ASC 815-15-55-96 clarifies that the phrase "routinely denominated in international commerce" should be based on how similar transactions for certain products or services are structured around the world, not in just one local area. If similar transactions for a certain product or service are routinely denominated in international commerce in different currencies, the exception in ASC 815-15-15-10 does not apply.

## Question DH 4-8

A reporting entity concludes that changes in its operations will result in a change to its functional currency. Should the reporting entity reassess its existing contracts to determine if embedded derivative features should be separated?

### *PwC response*

No. ASC 815-15-15-10 states that the qualification for the scope exception should be performed only at the inception of the contract. Although the change in functional currency is significant, we do not believe it would require a reassessment of the contracts under ASC 815-15-15-10.

Example DH 4-1, Example DH 4-2, and Example DH 4-3 illustrate the analysis for determining whether a contract contains an embedded foreign currency derivative.

### **EXAMPLE DH 4-1**

#### **Contract with payments linked to foreign-exchange rates**

USA Corp is a US registrant that has a US dollar (USD) functional currency.

On August 1, 20X1, USA Corp enters into a contract for professional services denominated in USD. The terms of the contract require quarterly payments in USD. The contract also requires a fixed adjustment to the quarterly payment amount when the USD / Japanese yen (JPY) exchange rate reaches a specified level.

Is there an embedded foreign currency derivative that must be separated from the host contract?

#### *Analysis*

The contract payment adjustment is an embedded foreign currency derivative that should be separated from the professional services contract. Because the quarterly contract payments are not denominated in JPY (nor is it in substance JPY denominated), but are instead simply indexed to JPY, the embedded derivative does not qualify for the scope exception in ASC 815-15-15-10.

### **EXAMPLE DH 4-2**

#### **Foreign currency denominated lease guaranteed by parent**

USA Corp is a US registrant that has a USD functional currency. Deutsche AG is a consolidated subsidiary of USA Corp located in Germany, which has the euro as its functional currency.

Deutsche AG enters into a lease with Canadian Corp (which has a Canadian dollar functional currency), which requires annual lease payments in USD. USA Corp guarantees Deutsche AG's payments on the lease.

Is there an embedded foreign currency derivative that must be separated from the host contract?

*Analysis*

The lease contains an embedded derivative that converts euro lease payments to USD that should be separated by Deutsche AG and in the consolidated financial statements of USA Corp. The substantial parties to the lease are Deutsche AG and Canadian Corp. Even though USA Corp guarantees the lease, it is not a substantial party to the contract. Since the lease payments are not denominated in one of the functional or local currencies of the substantial parties to the lease or a currency in which leases are routinely denominated in international commerce, the embedded derivative does not qualify for the scope exception in ASC 815-15-15-10.

**EXAMPLE DH 4-3****Commodity contract**

USA Corp is a US registrant that has a USD functional currency.

USA Corp enters into a contract to purchase a commodity from Britannia PLC, which has a British pound sterling functional currency. The commodity purchase contract is denominated in euros.

The commodity underlying the contract is readily convertible to cash and USA Corp does not meet the requirements for applying the normal purchases and normal sales scope exception.

Is there an embedded foreign currency derivative that must be separated from the host contract?

*Analysis*

Since the commodity contract meets the definition of a derivative (because the underlying commodity is readily convertible to cash) and is not eligible for a scope exception, it should be accounted for as a derivative in its entirety. Therefore, there is no embedded foreign currency derivative to be separated; embedded derivatives are not separated from contracts that are accounted for as derivatives in their entirety.

**4.4 Debt hosts**

The most common type of hosts are debt hosts. See FG 5.4 for information regarding how to determine whether an equity contract is a debt or equity host.

Generally, embedded derivatives in debt host contracts are not clearly and closely related if they introduce risks that are not typical for debt instruments or if the return that investors may receive is significantly leveraged (i.e., favorably or unfavorably impacted to a significant degree by the embedded derivative). When applying the clearly and closely related criterion in ASC 815-15-25-1(a) to a debt host, the focus should be on determining whether the economic characteristics and risks of the embedded derivative have features unrelated to interest rates (e.g., equity-like or commodity-like features) or credit risk of the issuer. When the characteristics of the derivative are related to interest rates, the focus should be on determining whether the features involve leverage or change in the opposite direction as interest rates (e.g., an inverse floater).

#### 4.4.1 *Common embedded features*

Generally, an embedded derivative is clearly and closely related to a debt host if it is one of the following:

- A non-leveraged interest rate or index
- A non-leveraged index of inflation in the economic environment for the currency in which the bond is denominated
- The creditworthiness of the debtor
- An issuer-exercisable call or a holder-exercisable put that does not contain an embedded interest rate derivative under the guidance in ASC 815-15-25-26 and meets the requirements for not separating put and call options in ASC 815-15-25-41 through ASC 815-15-25-42

ASC 815-15-25-23 through ASC 815-15-25-51 provides guidance on how to apply the clearly and closely related criterion to different hybrid debt instruments with various embedded features.

#### **Question DH 4-9**

If a debt instrument contains an embedded derivative that results in the interest payments being indexed to the price of silver (or some other metal or commodity index) and they are settled in cash or in a financial instrument or commodity that is readily convertible to cash, must the derivative be separated from the host contract?

#### ***PwC response***

Yes. In this situation, the issuer would be viewed as having (1) issued debt at a certain interest rate, and (2) entered into a swap contract to convert the index that determines the rate of interest from an interest rate index to a commodity index. The swap contract would not be considered clearly and closely related to the host contract because its economic characteristics are linked to a commodity index (rather than an interest rate index). Therefore, assuming the hybrid instrument is not being carried at fair value with changes recognized in current earnings and a separate instrument with the same terms as the embedded feature would be a derivative instrument under ASC 815, the embedded derivative should be separated from the host contract and accounted for separately as a derivative.

For further discussion on evaluating debt host contracts with embedded interest rate derivatives, including evaluation of whether the embedded derivative is clearly and closely related to the host contract, refer to FG 1.6.1.2. The guidance included in FG 1.6.1.2 is applicable to both investors and issuers of debt host contracts; the evaluation of any embedded interest rate derivatives would be based on the same guidance for both parties. However, an issuer and an investor may reach different conclusions based on their respective facts and circumstances. For example, an issuer may have issued an instrument at par, but an investor may have purchased it with a premium or discount so they may have different yields. This is discussed in ASC 815-15-25-27, which notes that the acquirer of a hybrid instrument in a secondary market could potentially reach a different conclusion than the issuer of the instrument.

#### 4.4.2 ***Embedded put or call options***

Put features allow the debt holder to demand repayment, and call features allow the issuer to repurchase the debt. It should be noted that in the context of debt instruments, puttable debt (i.e., that the holder may require to be repaid early) is often referred to in practice as *callable*, although callable debt theoretically is prepayable only at the issuer's option. Generally, a put or call option is considered clearly and closely related to its debt host unless it is leveraged (i.e., it creates more interest rate and/or credit risk than is inherent in the host instrument). For example, debt issued at par value that is puttable at two times the par value upon the occurrence of a specified event may have an embedded component that is not clearly and closely related to its debt host instrument.

For further discussion on embedded put and call options within debt instruments, including examples on determining whether a put or call option is considered clearly and closely related to the host debt instrument, refer to FG 1.6.1.1. The analysis of whether or put or call option is clearly and closely related to the debt host contract would be based on the same guidance for both the issuer of the debt host and an investor in the debt host. However, an issuer and an investor may reach different conclusions based on their respective facts and circumstances. For example, an issuer may have issued an instrument at par, but an investor may have purchased it with a significant premium or discount. This is discussed in ASC 815-15-25-27, which notes that the acquirer of a hybrid instrument in a secondary market could potentially reach a different conclusion than the issuer of the instrument.

#### 4.4.3 ***Issuer's accounting for convertible debt***

Convertible debt is a hybrid instrument composed of at least (1) a debt host instrument and (2) one or more conversion features (i.e., a written call option requiring delivery of company stock upon exercise of the conversion option by the holder). Many convertible debt instruments contain a conversion option with several settlement features that are interrelated. If, after performing the analysis of one settlement feature, it is determined that it should be separately accounted for as a derivative, then the entire conversion option should be separated and accounted for as a single derivative. The debt may also contain other embedded derivatives (e.g., puts and calls, contingent interest, make-whole provisions, other interest features). See DH 4.8.3 for information on multiple derivative features embedded in a single hybrid instrument.

For further discussion on the accounting for convertible debt, including analysis of the embedded conversion option, refer to FG 6.4 (post adoption of ASU 2020-06) and FG 6.4A (pre adoption of ASU 2020-06). The guidance used in the analysis of whether a host contract is a debt or equity host and whether the conversion option will meet the definition of a derivative is the same for both the investor and the issuer of the host contract. However, the analysis of whether an embedded conversion option will meet one of the scope exceptions in ASC 815 is different for issuers than for investors.

Issuers of convertible debt may qualify for the issuer own equity derivative scope exception in ASC 815-10-15-74(a). Refer to FG 5.6.2 and FG 5.6.3 (post adoption of ASU 2020-06) and FG 5.6.2A and FG 5.6.3A (pre adoption of ASU 2020-06) for discussion on whether an equity linked instrument meets the issuer own equity derivative scope exception. This scope exception does not apply to an investor in an instrument convertible into the equity of the issuer. As such, an investor in a convertible instrument will have to bifurcate the conversion option if the instrument is deemed to be a debt host and the embedded conversion option meets the definition of a derivative unless the investor is accounting for the instrument at fair value with changes in fair value reported in earnings.

See FG 6.5.1 (post adoption of ASU 2020-06) and FG 6.5.1A (pre adoption of ASU 2020-06) for information on the derecognition of convertible debt with a separated conversion option by the issuer of that instrument.

#### **4.4.4 Conversion option no longer requires separate accounting by an issuer**

ASC 815-15-35-4 provides guidance that addresses the issuing entity's accounting for a convertible bond with a previously separated conversion option that no longer meets the criteria for separate accounting. Refer to FG 6.5.2 (post adoption of ASU 2020-06) and FG 6.5.2A (per adoption of ASU 2020-06) for further discussion.

#### **4.4.5 Beneficial interests in securitizations**

Many securitization transactions involve the transfer of financial assets to a limited-purpose entity through one or more steps. The securitization entity issues various interests in security form (hence the term "securitization") to third parties that entitle the holders to the cash flows generated by the entity's underlying financial assets. These interests are commonly referred to as "beneficial interests" in those assets. ASC 860, *Transfers and Servicing*, defines beneficial interests.

##### **Definition from ASC 860-10-20**

Beneficial Interests: Rights to receive all or portions of specified cash inflows received by a trust or other entity, including, but not limited to, all of the following:

- a. Senior and subordinated shares of interest, principal, or other cash inflows to be passed-through or paid-through
- b. Premiums due to guarantors
- c. Commercial paper obligations
- d. Residual interests, whether in the form of debt or equity

Beneficial interests can take many different forms, ranging from debt securities to equity interests issued by a limited partnership or limited liability company. Examples of beneficial interests in securitizations include mortgage-backed securities, asset-backed securities, credit-linked notes, collateralized debt obligations, and interest-only (IO) or principal-only (PO) strips. The primary investors in beneficial interests in securitizations are insurance companies, banks, broker-dealers, hedge funds, pension funds, and other individuals or companies that maintain a significant investment or trading portfolio. Corporate treasury groups may also invest in beneficial interests. For example, many corporations invest in mortgage-backed securities issued by government-sponsored enterprises, such as Freddie Mac or Fannie Mae. The entity selling assets in a securitization transaction often retains interests in the assets sold. Commonly referred to as retained interests, these are also regarded as forms of beneficial interests.

##### **4.4.5.1 Accounting for derivatives embedded in beneficial interests**

Beneficial interests should be evaluated to determine whether they meet the definition of a derivative in ASC 815. See DH 2 for information on the definition of a derivative. If the beneficial interest is an IO



or PO strip it may qualify for a scope exception; see DH 3.2.12 for information on the scope exception for certain IOs and POs.

Certain beneficial interests in securitizations (that are not derivatives within the scope of ASC 815) are accounted for like debt securities under ASC 320, as detailed in ASC 860-20-35-2. See LI 3.2.2.1 for information on these instruments.

If a beneficial interest meets the definition of a derivative in its entirety and does not qualify for a scope exception, it must be accounted for as a derivative under ASC 815. It should be initially recorded at its fair value and subsequently measured at fair value each reporting period with changes in fair value recognized in earnings.

Beneficial interests that are not derivatives in their entirety should be evaluated to determine whether they contain embedded derivatives that should be accounted for separately. As discussed in ASC 815-15-25-12, that determination should be based on an analysis of the contractual and implied terms of the beneficial interest, which requires an understanding of the nature and amount of assets, liabilities, and other financial instruments that comprise the entire securitization transaction. It also requires that the reporting entity obtain information about the payoff structure and the payment priority of the instrument.

The evaluation of the clearly and closely related criterion in ASC 815-15-25-1(a) can be more complicated for beneficial interests because the contractual terms might not explicitly acknowledge the presence of embedded derivatives. Therefore, a more holistic analysis of whether the securitization vehicle has entered into contracts that introduce new risks not inherent in the asset portfolio or how the terms of the beneficial interest relate to the assets and liabilities of the securitization vehicle will be required. ASC 815-15-55-222 through ASC 815-15-55-226A provide examples of how to apply the clearly and closely related criterion to beneficial interests in securitized assets. The evaluation of embedded credit derivative features differs from other risks, as discussed in DH 4.4.5.3.

Following is a list of frequently identified potential embedded derivatives found in beneficial interests that require additional analysis. Interest rate and prepayment features are the most common types of embedded derivatives in investments in securitized financial assets.

- Embedded prepayment options in the underlying securitized financial assets
- Embedded put and call options permitting the investor, transferor, or servicer to redeem the beneficial interests
- Servicer clean-up calls
- Options that allow the servicer to purchase loans from the securitization trust (e.g., removal of account provisions)
- Certain explicit derivatives that the securitization vehicle enters into, such as written credit default swaps embedded in synthetic collateralized debt obligation structures

In addition, there may be implicit embedded derivatives when the following exist in the beneficial interests:

- Basis risk from the interest payments of the assets of a securitization entity being based on interest rates (e.g., adjustable rate mortgage based on Treasury rates) that are different from the interest rate underlying the beneficial interests issued (e.g., LIBOR plus a fixed spread)
- Notional mismatches creating basis risk between the balances of assets and liabilities of the securitization vehicle and derivatives the securitization vehicle has entered into may occur as the underlying assets (e.g., mortgage loans) are prepaid
- Differences in the foreign exchange rates associated with the underlying collateral assets and beneficial interests issued

If there is any potential shortfall of cash flows that will be generated by the assets and derivatives held by a trust funding the payment of the beneficial interests (excluding certain credit losses), no matter how remote, the beneficial interest would contain an embedded component that should be evaluated to determine whether it is a derivative that should be separated. A shortfall may occur if the contractual cash flows from the financial instruments in the vehicle (excluding certain credit losses) could be insufficient to fund the payments to the beneficial interest holders. Provided the only underlying risk is interest rate risk, these embedded components should be analyzed under ASC 815-15-25-26(a) to determine whether the cash flow shortfall could result in the investor not recovering substantially all of its initial recorded investment. Similarly, beneficial interests with positive leverage resulting from incremental trust cash flows (i.e., doubling of the initial and the then-market rates of return) should be analyzed under the guidance in ASC 815-15-25-26(b). See FG 1.6.1.2 for information on the embedded interest rate derivative guidance in ASC 815-15-25-26.

The analysis required by ASC 815-15-25-26 is based on the recorded basis of the instrument. When investors purchase prepayable beneficial interests at a substantial premium, it becomes more likely that the securities contain an embedded derivative that should be accounted for separately because the hybrid financial instrument is more likely to be contractually settleable in a way that the investor would not recover substantially all of its initial recorded investment.

### Question DH 4-11

A mortgage-backed security (MBS) issuer has the option to call the securities once the number of underlying loans falls below 200. Is the option an embedded derivative that should be accounted for separately?

#### ***PwC response***

Probably not. ASC 815-15-25-37 through 15-39 states that an option that only provides the issuer the right to accelerate the settlement of the debt does not require an assessment under ASC 815-15-25-26(b). Additionally, the option would not be considered an option that is only contingently exercisable under ASC 815-15-25-41 as the number of loans underlying the MBS will eventually reduce to below 200 over the term of the security. As a result, this option would not need to be bifurcated under the embedded derivative guidance in ASC 815-15 unless the instrument was purchased at a significant premium to the redemption price. In that case, it becomes more likely that the securities contain an embedded derivative that should be accounted for separately based on the guidance in ASC 815-15-25-26(a) because the hybrid financial instrument is contractually settleable in a way that the investor would not recover substantially all of its initial recorded investment.

**Question DH 4-12**

A special purpose entity holding \$100 fixed-rate non-prepayable loans issues a \$60 Class A beneficial interest that pays floating-rate interest based on LIBOR (with limited exposure to credit losses on the fixed-rate loans) and a \$40 Class B residual interest. Do the beneficial interests contain embedded derivatives that should be accounted for separately?

***PwC response***

The Class A beneficial interest can be viewed as a floating-rate security with an interest rate cap (the return of this Class A beneficial interest is capped by the fixed rate on the prepayable loans). Since the floating rate is capped, it is not likely that the Class A beneficial interest contains an embedded derivative under the guidance in ASC 815-15-25-26.

The Class B beneficial interest has an embedded interest rate swap in which it receives a fixed rate and pays a floating rate on the liabilities issued by the SPE (i.e., floating rate beneficial interests). This embedded interest rate swap should likely be separated from the host beneficial interest based on the guidance in ASC 815-15-25-26. If the floating rate rises, it is possible that the cash flows generated by the loans will not support the terms of the Class A beneficial interests. In that case, the Class B investors would not recover all of their principal. In addition, there are interest rate scenarios that could result in investors doubling both their initial rate of return and the market rate of return for the host beneficial interest.

**Question DH 4-13**

An investor purchases an agency asset-backed security with a par amount of \$100 for \$115. The mortgage loans underlying the security are prepayable at par (\$100). Does the security contain an embedded derivative that should be accounted for separately?

***PwC response***

Yes. If the borrowers in the mortgage loans owned by the securitization entity elect to prepay their mortgages (at par of \$100) the day after the investor purchases the asset-backed security, the investor would receive approximately 87% of its initial recorded investment of \$115. In that case, an embedded interest rate derivative should be separated based on the guidance in ASC 815-15-25-26(a) because the investor would not receive substantially all of its initially recorded investment. The likelihood that the borrowers will elect to prepay the mortgage loans on the next day is irrelevant to the analysis.

**Question DH 4-14**

An investor pays \$115 for a securitized interest with a remaining term of four years, par value of \$100 and an interest rate of 7% at a time when market rates for instruments of this credit type are 2%. The assets underlying the securitized interest are not prepayable. The security is not prepayable and does not have any features that could change the timing and amount of cash flows. Does the security contain an embedded derivative that should be accounted for separately?

***PwC response***

No. Since the assets are not prepayable, the investor is guaranteed (absent a default, which should not be taken into account when performing the analysis in ASC 815-15-25-26(a)) to receive its recorded

investment of \$115 (through the interest and principal payments) by the maturity of the securitized interest. The only potential change in the amount of contractual cash flows to be collected is due to credit. Credit risk is clearly and closely related to a debt host contract and therefore does not create an embedded derivative that needs to be accounted for separately.

#### **4.4.5.2 *Beneficial interests in prepayable securitized assets***

ASC 815-15-25-33 exempts certain beneficial interests from the ASC 815-15-25-26(b) leverage tests (the double-double test). This exception only applies to embedded derivatives that are tied to the prepayment risk of the underlying prepayable financial assets.

##### **ASC 815-15-25-33**

A securitized interest in prepayable financial assets would not be subject to the conditions in paragraph 815-15-25-26(b) if it meets both of the following criteria:

- a. The right to accelerate the settlement of the securitized interest cannot be controlled by the investor.
- b. The securitized interest itself does not contain an embedded derivative (including an interest-rate-related derivative instrument) for which bifurcation would be required other than an embedded derivative that results solely from the embedded call options in the underlying financial assets.

The application of the guidance in ASC 815-15-25-33 depends on when the beneficial interest was issued or acquired. If it was issued or acquired after June 30, 2007 (date specified in DIG Issue B40), then the guidance should be applied regardless of the value the other embedded derivative (other than the prepayment option) is expected to have over its life.

If the beneficial interest was acquired before January 1, 2007, the beneficial interest would be grandfathered from being assessed under ASC 815-15-25-26(b). If the beneficial interest was issued after January 1, 2007 but before June 30, 2007, then the criterion in ASC 815-15-25-33(b) would not be applicable if the other embedded derivative will have a greater than trivial fair value only under extremely remote scenarios (e.g., embedded derivative only has value when an interest rate index reaches a remote level).

#### **4.4.5.3 *Embedded credit derivatives***

Reporting entities are required to evaluate credit derivative features embedded in beneficial interests in securitized financial assets to determine whether they should be separately accounted for.

ASC 815-15-15-9 provides a limited scope exception for embedded credit derivative features created by the transfer of credit risk between tranches as a result of subordination.

##### **ASC 815-15-15-9**

The transfer of credit risk that is only in the form of subordination of one financial instrument to another (such as the subordination of one beneficial interest to another tranche of a securitization, thereby redistributing credit risk) is an embedded derivative feature that shall not be subject to the application of paragraph 815-10-15-11 and Section 815-15-25. Only the embedded credit derivative feature created by subordination between the financial instruments is not subject to the

application of paragraph 815-10-15-11 and Section 815-15-25. However, other embedded credit derivative features (for example, those related to credit default swaps on a referenced credit) would be subject to the application of paragraph 815-10-15-11 and Section 815-15-25 even if their effects are allocated to interests in tranches of securitized financial instruments in accordance with those subordination provisions. Consequently, the following circumstances (among others) would not qualify for the scope exception and are subject to the application of paragraph 815-10-15-11 and Section 815-15-25 for potential bifurcation:

- a. An embedded derivative feature relating to another type of risk (including another type of credit risk) is present in the securitized financial instruments.
- b. The holder of an interest in a tranche of that securitized financial instrument is exposed to the possibility (however remote) of being required to make potential future payments (not merely receive reduced cash inflows) because the possibility of those future payments is not created by subordination. (Note, however, that the securitized financial instrument may involve other tranches that are not exposed to potential future payments and, thus, those other tranches might qualify for the scope exception.)
- c. The holder owns an interest in a single-tranche securitization vehicle; therefore, the subordination of one tranche to another is not relevant.

Reporting entities should still evaluate other derivatives embedded in beneficial interests to determine whether they should be separated, including instances when the beneficial interest has an embedded derivative feature relating to another type of risk (e.g., interest rate risk), including another type of credit risk. The embedded derivative analysis should be based on both the contractual terms of the interest in securitized financial assets and the activities of the securitizing entity. This analysis requires an understanding of the nature and amount of assets, liabilities, and other financial instruments that compose the securitization, as well as the payoff structure and priorities, as discussed in ASC 815-15-25-12 and ASC 815-15-25-13.

However, as it relates to credit risk, a reporting entity should first look into the securitization vehicle to identify whether there are any credit derivatives. If a new credit risk is added to a beneficial interest by a written credit derivative in the securitization structure (e.g., as is the case with a synthetic collateralized debt obligation), the related embedded credit derivative feature is not clearly and closely related to the host contract. We believe the requirement to look into the securitization vehicle applies beyond credit risk; it also applies to any derivative that introduces additional risk to the securitization rather than managing a risk that already exists in the securitization structure.

We believe securitization vehicles that do not contain any derivatives are not affected by this guidance, as illustrated by Case Y in ASC 815-15-55-226, in which the special-purpose entity holds a portfolio of loans that commingle different credit risks. However, there may be embedded derivatives related to non-credit risks that may have to be separated under other provisions in ASC 815.

**Question DH 4-15**

In a cash collateralized debt obligation (CDO), a securitization entity issues interests to third parties. The repayment of the principal on the notes is based on the performance of debt securities held by the securitization entity. Does the security contain an embedded credit derivative that should be accounted for separately?

***PwC response***

Maybe. Since ASC 815-15-15-9 states that credit concentrations in subordinated interests should not be recognized as embedded derivatives, many cash CDOs will not contain an embedded credit derivative because the principal repayment is directly linked to the loans held by the securitization entity (i.e., repayment is based on the credit risk of the loans held by the securitization entity). Reporting entities should analyze the specific facts and circumstances of their arrangements to determine whether there is an embedded credit derivative that requires separate accounting. In addition, an assessment of other embedded derivatives, such as interest and prepayment risk, should be performed.

**Question DH 4-16**

In a synthetic CDO, a securitization entity issues interests to third parties. The securitization entity holds highly-rated financial instruments (e.g., US Treasury securities) and writes a credit default swap (CDS) to a third party. The repayment of principal and interest on the notes is based on the performance of the CDS (and the underlying collateral). Does the security contain an embedded credit derivative that should be accounted for separately?

***PwC response***

Yes. A credit derivative written by a securitization entity would not be considered clearly and closely related to its host beneficial instrument; therefore, it should be separated by the holder. In addition, an assessment of other derivatives, such as interest and prepayment risk, should be performed.

**Question DH 4-17**

A securitization entity holds \$100 of highly-rated collateral and writes a CDS with a notional amount of \$20 on referenced credits, and issues notes with a notional amount of \$100. Do the securities issued contain an embedded credit derivative that should be accounted for separately?

***PwC response***

Yes. The extent of synthetic credit is not relevant to the analysis of embedded credit derivatives. See Case AA in ASC 815-15-55-226C and Case AB in ASC 815-15-55-226D for similar examples.

**Question DH 4-18**

A credit-linked note (CLN) is created through a synthetic securitization transaction (the securitization entity holds highly-rated financial instruments, writes a credit default swap, and issues notes to third parties.) A guarantor provides a financial guarantee contract guaranteeing the payment of principal and interest of the CLN. If there is a credit event, the financial guarantor will step in and make payments to the note holders. Is that financial guarantee contract eligible for the scope exception

under ASC 815-10-15-58?

***PwC response***

No. A CLN issued as part of a synthetic securitization contains an embedded derivative requiring separate accounting. Since the financial guarantee contract provides coverage on a derivative instrument, it would not be eligible for the exception in ASC 815-10-15-58.

## **4.5 Hybrid instruments with equity hosts**

To apply the embedded derivative model, it is necessary to understand the economic characteristics and risks of the host contract. Certain instruments, such as preferred stock, have characteristics of both debt and equity, and the determination of the host contract will have a direct impact on the conclusion of whether an embedded component should be separated. For example, a conversion feature in preferred stock that is deemed an equity host would not be separated by the investor because the conversion option is clearly and closely related to an equity host contract. In contrast, a conversion feature in preferred stock deemed to be a debt host would not be clearly and closely related; therefore, it would be separated by the investor if the remaining criteria in ASC 815-15-25-1 are met.

### **4.5.1 Determining if an equity contract is a debt or equity host**

To determine its nature, the reporting entity needs to consider the host contract's underlying economic characteristics and risks. Whether a host instrument is an equity or debt host is not determined by its balance sheet classification. An instrument, such as a preferred stock instrument, may be classified as equity, but may be considered a debt host contract for purposes of evaluating embedded components. For further analysis and examples on determining whether a host instrument is an equity or debt host, refer to FG 5.4.1. The guidance used in the analysis of whether an equity contract is a debt or equity host for purposes of evaluating embedded derivatives would be the same for both an investor in the instrument or an issuer of the instrument.

## **4.6 Other host contracts**

### **4.6.1 Executory contract hosts**

An executory contract may meet the definition of a derivative in its entirety (and not qualify for a derivative scope exception under ASC 815-10-15); in those cases, the contract would not be assessed under ASC 815-15-25-1 to determine whether it contains embedded derivatives that should be accounted for separately since the entire contract would have to be accounted for as a derivative. However, in some cases executory contracts may not meet the definition of a derivative or may qualify for a scope exception. For example, executory contracts often do not contain net settlement provisions and therefore may not meet the definition of a derivative in their entirety. In such instances, executory contracts must still be evaluated for embedded features (e.g., caps, and floors) that may need to be separated. See DH 2 for information on the definition of a derivative and DH 3 for information on scope exceptions.

Executory contracts for the purchase and sale of raw materials, supplies, and services that are not derivatives in their entirety may include a variety of embedded derivatives, such as:



- Foreign-currency swaps (with a settlement in a currency other than the functional currency of either party to the transaction)
- Commodity forwards (agreements to transact a fixed quantity on a specified future date at a fixed price) and options
- Purchase-price caps and floors (i.e., the purchase price may not exceed a cap or fall below a floor)
- Price adjustments (i.e., the price stated in the contract is adjusted based on a specified index)

ASC 815-15-25-19 provides guidance on the economic characteristics of price caps and floors embedded in purchase contracts.

#### **ASC 815-15-25-19**

The economic characteristics and risks of a floor and cap on the price of an asset embedded in a contract to purchase that asset are clearly and closely related to the purchase contract, because the options are indexed to the purchase price of the asset that is the subject of the purchase contract. See Example 6 (paragraph 815-15-55-114) for an illustration of such options.

However, if the price in the contract is referenced to an underlying that is extraneous to the asset or the underlying is leveraged (i.e., the magnitude of the price adjustment based on the underlying is significantly disproportionate to the relationship of the underlying to the asset), then the embedded derivative is not considered clearly and closely related and may have to be separated. This analysis applies to executory contracts that do not meet the definition of a derivative. For more information on the application of the normal purchase normal sale derivative scope exception, see DH 3.2.4.

#### **4.6.2 Insurance hosts**

Insurance contracts may also contain embedded derivatives. As discussed in IG 2.4.5, if a company has adopted Accounting Standards Update 2018-12, *Financial Services— Insurance (Topic 944): Targeted Improvements to the Accounting for Long-Duration Contracts* (ASU 2018-12), companies must first evaluate insurance contracts for features that meet the definition of a market risk benefit (MRB) under ASC 944-40-25-25C and ASC 944-40-25-25D before the company evaluates whether an embedded derivative exists. Refer to Figure IG 2-1 for a decision tree for determining the accounting model for contract features in insurance and investment contracts that provide potential benefits in addition to the account balance, as detailed in ASC 944-40-25-25B. If an insurance policy contains an embedded derivative instrument, it may have to be separated if the embedded derivative is not clearly and closely related to the insurable risk that is covered under the insurance contract. Contracts such as equity-indexed annuities, equity-indexed life insurance, and dual-trigger property/casualty reinsurance that do not meet the requirements in ASC 815-10-15-55 may contain embedded derivatives.

ASC 815-10-15-67 provides a scope exception for investments in a life insurance contract that falls within the scope of ASC 325-30. This scope exception also applies to embedded derivative-like provisions that would otherwise have to be accounted for separately under ASC 815. Such insurance contracts include corporate-owned life insurance, bank-owned life insurance, and life settlement contracts. However, it should not be applied by analogy to contracts other than life insurance contracts subject to the provisions of ASC 325-30. In addition, the scope exception in ASC 815-10-15-67 applies



only to the policyholder and does not affect the insurer's accounting. See DH 3.2.9 for information on the scope exception for investments in life insurance contracts and LI 5.1 for the information on the accounting for investments in life insurance contracts.

### Question DH 4-19

Should embedded derivatives in the following contracts be separated from the host insurance contracts?

- A traditional whole life insurance contract in which insurance may be kept in force for a person's entire life
- A traditional universal life contract under which (a) premiums are generally flexible, (b) the level of death benefits may be adjusted, and (c) mortality, expenses, and other charges may vary

#### ***PwC response***

No. The contracts have two components, a death benefit and a surrender benefit. The payment for the death-benefit component is based on an insurable event that is eligible for the scope exception in ASC 815-10-15-52. The cash surrender value payment is generally based on interest rates and is considered clearly and closely related to the debt host. In the case of whole life insurance, there is no interest rate explicitly provided—just surrender value—which fluctuates in value based primarily on interest rates and is therefore regarded as clearly and closely related. In the case of universal life insurance contracts, a minimum interest rate is usually stipulated (that is not above then-current market rates at issuance), above which additional interest payments are discretionary. Given the nature of interest features in traditional universal life contracts, they are generally regarded as clearly and closely related.

In contrast, nontraditional universal life contracts with guaranteed minimum benefits may have embedded derivatives requiring separation. However, if a company has adopted ASU 2018-12, these features may be considered market risk benefits and follow the accounting and classification guidance under ASC 944-40-25-25B through ASC 944-40-25-25D. The features should be assessed as potential market risk benefits prior to the assessment of whether they should be classified as embedded derivatives requiring separation.

### Question DH 4-20

Insurance Co issues a traditional variable-annuity product that contains a provision under which benefit payments will vary according to the investment experience of the separate accounts to which the premium deposits are allocated. Does the insurance product contain an embedded credit derivative that should be accounted for separately?

#### ***PwC response***

No. The traditional variable annuity component of the product, as described in ASC 815-15-55-54 and ASC 815-15-55-55 and in ASC 944-20-05-18, contains no embedded derivatives. This component is not considered a derivative because of the unique attributes of traditional variable annuity contracts issued by insurance companies, as further described in ASC 944-815-25-1 through ASC 944-815-25-4. However, variable-annuity products may contain nontraditional features, such as guaranteed minimum accumulation benefits and guaranteed minimum withdrawal benefits. If a company has

adopted ASU 2018-12, these features first should be evaluated to see if they meet the definition of a market risk benefit and follow the accounting and classification guidance under ASC 944-40-25-25B through ASC 944-40-25-25D. If they do not meet the definition of a market risk benefit, these features would typically constitute embedded derivatives requiring separate accounting under ASC 815, as further described in ASC 944-815-25-5. In such instances, the variable annuity host contract would continue to be accounted for under existing insurance accounting guidance.

### Question DH 4-21

Is an equity-indexed annuity contract a hybrid instrument that should be separated?

#### *PwC response*

Yes. The host is an investment contract under ASC 944 (i.e., a debt host) with multiple embedded derivatives (a contract holder prepayment option and a contingent equity-return feature). The prepayment option would typically require payment of the contract account balance less a specified non-indexed surrender charge to the contract holder, and thus would generally be clearly and closely related to the debt host, provided it does not contain an embedded interest rate derivative under the guidance in ASC 815-15-25-26. However, the contingent equity-return feature is not clearly and closely related to the debt host. If a company has adopted ASU 2018-12, this feature should first be evaluated to see if it meets the definition of a market risk benefit and follow the accounting and classification guidance under ASC 944-40-25-25B through ASC 944-40-25-25D. However, if it does not meet the definition of a market risk benefit, the embedded equity derivative must be separated from the host contract.

### Question DH 4-22

Does a property/casualty insurance contract under which the payment of benefits is the result of an identifiable insurable event (e.g., theft or fire), with payments based on both changes in foreign currency (or another index) and insurable losses contain an embedded derivative that should be separated?

#### *PwC response*

Maybe. ASC 815-15-55-12 specifies that dual-trigger contracts under which the insurable loss is highly probable to occur do not meet the scope exception in ASC 815-10-15-52. Therefore, the embedded derivative must be separated if the insurable loss is highly probable and the other criteria in ASC 815-15-25-1 are met. In addition, if payments could be made without the occurrence of an insurable event or in excess of the actual loss, the entire contract may be a derivative or may contain embedded derivatives that would require separate accounting.

### Question DH 4-23

Does a disaster bond with a payment feature that is contingent on specific insurable losses of the issuer contain an embedded derivative that requires separate accounting? Would the answer change if the disaster bond had a payment feature indexed to industry loss experience measured as if it were a dollar-based index?

***PwC response***

The disaster bond with a payment feature that is contingent on specific insurable losses does not contain an embedded derivative that should be separately accounted for as a derivative. Although the payment feature is not clearly and closely related to the debt host, the payment feature is contingent on an insurable event and meets the scope exception in ASC 815-10-15-52. In such instances, the investor is essentially providing a form of insurance or reinsurance coverage for the issuer.

However, the answer would change if the payment feature was indexed to industry loss experience. The payment feature is not clearly and closely related and since the payment feature would not be contingent on insurable losses of the issuer, it would not qualify for the ASC 815-10-15-52 scope exception. As a result, the embedded derivative must be separated from the host contract if the other criteria of ASC 815-15-25-1 are met.

**Question DH 4-24**

Does a modified coinsurance arrangement in which the terms of the ceding company's payable provide for the future payment of a principal amount plus a return based on a specified proportion of the ceding company's return on either its general account assets or a specified block of those assets (such as a specific portfolio of its investment securities) contain an embedded derivative that should be separately accounted for?

***PwC response***

Yes. In accordance with ASC 815-15-55-108, the return on the receivable by the assuming company is not clearly and closely related to the host because the yield is based on a specific proportion of the ceding company's return on a block of assets. Some contend that modified coinsurance arrangements are insurance contracts and therefore should be exempt from ASC 815 under the ASC 815-10-15-52 exception. However, as described in ASC 815-10-15-54, insurance contracts can have embedded derivatives that need to be separated. ASC 815-15-55-108 notes that whether the host contract is considered to be an insurance contract or the modified coinsurance receivable/payable component of the arrangement, the embedded derivative provisions of ASC 815 are still applicable.

**4.6.3 Lease hosts**

The approach for determining whether an embedded derivative is clearly and closely related to a lease host is similar to the approach used for a debt host. As discussed in ASC 815-15-25-21 through ASC 815-15-25-22, an embedded derivative that alters lease payments is considered clearly and closely related to the lease host if (1) there is no significant leverage factor and (2) the underlying is an adjustment for inflation on similar property or an interest rate index.

In assessing if there is significant leverage relating to an underlying that is an interest rate index, the guidance in ASC 815-15-25-26 should be assessed. See FG 1.6.1.2 for additional information.

Oftentimes, embedded derivatives in lease agreements qualify for the scope exception in ASC 815-10-15-59 for contracts not traded on an exchange. For example, an operating lease that requires lease payments that vary based on sales by the lessee (e.g., rent payable at a base of \$10,000 plus 3% of the lessee's sales each month) would not have to be separated because the embedded feature in the lease qualifies on a standalone basis for the scope exception in ASC 815-10-15-59(d) applicable to a non-exchange-traded contract whose underlying is specified volumes of sales by one of the parties to the

contract. Similarly, an option embedded in an operating lease agreement on an office building that gives the lessee the option of buying the leased asset would qualify for the ASC 815-10-15-59(b) scope exception on a standalone basis because the settlement is based upon the leased asset, which is a nonfinancial asset of one of the parties. The same would potentially apply to more complex lease arrangements, such as an operating lease with a terminal rental adjustment clause indexed to the specific asset under lease, if the lease and rental adjustment clause are not exchange-traded and the subject of the lease is a nonfinancial asset (and thus would qualify for the scope exception in ASC 815-10-15-59(b)). Options to acquire leased assets may also not meet the definition of a derivative as they may not meet the net settlement criteria in ASC 815-10-15-83(c) since the asset to be delivered by one of the parties may not be readily convertible to cash.

Example DH 4-4 and Example DH 4-5 illustrate the analysis of embedded features in lease agreements.

### EXAMPLE DH 4-4

#### Purchase option and option to extend lease embedded in a finance lease

Lessee Corp enters into a property lease (land and building) with Lessor Corp. The following table summarizes information about the lease and the leased asset.

Lease term	10 years
Renewal option	One 2-year renewal option If exercised, the annual lease payments are reset to then-current market rents.
Economic life	12 years
Fair value of the leased property	\$5,000,000
Purchase option	Lessee Corp has an option to purchase the property at the end of the lease term for \$1,000,000 when the expected fair value at the end of year ten is \$1,500,000.
Annual lease payments	The annual lease payments are \$600,000, with increases of 3% per year thereafter.

Lessee Corp concludes that the lease is a finance lease under the guidance in ASC 842, *Leases*, because at lease commencement the fixed price purchase option available to Lessee Corp at the end of the initial lease term (i.e., after 10 years) is reasonably certain to be exercised by Lessee Corp. As a result, Lessee Corp has effectively obtained control of the underlying asset.

Under the guidance in ASC 842, Lessee Corp would record a lease liability and a right of use asset at the present value of the lease payments plus the present value of the option purchase price using its incremental borrowing rate. See LG 4 for information on the accounting for leases under ASC 842.

Is either the renewal option or purchase option an embedded derivative that should be separated from the lease contract?

### Analysis

A right to extend a finance lease is a right to extend the maturity of the lease liability. For the following reasons, this extension option does not meet the definition of a derivative because it does not contain a net settlement provision. The extension option simply results in the delivery of a new lease with a two year maturity. The lease asset to be delivered must be done on a gross basis and the asset would not be readily convertible to cash. Since the option to extend the lease would not be accounted for as a derivative if it were freestanding, it does not meet the requirement in ASC 815-15-25-1(c) and should not be separated from the lease host contract.

The option to purchase the leased asset also would not meet the definition of a derivative due to not meeting the net settlement provision for the following reasons:

- To exercise the option, Lessee Corp must pay the purchase price in cash, and Lessor Corp must deliver the asset (property). This is done on a gross basis, and there is no provision in the contract that would permit net settlement.
- There is no market mechanism to facilitate net settlement.
- The asset to be delivered is not readily convertible to cash.

As noted above, an option to purchase the leased asset may also meet the derivative scope exception in ASC 815-10-15-59(b).

If Lessee Corp exercises its purchase option, it would recognize this as an extinguishment of the lease liability.

### EXAMPLE DH 4-5

#### Purchase option and option to extend lease embedded in an operating lease

Lessee Corp leases an automobile from Lessor Corp. The following table summarizes information about the lease and the leased asset.

Lease term	3 years
Renewal option	3 year renewal option If exercised, the annual lease payments are reset to then-current market rates.
Economic life of the automobile	6 years
Purchase option	Lessee Corp has the option to purchase the automobile for \$20,000 upon expiration of the lease.
Monthly lease payments	\$500

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Other	<ul style="list-style-type: none"> <li>□ Title to the automobile remains with Lessor Corp upon lease expiration</li> <li>□ The fair value of the automobile is \$30,000; Lessee Corp does not guarantee the residual value of the automobile at the end of the lease term</li> </ul>
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Lessee Corp concludes that the lease is an operating lease because none of the criteria in ASC 842-10-25-2 and ASC 842-10-25-3 to classify a lease as a finance lease have been met.

Is either the renewal option or purchase option an embedded derivative that should be separated from the lease contract?

### *Analysis*

A right to extend an operating lease beyond the lease term is a right to acquire the use of a nonfinancial asset for an additional period. The extension option in this case does not meet the definition of a derivative because it simply provides the right to execute a new lease and does not contain a net settlement provision. Since the option to extend the lease would not be accounted for as a derivative if it were freestanding, it does not meet the requirement in ASC 815-15-25-1(c) and should not be separated from the lease host contract.

The purchase option does not meet the definition of a derivative because it does not contain a net settlement provision.

- To exercise the option, Lessee Corp must pay the purchase price in cash, and Lessor Corp must deliver the asset. This is done on a gross basis, and there is no provision in the contract that would permit net settlement.
- There is no market mechanism to facilitate net settlement.
- The asset to be delivered is not readily convertible to cash.

Since the purchase option would not be accounted for as a derivative if it were freestanding, it does not meet the requirement in ASC 815-15-25-1(c) and should not be separated from the lease host contract. As noted above, an option to purchase the leased asset may also meet the derivative scope exception in ASC 815-10-15-59(b).

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## **4.7 Accounting considerations for hybrid instruments**

As discussed in ASC 815-15-25-4, a reporting entity may elect to account for an entire hybrid financial instrument at fair value. If that election is not made (and the hybrid instrument is not otherwise measured at fair value with changes in fair value reported in earnings), an embedded derivative that meets the requirements in ASC 815-15-25-1 must be separated from the host contract and accounted for as a derivative. See DH 4.3.2.1 for information on the fair value option for certain hybrid instruments and FV 5 for information on the election and accounting under the fair value option for all instruments.

When an embedded derivative is separated from a hybrid instrument, the accounting for the host contract should be based on the accounting guidance that is applicable to similar contracts that don't contain the embedded derivative. The separated derivative would be accounted for as a derivative instrument under ASC 815 (i.e., classified on the balance sheet as an asset or liability at fair value with any changes in its fair value recognized currently in earnings), consistent with the accounting for a freestanding derivative. The embedded derivative can be designated as a hedging instrument, provided that the hedge accounting requirements have been met.

If a reporting entity is unable to reliably identify and measure the embedded derivative instrument for purposes of separating that instrument from the host contract, the entire contract (i.e., the hybrid instrument) would have to be measured at fair value with gains and losses recognized in current earnings. If this practicability exception is invoked, the hybrid instrument may not be designated as a hedging instrument because nonderivative instruments generally do not qualify as hedging instruments.

#### **4.7.1 Allocating basis**

ASC 815-15-30-2 provides guidance on allocating the carrying amount of the hybrid instrument between the host contract and the embedded derivative when an embedded derivative is separated. The embedded derivative should be recorded on the balance sheet at its fair value at inception and the carrying value assigned to the host contract is calculated as the difference between the previous carrying amount of the hybrid instrument and the fair value of the derivative (i.e., the with-and-without method). Therefore, there is no immediate earnings impact associated with the initial recognition and measurement of an embedded derivative that is separated from a hybrid instrument except in rare cases discussed in FG 5.4.4 when the fair value of the bifurcated derivative exceeds the net proceeds received.

When separating an embedded forward derivative (i.e., a non-option derivative) from the host contract, ASC 815-15-30-4 states that the terms of the embedded derivative should be determined in a manner that results in a fair value that is generally equal to zero at the inception of the hybrid instrument. That is, the explicit terms of a forward-based embedded derivative that requires separate accounting should be adjusted to equal market terms so that the derivative has a zero fair value at inception. This is illustrated in Example 12 beginning at ASC 815-15-55-160.

However, if the embedded instrument is an option, ASC 815-15-30-6 allows the embedded option-based derivative to have a value other than zero at the inception of the contract. Accordingly, the terms of an embedded option should not be adjusted from its stated terms to result in the option's being at-the-money at the inception of the hybrid instrument. In the case of a debt host contract, this will result in an additional debt discount or premium equal to the initial fair value of the separated option.

Figure DH 4-5 illustrates the provisions of ASC 815-15-30-4 through ASC 815-15-30-6 that relate to the separation of hybrid instruments containing option-based and non-option-based embedded derivatives.

**Figure DH 4-5**

## Separating option-based and non-option-based embedded derivatives

Type of embedded derivative	Codification reference	Timing of assessment	Holder/ issuer	Fair value of embedded derivative
Non-option	815-15-30-4	At inception	Holder and issuer	Terms should be set such that fair value would generally equal zero at inception.
	815-15-30-5	At acquisition, subsequent to inception	Holder	Terms should be set such that fair value would generally equal zero at acquisition date.
Option-based	815-15-30-6	At inception	Holder and issuer	Strike price based on stated terms such that intrinsic value may be other than zero at inception.
	815-15-30-6	At acquisition, subsequent to inception	Holder	Strike price based on stated terms such that intrinsic value may be other than zero at acquisition.

A reporting entity should make sure that economic characteristics are not lost or double counted in the process of separating the instrument. Proper identification of the host and embedded features may affect several aspects of the accounting analysis, including the determination of whether the feature is clearly and closely related, whether it meets the net settlement criteria or qualifies for a scope exception, and how it is potentially measured.

**4.7.2 Determining the terms of a debt host contract**

When separating an embedded derivative from a debt host, a reporting entity should use the stated or implied terms of the hybrid instrument, as discussed in ASC 815-15-25-24. For example, a fixed-rate S&P 500 indexed bond (pays a fixed rate of interest plus a coupon linked to the return on the S&P 500 Index) should be separated into a fixed-rate bond and a derivative linked to the S&P 500 Index. However, it may be difficult to determine the stated or implied terms of some hybrid instruments, particularly those with embedded interest rate derivatives. ASC 815-15-25-25 provides guidance on determining the characteristics of a debt host in that circumstance.

**ASC 815-15-25-25**

In the absence of stated or implied terms, an entity may make its own determination of whether to account for the debt host as a fixed-rate, variable-rate, or zero-coupon bond. That determination requires the application of judgment, which is appropriate because the circumstances surrounding each hybrid instrument containing an embedded derivative may be different. That is, in the absence of stated or implied terms, it is appropriate to consider the features of the hybrid instrument, the issuer, and the market in which the instrument is issued, as well as other factors, to determine the



characteristics of the debt host contract. However, an entity shall not express the characteristics of the debt host contract in a manner that would result in identifying an embedded derivative that is not already clearly present in a hybrid instrument. For example, it would be inappropriate to do either of the following:

- a. Identify a variable-rate debt host contract and an interest rate swap component that has a comparable variable-rate leg in an embedded compound derivative, in lieu of identifying a fixed-rate debt host contract
- b. Identify a fixed-rate debt host contract and a fixed-to-variable interest rate swap component in an embedded compound derivative in lieu of identifying a variable-rate debt host contract.

Once the terms of the embedded and the host components have been determined, they cannot be changed to another acceptable alternative at a later date.

## **4.8 Other considerations in evaluating embedded derivatives**

### **4.8.1 Issuer and investor asymmetry**

Although the requirement to separate an embedded derivative from a host contract applies to both parties to a contract (i.e., both the issuer and the holder of a hybrid instrument), the two parties might reach different conclusions. The following sections discuss transactions when this asymmetry is likely to occur.

#### **4.8.1.1 Convertible debt**

An investor that holds a debt security that is convertible into shares of a public company's common stock must separate the embedded conversion option from the host contract because it would be subject to the requirements of ASC 815 if it were a freestanding derivative. However, the issuer may qualify for the scope exception in ASC 815-10-15-74(a) for certain contracts involving an issuer's own equity. In that case, the issuer would not have to separate the embedded conversion option. See DH 3.3 and FG 5 for information on the scope exception for certain contracts involving an issuer's own equity.

#### **4.8.1.2 Equity-indexed life insurance**

An equity-indexed life insurance contract links term-life coverage with an investment feature. The surrender feature provides the policyholder with a contingent equity return that is not clearly and closely related to the host contract, as discussed in ASC 815-15-55-75; therefore, the insurance company would have to separately account for the embedded derivative. However, if the holder accounts for an equity-indexed life insurance contract under the guidance in ASC 325-30, *Investments—Other, Investments in Insurance Contracts*, it is not subject to ASC 815 and therefore the holder would not separate the embedded derivative. See DH 3.2.9 for information on the scope exception for investments in life insurance contracts and LI 5.1 for information on the accounting for investments in life insurance contracts.

### 4.8.2 *Timing and frequency of the embedded derivative assessment*

The analysis of whether an embedded derivative is clearly and closely related to its host contract is generally performed either on the date that the hybrid instrument is issued or on the date that the reporting entity acquires the instrument. An investor that acquires a hybrid instrument in the secondary market or in a business combination could potentially reach a different conclusion with regard to the separation of an embedded derivative than the issuer or the original investor, since each may perform their respective analyses on different dates and under potentially different market conditions. For example, the initial investor of the instrument at par may reach a different conclusion than a reporting entity that acquires a hybrid instrument in the secondary market at a premium or discount with regard to the leverage tests required in ASC 815-15-25-26 when assessing an interest rate host with embedded interest rate features. That is, the initial investor may have concluded that an embedded derivative was clearly and closely related to the host contract, whereas a subsequent holder may conclude otherwise, or vice versa.

While the analyses of the clearly and closely related criterion in ASC 815-15-25-1(a) and the embedded foreign currency derivative guidance in ASC 815-15-15-10 are generally one-time assessments for each holder of the hybrid instrument, the remaining criteria in ASC 815-15-25-1 require an ongoing assessment by each holder each reporting period. Because ASC 815-15-25-1(c) requires a decision about whether a separate instrument with the same terms as the embedded derivative would qualify as a derivative, it follows that the assessment of whether an embedded derivative should be separated must also be applied at the inception of the hybrid instrument and over its life. Although a similar reassessment argument may be made regarding the criterion in ASC 815-15-25-1(b), it is uncommon for the measurement attribute of a hybrid instrument to change absent a change in accounting principle that provides specific transition guidance.

There are a number of circumstances under which a reporting entity should reassess embedded derivatives in a hybrid instrument. These include the following:

- A public offering of equity instruments by a previously non-public entity may cause an embedded conversion option related to that instrument to have the characteristic of net settlement because the underlying instrument is readily convertible to cash pursuant to ASC 815-10-15-119.
- The classification of an embedded derivative may no longer meet the ASC 815-10-15-74(a) scope exception because of a change in circumstances causing the embedded derivative, if freestanding, to be reclassified to a liability from equity under the guidance in ASC 815-40.
- A hybrid instrument may be legally modified in a manner that triggers a new basis event.

### 4.8.3 *Multiple embedded derivative features*

ASC 815-15-25-7 provides guidance on separating multiple embedded derivatives from a single hybrid instrument (e.g., a call option and a conversion option from a convertible debt security).

#### **ASC 815-15-25-7**

If a hybrid instrument contains more than one embedded derivative feature that would individually warrant separate accounting as a derivative instrument under paragraph 815-15-25-1, those embedded derivative features shall be bundled together as a single, compound embedded derivative that shall

then be bifurcated and accounted for separately from the host contract under this Subtopic unless a fair value election is made pursuant to paragraph 815-15-25-4.

Separating embedded derivatives from a hybrid instrument often becomes more complex when there is more than one embedded derivative. Embedded derivatives that are clearly and closely related (and as a result are not separated) may have an impact on the valuation of the embedded features that are separated. Those embedded derivatives should not be included in the compound embedded derivative instrument that is separated from the hybrid instrument. The host contract and the remaining embedded derivatives should be accounted for based on GAAP applicable to similar host contracts of that type.

Each embedded derivative should be analyzed separately; however, there may be circumstances in which it is reasonable to analyze multiple embedded derivatives together. Regardless of the approach taken, we believe that a reporting entity should (1) contemporaneously document the method selected and the factors considered in electing that method and (2) consistently apply that method over time.

Once a conclusion is reached that multiple derivative features must be separated, the value of the compound derivative must be based on one unit of account rather than determining separate fair value measurements for each embedded derivative component and adding them together. A separate unit of account method is inconsistent with ASC 815-15-25-7 and may produce an inaccurate valuation result, since multiple derivatives within a single hybrid instrument likely affect each other's fair values.

### Question DH 4-25

Can the sum of the fair values of a separated embedded derivative and the remaining host contract equal an amount that is greater or less than the fair value of the hybrid instrument as a whole?

#### *PwC response*

No. The sum of the values of the separated embedded derivatives and the remaining instrument should equal the value of the hybrid instrument as a whole.

## 4.9 *SOFR embedded derivative considerations*

LIBOR is one of the most commonly used reference rates in the global financial markets along with other interbank offered rates (IBORs). However, the United Kingdom's Financial Conduct Authority announced that it would no longer persuade or compel banks to submit LIBOR as of the end of 2021. In early 2021, the ICE Benchmark Administration (the administrator for LIBOR) finalized its decision to cease the publication of the one-week and two-month US dollar (USD) LIBOR settings as well as all non-USD LIBOR settings immediately following the LIBOR publication on December 31, 2021, and the remaining USD LIBOR settings immediately following the LIBOR publication on June 30, 2023. In the United States, the Alternative Reference Rates Committee (ARRC) convened by the Federal Reserve identified the Secured Overnight Financing Rate (SOFR) as its preferred alternative reference rate to US dollar LIBOR.

In response to the anticipated cessation of certain IBORS, industry working groups, such as the ARRC, have developed and are developing proposals for alternative reference rates (such as SOFR) and "fallback language" for reporting entities to insert as provisions into new or existing agreements that refer to rates expected to be replaced. The fallback language specifies how a replacement rate will be

identified (i.e., interest rate reset feature) once a trigger event (such as LIBOR no longer being quoted) occurs. Some more recent issuances of loans and securities are indexed to SOFR.

As discussed in DH 4.4, debt instruments are required to be assessed for embedded derivatives, which may require bifurcation from the host contract if the interest rate reset features are not considered to be clearly and closely related to the host contract.

#### 4.9.1 **ARRC SEC consultation on SOFR reset features**

In April 2020, the ARRC submitted a consultation request to the Office of the Chief Accountant of the SEC. The submission focused on whether certain interest rate reset features based on SOFR would be required to be bifurcated and accounted for as derivative instruments pursuant to ASC 815. The submission focused on three interest rate reset features for commercial products and one interest rate reset feature for consumer adjustable-rate mortgage loans that the ARRC has recommended industry participants adopt.

Figure DH 4-6 summarizes the interest rate reset features included in the submission.

**Figure DH 4-5**  
Summary of SOFR reset features

<b>Rate type</b>	<b>Description of the rate</b>
Term SOFR	Pays interest based on a forward-looking term SOFR for the corresponding tenor.
Compound SOFR in arrears	Pays interest based on a daily compounded average SOFR for the corresponding tenor implemented <i>in arrears</i> .
Compound SOFR in advance	Pays interest based on a daily compounded average SOFR for the corresponding tenor implemented <i>in advance</i> .
Average SOFR in advance	Pays interest based on the trailing 30 or 90 days SOFR simple or compound average, which resets every 6 months and is set 45 days before the beginning of the interest period.

A forward-looking term SOFR would reset periodically based on the tenor (e.g., three month SOFR would reset every 3 months). The interest rate paid on the payment date would be known prior to the beginning of the interest accrual period and remain fixed until the next reset date.

A compounded SOFR in arrears rate is determined at the end of an interest rate accrual period. For example, if an instrument indexed to compounded SOFR in arrears pays interest quarterly, the interest rate for the first calendar year quarter would be based on the daily compounded average of SOFR rates during the time period from January 1 through March 31.

Compounded SOFR in advance means the interest rate applied during the interest accrual period is based on the daily compounded average of SOFR during the prior interest accrual period. Since the rate is set “in advance,” the interest rate is determined at the beginning of the interest accrual period

and is fixed until the next reset date. For example, if an instrument indexed to compounded SOFR in advance pays interest quarterly, the interest rate for the third calendar quarter would be based on the daily compounded average of SOFR during the period from April 1 through June 30 (i.e., Q2).

Average SOFR in advance means the interest rate applied during the interest accrual period is based on either the daily simple or daily compounded average of SOFR from a specified period. However, the reset frequency and period over which the average is calculated may not match. Since the rate is set “in advance,” the interest rate is determined prior to the beginning of the interest accrual period and is fixed until the next reset date. For example, if an instrument (e.g., a consumer adjustable-rate mortgage) indexed to the daily simple average of SOFR in advance resets semi-annually on June 30, the new rate would set 45 days in advance of June 30 (i.e., April 15) based on the daily simple average of SOFR during the prior 90-day period (i.e., January 15 through April 15).

The SEC staff did not object to the ARRC’s conclusions that the SOFR interest rate reset features noted above are considered terms of the host contract and therefore do not represent embedded derivatives that require further analysis under ASC 815. The SEC staff’s response was limited to the fact patterns discussed above. We understand that the SEC’s view was based, in part, on the current expectation that the SOFR markets will develop to include interest rate reset features consistent with these features and therefore, these SOFR interest rate reset features would be considered terms of the host contract. However, as the SOFR market develops, changes in facts and circumstances could lead to different conclusions which may need to be reassessed.

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***Chapter 5:  
Introduction to hedging—  
updated July 2022***

## 5.1 Introduction to hedging chapter overview

A reporting entity may be exposed to a wide range of risks that can adversely impact its business. It may undertake risk management activities, including using derivatives, to reduce the impact of these risks. For certain risk management activities, reporting entities may elect hedge accounting. This chapter provides background on what hedge accounting is and how it works. It also provides examples of some common hedging relationships and describes the general documentation requirements. Finally, the chapter discusses economic hedges that are not designated under ASC 815.

Guidance specific to financial, nonfinancial, and foreign currency hedges are addressed in DH 6, DH 7, and DH 8, respectively. Assessing the effectiveness of hedging relationships is addressed in DH 9.

## 5.2 Introduction to hedge accounting

ASC 815 requires that all derivative instruments within its scope (including embedded derivatives that have been separated from their host contracts for accounting purposes) be recognized and subsequently measured on the balance sheet at fair value in accordance with ASC 820, *Fair Value Measurement*, regardless of whether the derivative is designated as a hedge or used for a purpose other than hedging.<sup>1</sup>

ASC 815's requirement to reflect changes in the fair value of a derivative in the income statement each period may create volatility. If certain qualifying criteria are met, reporting entities can use hedge accounting to reduce the earnings volatility that would otherwise result from recording changes in the fair value of the derivative in one period and the income statement impact of the hedged risk in another period. In other words, there is a matching in the income statement. (For fair value hedges, there may be some mismatch, as explained in DH 5.4.)

The accounting for changes in the fair value of a derivative for a given period will depend on the intended use of the derivative, whether it qualifies for hedge accounting, and what type of hedge it is.

ASC 815 divides hedges into categories with specific accounting guidance for each. That guidance determines how the matching is achieved. Figure DH 5-1 summarizes the treatment of a derivative that qualifies as a hedging instrument in each type of hedge.

### Figure DH 5-1

Recognition of hedging instruments by type of hedge

Type of hedge	Recognition of gains or losses on the hedging instrument	Guide reference
Cash flow hedge, including foreign currency cash flow hedge	In other comprehensive income (OCI) until the hedged transaction impacts earnings, at which time amounts reported in OCI will be recognized in earnings.	DH 5.3 DH 6.3 for hedges of financial items DH 7.3 for hedges of nonfinancial items

<sup>1</sup> There is a simplified approach available for certain private company hedging relationships that results in measurement of a derivative at settlement value if certain criteria are met. This is discussed in DH 11.

Type of hedge	Recognition of gains or losses on the hedging instrument	Guide reference
		DH 8.4 for hedges of foreign currency risk
Fair value hedge, including foreign currency fair value hedge	In earnings and offset by recognition of changes in fair value of the hedged item (for the hedged risk)	DH 5.4 DH 6.4 for hedges of financial items DH 7.4 for hedges of nonfinancial items DH 8.5 for hedges of foreign currency risk
Foreign currency hedge (except for a net investment hedge)	Depending on the hedging relationship, it may be either as a cash flow or fair value hedge and would be reflected accordingly	DH 5.5 DH 8 for hedges of foreign currency risk
Net investment hedge (special type of foreign currency hedge)	In cumulative translation adjustment until the hedged net investment is sold or liquidated	DH 5.5 DH 8.6 for hedges of foreign currency risk

### 5.2.1 Unit of account

The unit of account in ASC 815 is generally the individual derivative. Hedge accounting guidance requires a reporting entity to designate hedging relationships at a transaction level and limits the degree to which transactions can be grouped or aggregated. This may be different from how some reporting entities manage their risk mitigation activities, which may consider the risks of a portfolio or the net risk after offsetting certain positions.

## 5.3 Cash flow hedges

A cash flow hedge is used to manage variability in future expected cash flows and can be related to either a financial or nonfinancial item. This exposure could be the result of a recognized asset or liability (e.g., variable-rate debt) or a forecasted transaction (e.g., planned purchase of a commodity or forecasted interest payment). A cash flow hedge involves the use of a hedging instrument (a derivative) that essentially locks in the amount of a future cash inflow or outflow that would otherwise be impacted by movements in the market.

The primary purpose of cash flow hedge accounting is to link the income statement recognition of a hedging instrument and a hedged transaction, whose changes in cash flows are expected to offset each other. For a reporting entity to achieve this offsetting or “matching” of cash flows, the change in the fair value of the derivative (or in some cases, a portion of the change in fair value) designated as a cash flow hedge is initially reported as a component of other comprehensive income (OCI) and later reclassified into earnings in the same period(s) when the hedged transaction affects earnings (e.g., when a forecasted sale occurs). This reclassification is reported in the same income statement line item in which the hedged transaction is reported.

Example DH 5-1 illustrates a cash flow hedge used to offset the volatility in future interest payments.



## EXAMPLE DH 5-1

### Cash flow hedge of floating interest payments

DH Corp issues debt with a term of 10 years. The debt requires DH Corp to make monthly interest payments based on LIBOR. DH Corp manages the uncertainty associated with changes in LIBOR with a swap in which it pays a fixed rate and receives the LIBOR rate.



The LIBOR payments DH Corp receives from the swap counterparty (C) will offset the payments it needs to make on its debt (A), and as a result, the net of payments and receipts on the swap and the debt will be fixed (B).

How should DH Corp recognize the swap?

#### *Analysis*

If the swap qualifies as a cash flow hedge of the variability in the contractually specified interest rate, DH Corp would reflect the change in fair value of the swap in OCI and reclassify a portion to earnings when each applicable interest payment is made. The net result would reflect interest expense after consideration of the hedging transaction. In other words, “net” interest expense would reflect the fixed rate.

If the hedging relationship does not qualify for hedge accounting, DH Corp would reflect changes in the fair value of the swap in earnings each reporting period. This amount would include the changes in fair value of the swap stemming from estimated cash flows over the full 10-year term.

## 5.4 Fair value hedges

A fair value hedge is used to manage an exposure to changes in the fair value of a recognized asset or liability (e.g., fixed-rate debt) or an unrecognized firm commitment (e.g., the commitment to buy a fixed quantity of gold at a fixed price at a future date). A fair value hedge can be of either a financial or nonfinancial item, but fair value hedges of financial assets and liabilities are more common.

If a derivative qualifies as a fair value hedging instrument, the gain or loss on the portion of the derivative designated as a fair value hedge will still be recognized in earnings currently. However, a reporting entity would also recognize in earnings the changes in the value of the hedged asset, liability, or firm commitment due to the hedged risk through a basis adjustment to the hedged item. These two changes in fair value would offset one another in whole or in part and are reported in the same income statement line item as the hedged risk.

Example DH 5-2 illustrates a fair value hedge of a fixed-rate loan.

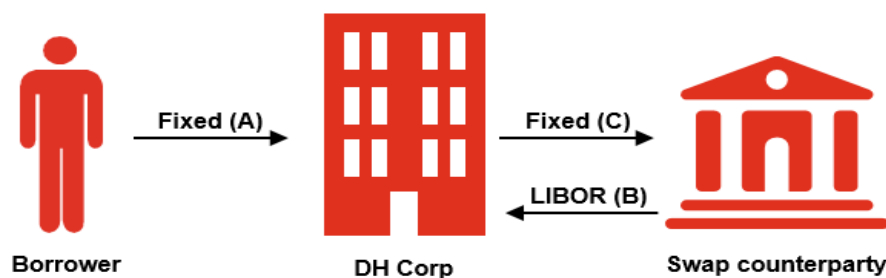
### EXAMPLE DH 5-2

#### Fair value hedge of a fixed-rate loan

DH Corp invests in a fixed-rate loan that will be due in 10 years. It will be entitled to monthly interest payments at a fixed rate.

As market interest rates move over the term of the loan, the fair value of the loan will change. DH Corp is hedging LIBOR as a benchmark interest rate (see DH 6.4.5.1). All else being equal, as LIBOR decreases, the value of its investment will increase because the contractual fixed interest payments will be above market. Similarly, all else being equal, if LIBOR increases, the value of its investment will decrease. DH Corp is exposed to the risk of changes in the benchmark interest rate (LIBOR).

To manage its exposure to changes in the fair value of its investment caused by changes in LIBOR, DH Corp enters into a receive-LIBOR and pay-fixed swap.



The fixed payments it receives from its investment (A) will be offset by the fixed payments it needs to make to the swap counterparty (C). Its net position will be the right to receive monthly LIBOR payments (B).

How should DH Corp recognize the swap?

#### *Analysis*

DH Corp would recognize the changes in fair value of the derivative directly in earnings in the periods in which they occur. If DH Corp qualifies and elects to apply fair value hedge accounting, it would record a basis adjustment on the debt equal to the change in fair value of the debt that is attributable to the changes in the benchmark interest rate (LIBOR). The changes in the value of the derivative and the changes in the value of the hedged item would be reported in interest income, offsetting each other to the extent the hedge is effective.

Had DH Corp not elected or qualified for hedge accounting, it would not record the basis adjustment on the investment, and there would be more volatility in earnings because the change in fair value of the derivative would not be offset.

## 5.5 Foreign currency hedges

A reporting entity hedging a foreign currency exposure may be able to pursue cash flow or fair value hedging strategies that would not otherwise be permitted for hedges of other risks. These include:

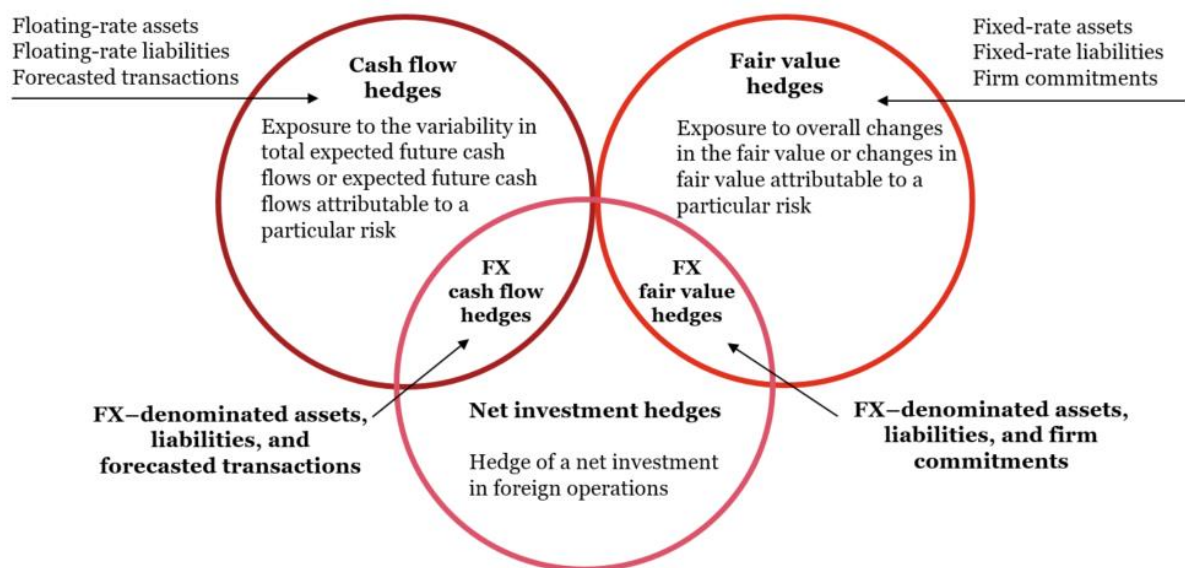
- applying hedge accounting to intercompany foreign-currency forecasted transactions (intercompany transactions are not otherwise permitted to be hedged, since they generally do not affect consolidated earnings),
- using intercompany foreign-exchange derivatives as hedging instruments in consolidated financial statements under certain limited circumstances (not permitted for other types of intercompany derivatives, such as interest rate derivatives), and
- hedging a net investment in a foreign operation.

A net investment hedge allows a reporting entity to hedge its investment in a foreign operation, which comprises the assets and liabilities of the foreign operation with dissimilar risks, as a single hedged item. This would not otherwise be permitted under cash flow or fair value hedge accounting guidance. The change in the fair value of the hedging instrument (or in some cases, a portion) designated as a net investment hedge is recognized in cumulative translation adjustment (CTA) within OCI and held there until the hedged net investment is sold or liquidated; at that point, the amount recognized in CTA is reclassified to earnings and reported in the same line item as the gain or loss on the liquidation of the net investment.

Figure DH 5-2 illustrates the overlap between fair value, cash flow, and foreign currency hedges, including a hedge of the net investment in a foreign operation.

**Figure DH 5-2**

Interaction between fair value, cash flow, and foreign currency hedges

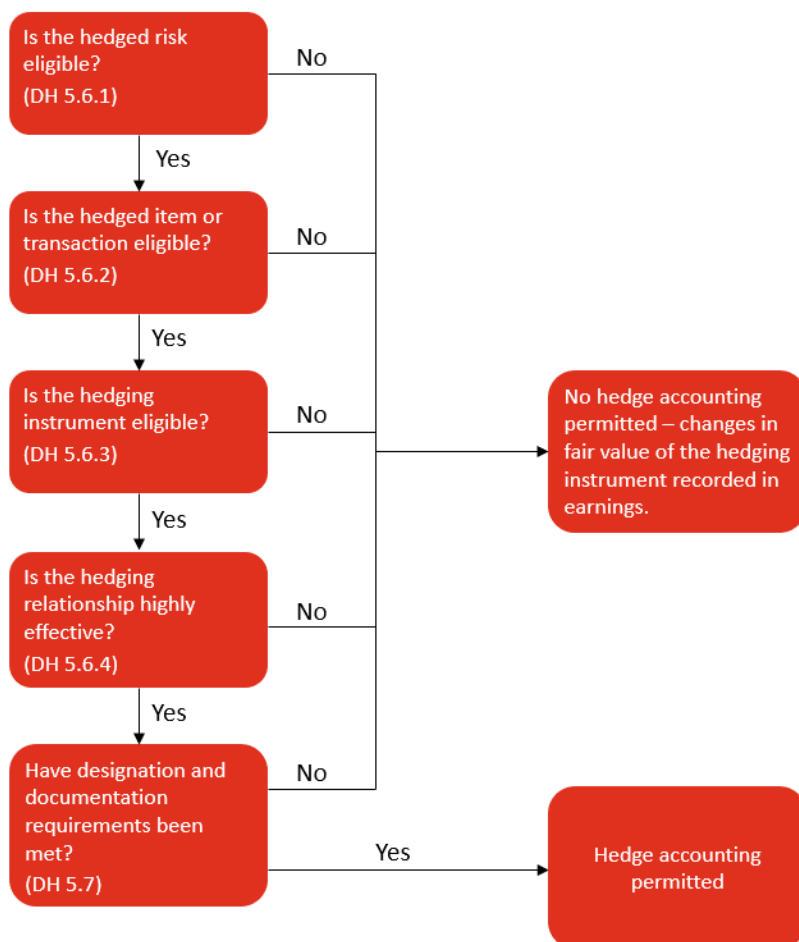


## 5.6 Hedge accounting requirements

Certain criteria need to be met to be able to elect hedge accounting. Figure DH 5-3 summarizes considerations in qualifying for hedge accounting. Detail on the eligibility criteria is included in DH 6.2 for hedges of financial items, DH 7.2 for hedges of nonfinancial items, and DH 8 for hedges of foreign currency risk. Effectiveness is addressed in DH 9.

### Figure DH 5-3

Considerations in qualifying for hedge accounting



### 5.6.1 Eligibility of the risk to be hedged

The risk associated with the hedged item or transaction must qualify for hedge accounting. The risks eligible to be hedged depend on whether it is a fair value, cash flow, or foreign exchange hedge and whether the hedged item is a financial or nonfinancial instrument.

The hedged risk must result in exposure to a change in fair values or cash flows that could affect reported earnings.

### **5.6.2 Eligibility of the hedged item**

Reporting entities can hedge certain recognized assets and liabilities, firm commitments, and forecasted transactions to reduce their exposure to changes in the fair value or cash flows associated with recognized balances and future transactions.

### **5.6.3 Eligibility of the hedging instrument**

Generally, only a derivative instrument as defined in ASC 815 can qualify as a hedging instrument, but there are limited circumstances (discussed in DH 8) related to foreign currency hedging when a nonderivative instrument is eligible to be used.

### **5.6.4 High effectiveness**

To qualify for hedge accounting, the hedging instrument must be highly effective at offsetting the specified risk during the period the hedge is designated. Effectiveness is addressed in DH 9.

## **5.7 Designation and initial documentation**

Once a reporting entity has determined that all of the criteria to obtain hedge accounting hedge have been met, it must formally designate and document the hedge to qualify for hedge accounting. Without contemporaneous documentation, a reporting entity would not be permitted to use hedge accounting. For public business entities and financial institutions, certain elements of the documentation are required at inception (DH 5.7.1), and others are due either at the end of the first quarter after the hedge is initiated or before the hedge is terminated (DH 9.2.3). Private company documentation is addressed in DH 11.

### **5.7.1 Documentation requirements at hedge inception — general**

At hedge inception, ASC 815-20-25-3(b) indicates that public business entities, public not-for-profit entities, and financial institutions need to document:

- The hedging relationship
- The risk management objective and strategy for undertaking the hedge, including identification of:
  - The hedging instrument
  - The hedged item or transaction
  - The nature of the risk being hedged
    - If the risk is interest rate risk, the benchmark interest rate or the contractually specified rate
    - If the risk is that of a contractually specified component in a nonfinancial item, the contractually specified component
  - The method that will be used to assess hedge effectiveness retrospectively and prospectively, whether qualitative or quantitative (see DH 9)

### 5.7.1.1 **Documentation for fair value hedges**

In addition to the general documentation requirements required at hedge inception, ASC 815-20-25-3(c) prescribes incremental documentation requirements for fair value hedges:

- A reasonable method for recognizing in earnings the gain or loss on a hedged firm commitment
- For a portfolio layer method hedging relationship, an analysis to support that the hedged item is anticipated to be outstanding as of the hedged item's assumed maturity date

We believe that the reporting entities should also contemporaneously document the method of calculating changes in fair value due to the hedged risk and the reporting entity's policy for amortizing basis adjustments. See DH 6.3.1.2 and 7.2.1.3.

### 5.7.1.2 **Documentation for cash flow hedges**

In addition to the general documentation requirements at hedge inception, ASC 815-20-25-3(d) prescribes incremental documentation requirements for cash flow hedges:

For a cash flow hedge of a forecasted transaction, the following must be documented:

- The date or period when the forecasted transaction is expected to occur
- The specific nature of asset or liability involved (if any)
- Either (1) the expected currency amount for foreign currency hedges or (2) the quantity of the forecasted transaction for hedges of other risks
- The current price of a forecasted transaction (to satisfy the criterion in paragraph ASC 815-20-25-75(b) for offsetting cash flows)
- If the hedged risk is the variability in cash flows attributable to changes in a contractually specified component in a forecasted purchase or sale of a nonfinancial asset, the contractually specified component
- If the hedged risk is the variability in cash flows attributable to changes in a contractually specified interest rate for forecasted interest receipts or payments on a variable-rate financial asset or liability, the contractually specified interest rate

If a forecasted sale or purchase is being hedged for price risk, the hedged transaction should not be specified (1) solely in terms of expected currency amounts or (2) as a percentage of sales or purchases during a period.

As discussed in DH 6.3.3.4 for hedges of financial items and 7.3.2.1 for hedges of nonfinancial items, the hedged forecasted transaction needs to be described with sufficient specificity so that when a transaction occurs, it is clear whether that transaction is or is not the hedged transaction.

See DH 11 for private company documentation requirements. Documentation of hedge effectiveness is discussed in DH 9.

**Question DH 5-1**

Can a derivative be designated retroactively as a hedge?

***PwC response***

No. Designation of a derivative as a hedge should be consistent with management's intent; therefore, the designation must take effect prospectively, beginning on the date that management has indicated (and documented) that the derivative is intended to serve as a hedging instrument. Absent this requirement, a reporting entity could retroactively identify hedged items, transactions, or methods of measuring effectiveness to achieve a desired accounting result.

## **5.8 Economic hedging**

The qualifying criteria for hedge accounting are rigorous and require a commitment of time and resources. To avoid the cost and the risk of misapplication of the rules, reporting entities may choose to not elect hedge accounting even though they have a risk management strategy that involves entering into derivatives.

Economic hedging refers to the use of a derivative that mitigates risk without applying hedge accounting. An entity choosing to treat a transaction as an "economic" rather than an "accounting" hedge will bear the volatility of changes in the fair value of the derivative instrument in its income statement.

### **5.8.1 Undesignated hedged item is remeasured through earnings**

If the risk that is economically hedged pertains to an item that is reported at fair value through earnings based on other applicable GAAP, the effect of measuring the derivative and the hedged item will offset in the income statement (to the extent effective). This accounting is common for instruments such as debt securities classified as trading securities and other balances that are recorded at fair value under GAAP. In these cases, hedge accounting would generally not be permitted. It is also common for economic hedges of the foreign exchange risk on foreign currency-denominated monetary assets and liabilities, which are measured at the end of each reporting period using the exchange rate at that date with the resulting transaction gains and losses recorded in current earnings.

ASC 815-15-25-4 and ASC 825-10-15-4 provide an elective fair value option for certain hybrid financial instruments and certain financial assets and liabilities, respectively. Reporting entities may wish to elect fair value treatment for eligible items to offset the changes in fair value of the derivative instrument serving as an economic hedge.

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***Chapter 6:***

***Hedges of financial assets and liabilities—updated July 2022***



## 6.1 *Hedges of financial assets and liabilities overview*

This chapter addresses relevant considerations in the application of hedge accounting for financial instruments under ASC 815, *Derivatives and Hedging*. This chapter assumes that an entity has adopted ASU 2022-01.

This chapter disaggregates hedges of financial instruments based on whether the coupons are fixed or variable rate and provides the eligibility criteria and recognition guidance for each type of hedge. This chapter also addresses the portfolio layer method for hedges of closed portfolios of certain financial assets. Finally, it addresses the interaction between the application of hedge accounting and impairment for both fixed-rate and variable-rate financial instruments.

The concepts within this chapter should be applied in conjunction with information in other chapters in this guide, including:

- Introduction to hedge accounting and documentation requirements for all hedges (DH 5)
- The application of hedge accounting to foreign-currency-denominated assets and liabilities or transactions and hedges of net investments (DH 8)
- Effectiveness assessments (DH 9)
- Discontinuance of hedge accounting (DH 10)

## 6.2 *Eligibility criteria — hedges of financial assets and liabilities*

ASC 815 prescribes eligibility criteria for all hedges. The following sections address the general criteria applicable to all hedges of financial instruments. DH 6.3.2 through DH 6.3.3.4 and DH 6.4.3 through DH 6.4.3.8 address the requirements specific to cash flow and fair value hedges, respectively. ASC 815-20-25-43(b) details items prohibited from being the hedged item or transaction in either a fair value or cash flow hedge. For eligible items in a net investment hedge, refer to DH 8.

### **Excerpt from ASC 815-20-25-43**

b. With respect to both fair value hedges and cash flow hedges:

1. An investment accounted for by the equity method of accounting in accordance with the requirements of Subtopic 323-10 or in accordance with the requirements of Topic 321
2. A noncontrolling interest in one of more consolidated subsidiaries
3. Transactions with stockholders as stockholders, such as either of the following:
  - i. Projected purchases of treasury stock
  - ii. Payments of dividends.

4. Intra-entity transactions (except for foreign-currency-denominated forecasted intra-entity transactions) between entities included in consolidated financial statements
5. The price of stock expected to be issued pursuant to a stock option plan for which recognized compensation expense is not based on changes in stock prices after the date of grant.

### **6.2.1 Eligibility of the risk to be hedged**

The risk associated with the hedged item or transaction must qualify for hedge accounting. The basic risks reporting entities may address when designating hedging transactions are:

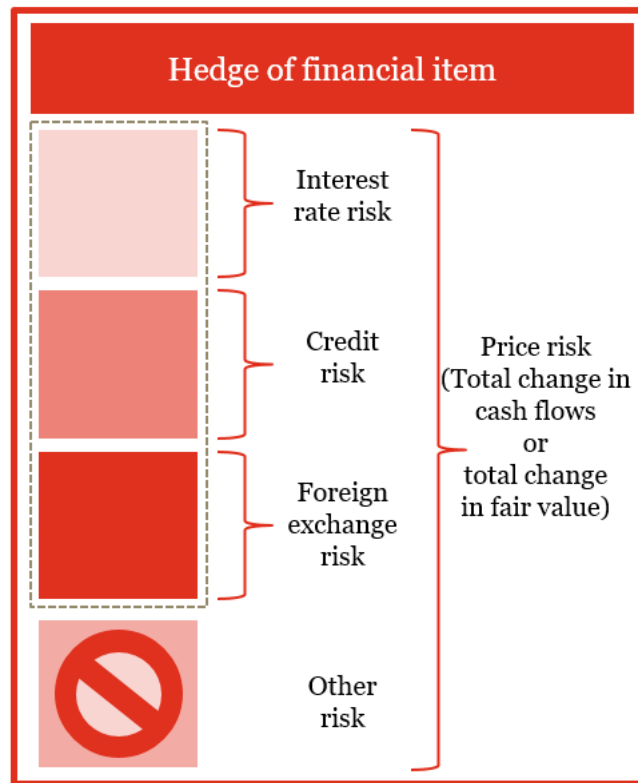
- Price risk (the total change in fair value or cash flows)
- Interest rate risk
- Foreign exchange risk
- Credit risk

ASC 815 focuses on these four risks because a change in the price associated with one of those risks will ordinarily have a direct effect on the fair value of an asset or liability in a determinable or predictable manner. The hedged risk must result in exposure to a change in fair values or cash flows that could affect reported earnings, which is a requirement for all hedge accounting relationships.

Figure DH 6-1 illustrates the risks eligible for hedge accounting in a financial instrument.

**Figure DH 6-1**

Four eligible hedged risks in financial instruments



In practice, credit risk has proven to be difficult for reporting entities to designate within an effective hedging relationship. The terms of hedging instruments available in the marketplace generally do not correspond precisely to the default risk of an individual issuer or specific instrument, and the basis difference between the credit risk in the derivative market and the credit spread of the hedged item may create a mismatch between the hedged item and the hedging instrument. For example, a downgrade in the credit rating of an individual security may trigger a payment under a credit derivative but may not offset the expected variability in cash flows of the hedged item to the same degree.

Figure DH 6-2 details different financial instruments and whether they may be hedged for each of the four eligible risks.

**Figure DH 6-2**  
Eligibility of financial instruments as hedged items

Instrument type	Recognition model	Eligible hedged risks			
		Interest rate	Foreign exchange	Credit	Market price
Loans	Held for investment	Yes	Yes	Yes	Yes
	Held for sale	Yes	Yes	Yes	Yes
	Fair value option <sup>1</sup>	No	No	No	No
Debt securities	Available for sale	Yes	Yes	Yes	Yes
	Held to maturity	No	Yes	Yes	No
	Trading <sup>1</sup>	No	No	No	No
Equity securities accounted for under ASC 321	Fair value through earnings <sup>1</sup>	No	No	No	No
	Measurement alternative	No	No	No	No
Liabilities and other assets	Amortized cost	Yes	Yes	Yes	Yes
	Fair value option <sup>1</sup>	No	No	No	No

<sup>1</sup> An asset or liability that is measured using the fair value option in ASC 825-10 or ASC 815-15, a debt security that is classified as trading, or an equity security not measured using the measurement alternative in ASC 321-10-35-2 do not qualify as hedged items under ASC 815 since the instrument is remeasured with changes in fair value reported currently in earnings.

### 6.2.1.1 Component hedging

ASC 815 allows reporting entities to designate as being hedged certain portions, or components, of the total risk within the hedged item. In these situations, when determining how effective a hedging relationship is, a reporting entity may compare the changes in the value (or cash flows) of the derivative to just the changes in the component that it is managing, rather than needing to compare the derivative to the entire risk exposure, thereby achieving an accounting outcome that better reflects the risk management objective of the arrangement. For example, a reporting entity may invest in fixed-rate debt (i.e., it is the lender). As the market interest rate increases, the value of the investment decreases. The value of the investment may also decrease for other reasons (e.g., as the creditworthiness of the issuer declines). Rather than managing the total risk associated with all changes in the value of the debt, including creditworthiness and other factors, the reporting entity may wish to manage just the component of the risk driven by changes in the benchmark interest rate, and may enter into a derivative linked to just that risk.

For variable-rate instruments, the component risk can be the change in cash flows due to the contractually specified interest rate. Rather than managing the total risk associated with all changes in the cash flows on a hedged item, the reporting entity may wish to manage just the component of the risk driven by changes in the contractually specified interest rate, and may enter into a derivative linked to just that risk.

Hedging interest rate risk in variable-rate instruments and fixed-rate instruments is addressed in DH 6.3.5 and DH 6.4.5, respectively.

### **6.2.1.2 Hedging multiple risks**

ASC 815 requires each designated risk to be accounted for separately. Reporting entities most commonly hedge multiple risks in financial instruments when they want to mitigate the impact of fluctuations in both foreign exchange rates and interest rates, as discussed in DH 8.2.1.2. ASC 815 permits a reporting entity to simultaneously hedge the fair value and cash flow exposures of a financial instrument. Since ASC 815 requires each designated risk to be accounted for separately, simultaneous hedging of the fair value and cash flow exposures associated with different risks of a financial instrument is not precluded. As originally described in paragraph 423 of FAS 133, *Accounting for Derivative Instruments and Hedging Activities*, which was codified in ASC 815, in certain circumstances it would be reasonable to hedge an existing asset or liability for a fair value exposure to one risk and a cash flow exposure to another risk. For example, a reporting entity might decide to hedge both the interest rate risk associated with a variable-rate financial asset (i.e., a cash flow hedge) and the credit risk associated with that same asset (i.e., a fair value hedge). However, simultaneous fair value and cash flow hedge accounting is not permitted for simultaneous hedges of the same risk because there is only one earnings exposure. Each risk can be hedged only once.

Once the change in the value of a hedged item that is attributable to a particular risk has been offset by the change in the value of a hedging derivative, another derivative cannot be an effective hedge of the same risk. However, if a reporting entity were to hedge only 75% of a designated risk with one derivative, it could use a second derivative to hedge the remaining 25% of the designated risk.

### **6.2.2 Eligibility of item or transaction to be hedged**

Reporting entities can hedge a single recognized asset or liability (fair value or cash flow hedge), a firm commitment (fair value hedge), or a forecasted transaction (cash flow hedge) or a proportion of any one of these to reduce their exposure to changes in the fair value or cash flows associated with recognized balances and future transactions. Under a portfolio layer method hedge strategy, reporting entities can hedge a closed portfolio of financial assets. Refer to DH 6.5 for further discussion specific to portfolio layer method hedges.

There are certain general principles regarding what is eligible to be a hedged item, as discussed in DH 6.2, and other criteria that are dependent on the type of hedge (cash flow, fair value, or foreign currency), as discussed in DH 6.3.3, DH 6.4.3, and DH 8, respectively.

#### **6.2.2.1 Equity investments/noncontrolling interests**

ASC 815-20-25-43(b)(1) precludes an investment accounted for under the equity method under ASC 323, *Investments—Equity Method and Joint Ventures*, or under ASC 321, *Investments—Equity Securities*, from being a hedged item. The Board explained in the Basis for Conclusions to FAS 133 that hedge accounting for an equity method investment conflicts with the accounting in ASC 323.

**Excerpt from FAS 133, Basis for Conclusions, paragraph 455**

Under the equity method of accounting, the investor generally records its share of the investee's earnings or losses from its investment. It does not account for changes in the price of the common stock, which would become part of the basis of an equity method investment under fair value hedge accounting. Changes in the earnings of an equity method investee presumably would affect the fair value of its common stock. Applying fair value hedge accounting to an equity method investment thus could result in some amount of double counting of the investor's share of the investee's earnings.

In addition to the conceptual issues, the Board thought it might be difficult to develop a method of implementing hedge accounting for equity method investments and that the results of any method may be difficult for users of financial statements to understand. An exception applies to a net investment hedge of an equity investment in a foreign operation (see DH 8). ASC 815-20-25-43(b)(1) also precludes any investment accounted for under ASC 321 as being a hedged item in a cash flow or fair value hedge.

For reasons similar to those related to equity method investments, ASC 815-20-25-43(b)(2) precludes a noncontrolling interest in a consolidated subsidiary from being a hedged item and ASC 815-20-25-43(c)(5) states that a hedged item in a fair value hedge cannot be a firm commitment to enter into a business combination or to acquire or dispose of a subsidiary, a noncontrolling interest, or an equity method investee.

As an alternative to hedge accounting, ASC 825-10-15-4(a) allows reporting entities to elect the fair value option for eligible financial assets, including equity method investments.

**6.2.2.2 *Dynamic hedging strategies***

The guidance permits use of a dynamic hedging strategy, either (1) increasing or decreasing the quantity of hedging instruments necessary to achieve the hedging objective or (2) changing the percentage of the hedged item that is designated. For example, a reporting entity may hedge the interest rate risk on 80% of a debt issuance and adjust the hedge strategy so that 100% of it is hedged in the following period. However, the reporting entity could never designate more than 100% of the hedged item. The use of dynamic hedging strategies may require dedesignation and redesignation of hedging relationships and may create additional complexities.

**6.2.3 *Eligibility of instruments used to hedge***

Generally, only a derivative instrument as defined in ASC 815 can qualify as a hedging instrument, but there are limited circumstances discussed in DH 8 related to foreign currency hedging when a nonderivative instrument is eligible to be used.

**6.2.3.1 *Using proportions of derivatives***

ASC 815 indicates that a reporting entity may designate all or a proportion of a derivative or a group of derivatives as the hedging instrument in one or more hedging relationships. ASC 815-20-25-45 requires that the proportion of the derivative being designated be expressed as a percentage of the entire derivative notional amount over the entire term so that the profile of risk exposures in the hedging portion of the derivative will be the same as that for the entire derivative.

In some instances, that percentage may not be *explicitly* documented. If (1) the designated proportion of the notional amount and (2) the total notional amount of the derivative hedging instrument are documented in such a way that the percentage can be calculated, then the hedge designation would meet the requirement. We believe that the term “expressed as a percentage” was meant to emphasize that the proportion of the derivative designated as the hedging instrument needs to have the same profile of risk exposures as that of the entire derivative. For example, consider two \$1 million interest-bearing assets being hedged with a single derivative that has a \$2 million notional amount. Documentation that identifies the first asset designated as being hedged with \$1 million of the derivative and the second asset designated as being hedged with \$1 million of the derivative would comply with the requirements because there is no uncertainty about what is being hedged (i.e., it is clear what proportion of the \$2 million derivative is intended to hedge each asset).

If different portions of the same derivative are in separate hedging relationships, each one would have to be assessed separately to determine whether it meets the requirements for hedge accounting. For example, if a reporting entity has a ten-year interest rate swap with a notional amount of \$500 million, it could designate 20% of the swap as a hedge of \$100 million ten-year, fixed-rate debt and designate the remaining 80% of the swap as a hedge of another \$400 million ten-year, fixed-rate debt, if all of the other qualifying criteria are satisfied. The remaining 80% of the swap is not required to be designated in a hedging relationship, and may be recognized at fair value through earnings as a derivative with no hedge designation.

### **6.2.3.2 *Separating a derivative into components***

Separating a derivative into components representing different risks so that a component can be designated as a hedging instrument is not permitted. For example, if a reporting entity were to enter into a cross-currency interest rate derivative (e.g., one party receives a fixed amount of foreign currency and pays a variable amount denominated in US dollars), the entity would not be permitted to separate the interest rate swap component to solely hedge interest rate risk. This would not be a proportion of a total derivative. However, the reporting entity is permitted to designate the cross-currency swap as a fair value hedge of both the interest rate and foreign-currency risk in foreign-currency-denominated debt. See DH 8.

### **6.2.3.3 *Using multiple derivatives as a hedging instrument***

Multiple derivatives, whether entered into at the same time or at different times, may be designated as a hedge of the same item. ASC 815-20-25-45 clarifies that two or more derivatives may be viewed in combination and jointly designated as the hedging instrument. For example, a reporting entity can designate two purchased options as a hedge of the same hedged item even if the options are acquired at different times. Multiple derivatives can be used to hedge the same risk or different risks, provided that all of the other hedge criteria are met and there is no duplicate hedging of the same risk.

#### **Question DH 6-1**

DH Corp has variable-rate debt that is based on the prime rate and would like to hedge the variability in the interest payments, but it would be more expensive to obtain a prime-rate-to-fixed-rate swap of the appropriate term. Could DH Corp enter into (1) a prime-to-LIBOR (pay-LIBOR, receive-prime) interest rate basis swap and (2) a LIBOR-to-fixed (pay-fixed, receive-LIBOR) interest rate swap and qualify for cash flow hedge accounting?

***PwC response***

Yes, assuming that DH Corp satisfies all of the hedge criteria. ASC 815-20-25-45 clarifies that two or more derivatives or proportions of derivatives may be viewed in combination and jointly designated as the hedging instrument. Accordingly, the two swaps jointly designated would achieve DH Corp's objective of hedging the variability of its contractually specified interest payment cash flows on the prime-based debt.

**6.2.3.4 *Written options as hedging instruments***

A written option requires the seller (writer) of the option to fulfill the obligation of the contract should the purchaser (holder) choose to exercise it. In return for providing that option to the holder, the writer receives a premium from the holder. For example, a written call option provides the purchaser of that option the right to call, or buy the commodity, financial or equity instrument at a price during or at a time specified in the contract. The writer would be required to honor that call. As a result, written options provide the writer with the possibility of unlimited loss, but limit any gain to the amount of the premium received. In other words, written options can have the opposite effect of what a hedge is intended to accomplish. Thus, they are generally not permitted to be used as hedging instruments.

However, there are circumstances when a written option may be a more cost-effective strategy for entities than using other instruments—for example, when used to hedge the call option feature in fixed-rate debt rather than issuing fixed-rate debt that is not callable. If a reporting entity wishes to use a written option as a hedging instrument, the instrument must pass the “written option test.” The test includes a requirement to ensure that, when considering the written option in combination with the hedged item, the “upside” potential (for gains or favorable cash flows) is equal to or greater than the “downside” potential (for losses or unfavorable cash flows), as described in ASC 815-20-25-94.

The written option test applies specifically to recognized assets, liabilities, or unrecognized firm commitments. As a result, we do not believe that a written option (or a net written option) can qualify as a hedging instrument in a hedge of a forecasted transaction.

**ASC 815-20-25-94**

If a written option is designated as hedging a recognized asset or liability or an unrecognized firm commitment (if a fair value hedge) or the variability in cash flows for a recognized asset or liability or an unrecognized firm commitment (if a cash flow hedge), the combination of the hedged item and the written option provides either of the following:

- a. At least as much potential for gains as a result of a favorable change in the fair value of the combined instruments (that is, the written option and the hedged item, such as an embedded purchased option) as exposure to losses from an unfavorable change in their combined fair value (if a fair value hedge)
- b. At least as much potential for favorable cash flows as exposure to unfavorable cash flows (if a cash flow hedge).

The combined position's relative potential for gains and losses is only evaluated at hedge inception. It is based on the effect of a change in price, and the possibility for upside should be as great as the possibility of downside for *all* possible price changes.



### ***Excluding time value from the written option test***

ASC 815-20-25-96 allows a reporting entity to exclude the time value of a written option from the written option test, provided that the entity also specifies that it will base its assessment of effectiveness only on the changes in the option's intrinsic value.

### ***Covered calls***

ASC 815-20-55-45 precludes hedge accounting for "covered call" strategies. In writing a covered call option, a reporting entity provides a counterparty with the option of purchasing an underlying (that the entity owns) at a certain strike price. In some cases, the reporting entity may then purchase an option to buy the same underlying at a higher strike price. A reporting entity may enter into this type of structure to generate proceeds by selling some, but not all, of the upside potential of the securities that it owns. Under such a strategy, the net written option does not qualify for hedge accounting because the potential gain is less than the potential loss.

### ***Combination of options***

Hedging strategies can include various combinations of instruments (e.g., forward contracts with written options, swaps with written caps, or combinations of one or more written and purchased options). A derivative that results from combining a written option and a non-option derivative is considered a written option. Reporting entities considering using a combination of instruments that include a written option as a hedging derivative should evaluate whether they have, in effect, a net written option, and therefore, are required to meet and document the results of the written option test.

ASC 815-20-25-89 outlines certain requirements for a combination of options to qualify as a net purchased option or zero-cost collar, in which case the written option test is not required.

#### **ASC 815-20-25-89**

For a combination of options in which the strike price and the notional amount in both the written component and the purchased option component remain constant over the life of the respective component, that combination of options would be considered a net purchased option or a zero cost collar (that is, the combination shall not be considered a net written option subject to the requirements of 815-20-25-94) provided all of the following conditions are met:

- a. No net premium is received.
- b. The components of the combination of options are based on the same underlying.
- c. The components of the combination of options have the same maturity date.
- d. The notional amount of the written option component is not greater than the notional amount of the purchased option component.

ASC 815-20-25-89 applies only when the strike price and the notional amount in both the written and purchased option components of a combination of options remain constant over the life of the respective components. If either or both the strike price or notional amounts change, the assessment

to determine whether the combination of options is a written option is evaluated with respect to each date that either the strike price or the notional amount changes.

If a combination of options fails to meet all of the criteria in ASC 815-20-25-89, it cannot be considered a net purchased option and is subject to the written option test. For example, if a collar includes a written floor based on the three-month Treasury rate and a purchased cap based on three-month LIBOR, the underlyings of the components are not the same, and therefore, the collar would be considered a net written option subject to the written option test.

A combination of options entered into contemporaneously is considered a written option if either at inception or over the life of the options a net premium is received in cash or as a favorable rate or other term. Further, a derivative that results from combining a written option and any other non-option derivative is a written option.

Under certain circumstances, a reporting entity that has combined two options might be able to satisfy the requirement that the hedge provides as much potential for gains as it does for losses. However, the entity would not be permitted to apply hedge accounting to the combined position unless it were to satisfy this requirement for *all* possible price changes.

### ***Redesignation of a combination of options***

When redesignating a hedging relationship involving a zero-cost collar or a combination of options that was considered a net purchased option, a reporting entity needs to re-assess whether the combination of options is a net purchased option or a net written option. The new assessment is based on the current fair values. For example, assume a reporting entity has a collar that at its inception was not considered a net written option and was designated in a hedging relationship. The reporting entity later dedesignates the original hedging relationship and wants to designate the existing collar in a new hedging relationship. In this situation, if the existing collar is deemed a net written option on the date of redesignation, the reporting entity would need to perform the written option test at the inception of the new hedging relationship based on the economics of the collar on that date.

### **Question DH 6-2**

If a noncancellable swap with no embedded options has an initial value of \$100,000, would it be considered a written option?

#### ***PwC response***

No. The \$100,000 received at the initiation of the contract is not a premium received for a written option. The swap contract does not contain an option element. Rather, the initial value of \$100,000 is an indication that the contract is off-market. The counterparty to the contract is paying for this initial value and expects to be repaid through future periodic settlements.

In essence, the swap contract contains a financing element. If it is more than insignificant, a reporting entity needs to consider ASC 815-10-45-11 through ASC 815-10-45-15. If the \$100,000 financing element is significant enough to disqualify the entire swap contract from meeting the definition of a derivative, then the contract should be accounted as a debt host and evaluated for whether it contains an embedded derivative that should be bifurcated (see DH 4 for a discussion of embedded derivatives).

### 6.2.3.5 *Items ineligible as hedging instruments*

In addition to the guidance in DH 6.2.3 through DH 6.2.3.4, ASC 815-20-25-71(a)(3) through ASC 815-20-25-71(a)(5) list certain instruments ineligible for designation as the hedging instrument in any hedge.

- A hybrid financial instrument that is measured in its entirety at fair value under the fair value option
- A hybrid financial instrument that would have an embedded derivative separated from it but it cannot be reliably measured
- Any of the individual components of a compound embedded derivative that is separated from the host contract

## 6.3 *Hedging variable-rate financial instruments*

Cash flow hedges of variable-rate debt continue to be one of the most common hedging strategies. One reason is that they give a reporting entity the ability to separate its funding and liquidity management from its interest rate risk management, which helps it optimize the capital funding process. Second, the overall cost of funding can be reduced because derivatives help better match investors' demand for investment types with the funding needs of issuing entities.

### 6.3.1 *Accounting for cash flow hedges*

In a qualifying cash flow hedge, a derivative's entire gain or loss included in the assessment of effectiveness is recorded through OCI. ASC 815-30-35-3(b) indicates that the amounts in AOCI related to the fair value changes in the hedging instrument are released into earnings when the hedged item affects earnings. This is to align the earnings impact of the hedged item and the hedging instrument.

#### **Excerpt from ASC 815-30-35-3(b)**

b. Amounts in accumulated other comprehensive income related to the derivative designated as a hedging instrument included in the assessment of hedge effectiveness are reclassified to earnings in the same period or periods during which the hedged forecasted transaction affects earnings in accordance with paragraphs 815-30-35-38 through 35-41 and presented in the same income statement line item as the earnings effect of the hedged item in accordance with paragraph 815-20-45-1A. The balance in accumulated other comprehensive income associated with the hedged transaction shall be the cumulative gain or loss on the derivative instrument from inception of the hedge less all of the following:

1. [Subparagraph superseded by Accounting Standards Update No. 2017-12].
  - 1a. The derivative instrument's gains or losses previously reclassified from accumulated other comprehensive income into earnings pursuant to paragraphs 815-30-35-38 through 35-41.
  - 1b. The cumulative amount amortized to earnings related to excluded components accounted for through an amortization approach in accordance with paragraph 815-20-25-83A.

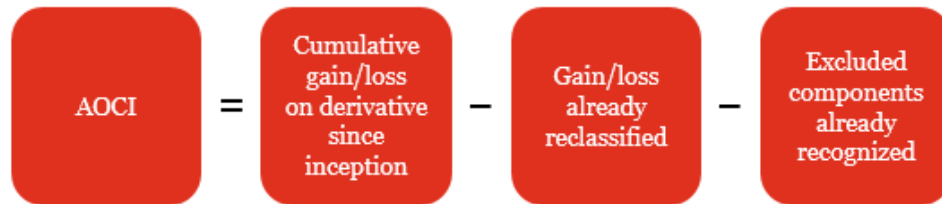
- 1c. The cumulative change in fair value of an excluded component for which changes in fair value are recorded currently in earnings in accordance with paragraph 815-20-25-83B.
2. [Subparagraph superseded by Accounting Standards Update No. 2017-12].

In determining how to reclassify amounts in AOCI into earnings, reporting entities should consider both the amount and timing of reclassification. ASC 815-30-35-3(b) notes that the amount of AOCI should equal the cumulative gain or loss on the hedging instrument since hedge inception, less (1) previously reclassified gains and losses, and (2) amounts related to excluded components already recognized in earnings.

Figure DH 6-3 illustrates what the balance in AOCI represents.

### Figure DH 6-3

Components related to hedging in AOCI



When an economic hedging relationship continues even though hedge accounting was not permitted in a specific period (e.g., because the retrospective effectiveness assessment for that period indicated that the relationship had not been highly effective), the cumulative gains or losses under ASC 815-30-35-3(b) excludes the gains or losses occurring during that period. That situation may arise if the reporting entity had previously determined that the hedging relationship would be highly effective on a prospective basis.

The amounts deferred in AOCI related to the fair value changes in the hedging instrument are generally released into the reporting entity's earnings when the hedged item affects earnings.

#### Excerpt from ASC 815-30-35-38

Amounts in accumulated other comprehensive income that are included in the assessment of effectiveness shall be reclassified into earnings in the same period or periods during which the hedged forecasted transaction affects earnings (for example, when a forecasted sale actually occurs) and shall be presented in the same income statement line item as the earnings effect of the hedged item in accordance with paragraph 815-20-45-1A.

The timing of reclassification may also vary depending on the nature of the hedged item. Reporting entities need to consider when the hedged item will affect earnings when determining the appropriate timing to release the amounts in AOCI.

### 6.3.1.1 **Reclassifying AOCI to earnings for hedges involving options**

When a purchased option (including a combination of options that comprise either a net purchased option or a zero-cost collar) is used as a hedging instrument and a reporting entity assesses effectiveness using the total change in the option's cash flows, a question arises as to how to reclassify amounts in AOCI to earnings.

ASC 815-30-35-41B explains that the fair value of a cap at inception of a hedge relationship that is hedging multiple payments should be allocated to the respective caplets at inception of the hedging relationship. Further, each respective allocated fair value amount should be reclassified to earnings from AOCI when each of the hedge transactions impacts earnings. This is referred to as the "caplet" method. It applies to a purchased option regardless of whether it is at the money, in the money, or out of the money at hedge inception.

#### **Excerpt from 815-30-35-41B**

For example, the fair value of a single cap at the inception of a hedging relationship of interest rate risk on variable-rate debt with quarterly interest payments over the next two years should be allocated to the respective caplets within the single cap on a fair value basis at the inception of the hedging relationship. The change in each respective allocated fair value amount should be reclassified out of accumulated other comprehensive income into earnings when each of the hedged forecasted transactions (the eight interest payments) affects earnings. Because the amount in accumulated other comprehensive income is a net amount composed of both derivative instrument gains and derivative instrument losses, the change in the respective allocated fair value amount for an individual caplet that is reclassified out of accumulated other comprehensive income into earnings may possibly be greater than the net amount in accumulated other comprehensive income.

The caplet method is an appropriate way to reclassify the amounts out of AOCI when the entire change in cash flows of an option is used to assess effectiveness, but not when time value is excluded, as discussed in *Amortizing time value in hedges of interest rate risk* in DH 6.3.1.2.

Assessing effectiveness of a hedging relationship based on the entire change in the option's cash flows (i.e., focusing on the terminal value, the expected future pay-off amount at maturity) is discussed in DH 9.6.

### 6.3.1.2 **Excluded components**

As part of its risk management strategy, a reporting entity may exclude certain components of a hedging instrument's change in fair value from the assessment of hedge effectiveness. ASC 815-20-25-82 indicates that these include:

- *For forwards and futures contracts (and swaps) when the spot method is used:*
  - The change in the fair value of the contract related to the changes in the difference between the spot price and the forward or futures price (sometimes referred to as forward points)

- For currency swaps (designated in fair value and cash flow hedges):
  - The portion of the change in fair value of a currency swap attributable to a cross-currency basis spread
- For options (including eligible collars):
  - Time value (the difference between the change in fair value and the change in undiscounted intrinsic value)
  - Volatility value (the difference between the change in fair value and the change in discounted intrinsic or minimum value)
  - The following components of time value:
    - Passage of time (theta)
    - Volatility (vega)
    - Interest rates (rho)

A reporting entity must elect a policy for recognizing excluded components that is consistently applied for similar hedges. There are two choices for recognition: an amortization approach (ASC 815-20-25-83A) or a mark-to-market approach (ASC 815-20-25-83B). The amortization approach is the default method, and the mark-to-market approach is the alternative.

**Excerpt from ASC 815-20-25-83A**

For fair value and cash flow hedges, the initial value of the component excluded from the assessment of effectiveness shall be recognized in earnings using a systematic and rational method *over the life of the hedging instrument*. Any difference between the change in fair value of the excluded component and amounts recognized in earnings under that systematic and rational method shall be recognized in other comprehensive income. [Emphasis added.]

**Excerpt from ASC 815-20-25-83B**

For fair value and cash flow hedges, an entity alternatively may elect to record changes in the fair value of the excluded component currently in earnings.

The initial value attributable to an excluded component depends on the type of derivative. When the time value of an option contract is the excluded component, the time value generally is the option premium paid (provided the option is at or out of the money at inception). The value attributable to forward points in a forward contract is the undiscounted difference between the market forward rate and the spot rate. The fair values of the excluded components change over time as markets change but must converge to zero by the maturity of the hedging instrument. Because of that, the FASB permits a systematic and rational amortization method.

ASU 2019-04 clarified that entities that do not separately report earnings (e.g., certain not-for-profit entities) cannot make the election to record changes in the fair value of the excluded component in AOCI and amortize amounts into earnings.

### ***Amortizing time value in hedges of interest rate risk***

When a reporting entity excludes all or a portion of the time value in an option-based derivative, such as a cap or floor, from the assessment of effectiveness, and elects to recognize it using an amortization approach, it must determine a systematic and rational method for recognizing the time value in earnings. We believe that the caplet method, which is used when the total changes in fair value of a cap/floor is used to assess hedge effectiveness (i.e., time value is not an excluded component), is not an appropriate method.

The caplet method allows the time value associated with each caplet to be deferred through OCI until each caplet's respective hedged item occurs. The guidance that describes the caplet method links to the general guidance on reclassifying gains or losses on derivatives in cash flow hedges to income when the forecasted transactions impact earnings. In contrast, when the time value is excluded, the guidance on reclassifying the amounts deferred in AOCI to income is in ASC 815-20-25-83A. In other words, the reporting entity needs to use a systematic and rational approach for recognizing the excluded amounts in earnings. Further, the reporting entity needs to recognize the excluded components over the life of the hedging relationship. Thus, waiting until the forecasted transaction impacts earnings to begin amortization, as is done under the caplet method when the time value is not excluded, is not appropriate.

We believe a systematic and rational method for recognizing time value must result in a portion of the excluded component being recognized in earnings during each reporting period between the hedge designation date and the occurrence of the hedged transaction. Because the caplet method allows for the time value of each caplet to be reclassified from AOCI only during the period in which the hedged transaction occurs, we do not believe it to be a systematic and rational method to recognize time value when it is excluded from the assessment of hedge effectiveness.

We believe that, in certain circumstances, recognizing the total premium paid for a cap/floor on a straight-line basis may be a systematic and rational method to recognize time value when it is excluded from the assessment of hedge effectiveness.

Example DH 6-1 illustrates the accounting for an excluded component recognized using an amortization approach.

#### **EXAMPLE DH 6-1**

##### ***Excluded component recognized through an amortization approach***

On June 1, 20X1, DH Corp, a USD-functional currency entity, designated a three-year euro/US dollar forward contract with a fair value of zero to sell 100 million euro on June 30, 20X4 as a cash flow hedge of the first 100 million of 1 billion in forecasted euro revenues to be received on June 30, 20X4. The current spot rate for 1 euro is \$1.3597 and the forward rate to June, 30 20X4 for 1 euro is \$1.3892. The spot rate at June 30, 20X4 is \$1.1427.

DH Corp demonstrated that the sales were probable based on historical experience, detailed sales forecasts for each quarter for the next three years, and long-range plans that support the probability of ongoing activities in Europe. The counterparty to the forward contract is of high credit quality.

DH Corp elects to exclude the forward points from the assessment of effectiveness and recognize them through an amortization approach. At June 1, 20X1, the undiscounted forward points have an initial

value of \$2,950,000. That is, the contracted forward rate of \$1.3892 minus the trade-date spot rate of \$1.3597 times 100 million euro notional equals \$2,950,000 of initial value for the forward points.

Date	Change in fair value of forward contract Gain/(loss)	Amount recorded through OCI (A)	Amortization reclassified from AOCI to earnings (B)	AOCI balance (Prior period balance + A + B)
	Dr./.(Cr.)	Dr./.(Cr.)	Dr./.(Cr.)	Dr./.(Cr.)
6/1/20X1				
6/30/20X1	(1,321,751)	1,321,751	79,730	1,401,481
9/30/20X1	9,314,204	(9,314,204)	239,189	(7,673,534)
12/31/20X1	5,886,096	(5,886,096)	239,189	(13,320,441)
3/31/20X2	14,201,846	(14,201,846)	239,189	(27,283,098)
6/30/20X2	(3,670,887)	3,670,887	239,189	(23,373,022)
9/30/20X2	351,075	(351,075)	239,189	(23,484,907)
12/31/20X2	2,753,320	(2,753,320)	239,189	(25,999,038)
3/31/20X3	(4,574,448)	4,574,448	239,189	(21,185,401)
6/30/20X3	3,173,130	(3,173,130)	239,189	(24,119,342)
9/30/20X3	(1,124,767)	1,124,767	239,189	(22,755,386)
12/31/20X3	7,629,698	(7,629,698)	239,189	(30,145,894)
3/31/20X4	(750,206)	750,206	239,189	(29,156,499)
6/30/20X4	(7,217,310)	7,217,310	239,189	(21,700,000)
Total	24,650,000	(24,650,000)	2,950,000	

How should DH Corp recognize the forward points under an amortization approach?

#### *Analysis*

DH Corp chose to use a straight-line approach as its systematic and rational amortization method for the initial value of the forward points. DH Corp would record the following journal entries in 20X1 and June 20X4. Entries for 20X2, 20X3, and March 20X4 would follow the same approach and use the amounts in the above table.



**June 30, 20X1**

Dr. Other comprehensive income	\$1,321,751	
Cr. Forward contract		\$1,321,751
To record the change in fair value of the forward contract		
Dr. Other comprehensive income	\$79,730	
Cr. Revenue		\$79,730
To record amortization of the initial value of the forward points ( $\$2,950,000 \times 1/37$ months) in the same line as the euro revenue		

**September 30, 20X1**

Dr. Forward contract	\$9,314,204	
Cr. Other comprehensive income		\$9,314,204
To record the change in fair value of the forward contract		
Dr. Other comprehensive income	\$239,189	
Cr. Revenue		\$239,189
To record amortization of the initial value of the forward points ( $\$2,950,000 \times 3/37$ months) in the same line as the euro revenue		

**December 31, 20X1**

Dr. Forward contract	\$5,886,096	
Cr. Other comprehensive income		\$5,886,096
To record the change in fair value of the forward contract		
Dr. Other comprehensive income	\$239,189	
Cr. Revenue		\$239,189
To record amortization of the initial value of the forward points ( $\$2,950,000 \times 3/37$ months) in the same line as the euro revenue		

**June 30, 20X4**

Dr. Other comprehensive income	\$7,217,310	
Cr. Forward contract		\$7,217,310
To record the change in fair value of the forward contract		
Dr. Other comprehensive income	\$239,189	
Cr. Revenue		\$239,189

To record amortization of the initial value of the forward points ( $\$2,950,000 \times 3/37$  months) in the same line as the euro revenue

Dr. Cash	\$24,650,000	
Cr. Forward contract		\$24,650,000

To settle the forward contract at its then fair value

Dr. Accounts receivable	\$114,270,000	
Cr. Revenue		\$114,270,000

To recognize euro sales on account of 100 million based upon the spot rate at the date of the sales transaction ( $100 \text{ million} \times \text{spot rate of } 1.1427$ )

Dr. Other comprehensive income	\$21,700,000	
Cr. Revenue		\$21,700,000

To release amounts deferred in AOCI to the income statement line item where the hedged item is recognized when the hedged item affects earnings

At the conclusion of the hedging relationship, prior to the reclassification of the derivative gain from AOCI to earnings, the balance in AOCI is the spot-to-spot change on the hedging instrument, \$21,700,000. When combined, the \$114,270,000 of sales and \$21,700,000 reclassification from AOCI to earnings results in a total revenue amount of \$135,970,000, which is equal to 100 million euro remeasured at the spot rate on June 1, 20X1, the inception date of the hedging relationship. The initial value of the forward points of \$2,950,000 was amortized to revenue over the life of the hedging instrument.

### 6.3.2 *Types of risks eligible for cash flow hedge accounting*

ASC 815-20-25-15(j) permits a reporting entity to hedge any of the following risks in a cash flow hedge.

#### **Excerpt from ASC 815-20-25-15(j)**

1. The risk of overall changes in the hedged cash flows related to the asset or liability, such as those relating to all changes in the purchase price or sales price (regardless of whether that price and the related cash flows are stated in the entity's functional currency or a foreign currency) [DH 6.3.4]
2. For forecasted interest receipts or payments on an existing variable-rate financial instrument, the risk of changes in its cash flows attributable to changes in the contractually specified interest rate (referred to as interest rate risk). For a forecasted issuance or purchase of a debt instrument (or the forecasted interest payments on a debt instrument), the risk of changes in cash flows attributable to changes in the benchmark interest rate or the expected contractually specified interest rate. ... [DH 6.3.5]
3. The risk of changes in the functional-currency-equivalent cash flows attributable to changes in the related foreign currency exchange rates (referred to as foreign exchange risk) [DH 8]

4. The risk of changes in its cash flows attributable to all of the following (referred to as credit risk):
  - i. Default
  - ii. Changes in the obligor's creditworthiness
  - iii. Changes in the spread over the contractually specified interest rate or benchmark interest rate with respect to the related financial asset's or liability's credit sector at inception of the hedge.

If the risk is not the change in total cash flows as listed in ASC 815-20-25-15(j)(1), a reporting entity can jointly designate two or more of the other risks in ASC 815-20-25-15(j).

ASC 815-20-25-15(f) and ASC 815-20-25-43(d) provide guidance on eligible hedged risks for held-to-maturity debt securities.

#### **ASC 815-20-25-15(f)**

If the variable cash flows of the forecasted transaction relate to a debt security that is classified as held to maturity under Topic 320, the risk being hedged is the risk of changes in its cash flows attributable to any of the following risks:

1. Credit risk
2. Foreign exchange risk.

#### **Excerpt from ASC 815-20-25-43(d)**

...none of the following shall be designated as a hedged item or transaction in the respective hedges:

2. If variable cash flows of the forecasted transaction relate to a debt security that is classified as held-to-maturity under Topic 320, the risk of changes in its cash flows attributable to interest rate risk

The notion of hedging the interest rate risk in a security classified as held-to-maturity is inconsistent with the held-to-maturity classification under ASC 320, which requires the reporting entity to hold the security until maturity regardless of changes in market interest rates.

However, hedging credit risk is permitted. It is not viewed as inconsistent with the held-to-maturity assertion since ASC 320 permits sales or transfers of a held-to-maturity security in response to significant deterioration in credit quality of the security.

### **6.3.3 Eligible hedged items in a cash flow hedge**

Hedge accounting may be applied to cash flow hedging relationships when they fulfill the relevant general qualifying criteria discussed in DH 6.2 and the criteria specific to cash flow hedges in ASC 815-20-25-13 through ASC 815-20-25-15.

### 6.3.3.1 *Earnings exposure*

One of the criteria specific to cash flow hedges is that the forecasted transaction presents an earnings exposure. Without an “earnings exposure” criterion, there would be no way to determine the period in which the derivative gain or loss should be included in earnings. The earnings exposure criterion specifically precludes hedge accounting for derivatives that are used to hedge:

- Transactions with shareholders, such as dividend payments or projected purchases of Treasury stock
- Intercompany transactions (except for foreign-currency-denominated forecasted intercompany transactions) in consolidated financial statements
- Forecasted stock issuances that are related to a stock option plan for which no compensation expense (based on changes in stock prices) is recognized

### 6.3.3.2 *No remeasurement for changes in fair value*

ASC 815-20-25-15(d) and ASC 815-20-25-15(e) state that the hedged item/transaction cannot be a forecasted acquisition of an asset or incurrence of a liability that subsequently will be remeasured at fair value or a forecasted transaction that relates to an asset or liability that is remeasured with changes in fair value reported currently in earnings. ASC 815 does not permit hedge accounting for these items because the gains or losses on the hedging instrument and the offsetting losses or gains on the hedged item both would be recorded in the income statement under other GAAP and would tend to naturally offset each other.

### 6.3.3.3 *External party*

Cash flow hedge accounting is appropriate only when there is a hedgeable risk arising from a transaction with an external party (although certain intercompany hedges for foreign currency exposures are permitted). Accounting allocations or intercompany transactions, in and of themselves, do not give rise to economic exposure, and therefore, do not qualify as hedgeable forecasted transactions.

## Question DH 6-3

A subsidiary entered into an interest rate swap that was designated in the consolidated financial statements as a cash flow hedge of forecasted LIBOR-based interest payments on variable-rate debt issued by the parent company. If the hedging relationship is designated and qualifies under ASC 815, how should the parent and the subsidiary account for the interest rate swap on a consolidated and standalone basis, respectively?

### *PwC response*

Because the interest rate swap was designated to hedge a risk exposure (variable-rate interest rate payments) at the consolidated reporting level, hedge accounting may be applied on a consolidated basis and the interest rate swap would be measured at fair value with changes recorded through OCI.

The subsidiary does not have the risk exposure at its reporting level; therefore, the swap would not qualify for hedge accounting and should be reported in the subsidiary’s standalone financial statements at fair value with changes in fair value recorded in earnings. If the subsidiary had an

exposure to interest rate risk at its reporting level, the subsidiary could designate this interest rate swap as a hedge of that exposure if it met the ASC 815 hedge accounting criteria. It is possible to have one derivative hedge two different exposures at different reporting levels.

This conclusion would not necessarily extend to a foreign currency hedge because special rules apply to them. See DH 8.7 for information on hedging the foreign currency risk in intercompany transactions.

### Question DH 6-4

Does ASC 815 permit an item to be initially designated as a hedged item in a cash flow hedge and later designated as a hedged item in a fair value hedge?

#### *PwC response*

Yes, ASC 815 permits an item to be initially designated as a hedged item in a cash flow hedge and later designated as a hedged item in a fair value hedge as long as the transaction or item that is being hedged meets the respective criteria for either type of hedge. For example, a reporting entity could (1) designate a derivative as a hedge of interest payments related to an issuance of fixed-rate debt that is forecasted to take place within six months, (2) terminate the hedge when the debt is issued six months later, and (3) designate another derivative as a hedge of the fair value exposure of the fixed-rate debt.

Under these circumstances, the deferred gains or losses on the cash flow hedge would remain in AOCI until earnings are impacted by the originally forecasted interest payments each period, even though the related debt will have subsequently been designated as a hedged item in a fair value hedge. See DH 6.6.1 for discussion of a hedge of the forecasted issuance of fixed-rate debt.

#### 6.3.3.4 *Forecasted transactions*

ASC 815-20-25-15 defines a forecasted transaction.

#### **ASC 815-20-25-15(a)**

The forecasted transaction is specifically identified as either of the following:

1. A single transaction
2. A group of individual transactions that share the same risk exposure for which they are designated as being hedged. A forecasted purchase and a forecasted sale shall not both be included in the same group of individual transactions that constitute the hedged transaction.

The term “forecasted transaction” is not intended to include transactions that qualify as firm commitments even though the settlement of such transactions occurs in the future.

Hedges of forecasted transactions (which involve variability in cash flows) are considered cash flow hedges since the price is not fixed. Forecasted transactions may be designated as hedged transactions in cash flow hedges, provided the following additional criteria in the standard are met.

### ***Specific identification***

When identifying the hedged item in a cash flow hedge, it is necessary to provide sufficient specificity about the hedged item so that there is no doubt as to what is being hedged. For example, if a reporting entity is hedging a future interest payment, it must specify the exact time period—for instance, “the first \$1 million in variable interest payments in the month of December 20XX,” or “the \$1 million of interest payments to be paid on December 15, 20XX on Debt Instrument X.” It would be insufficient to identify the hedged item in this scenario as “interest payments to be paid in December 20XX,” or “the last interest payments to be made on Debt Instrument X in the fourth quarter of 20XX.”

By designating the “first  $x$  dollars” of interest payments during the period, the reporting entity will not be locked into a specific date, and if for some reason the interest payment does not occur on that date, it will have more flexibility in assessing whether the forecasted transaction occurred.

ASC 815-20-55-80 illustrates the requirement that the hedged transaction be specifically identified.

#### **Excerpt from ASC 815-20-55-80**

Entity A determines with a high degree of probability that it will issue \$5,000,000 of fixed-rate bonds with a 5-year maturity sometime during the next 6 months, but it cannot predict exactly when the debt issuance will occur. That situation might occur, for example, if the funds from the debt issuance are needed to finance a major project to which Entity A is already committed but the precise timing of which has not yet been determined. To qualify for cash flow hedge accounting, Entity A might identify the hedged forecasted transaction as, for example, the first issuance of five-year, fixed-rate bonds that occurs during the next 6 months.

In this situation, the first issuance of the specified bonds may qualify as a hedged item even though the precise timing of issuance has not been determined. For further guidance regarding a forecasted transaction that is expected (probable) to occur on a specific date but whose timing involves some uncertainty within a range, see ASC 815-20-25-16(c) and the illustrative example in ASC 815-20-55-100 through ASC 815-20-55-104.

### ***The occurrence of the forecasted transaction is probable***

Assessing the probability that a forecasted transaction will occur requires judgment. A transaction is “probable” in the context of hedge accounting when “the future event or events are likely to occur.” Thus, although ASC 815 and ASC 450 do not establish bright lines, a probable likelihood of occurrence should be a significantly greater threshold than the 50% threshold associated with “more likely than not.”

In addition, there should be compelling evidence to support management’s assertion that it is probable that a forecasted transaction will occur.

ASC 815-20-55-24 provides the following additional guidance on determining the probability of a forecasted transaction.

**ASC 815-20-55-24**

An assessment of the likelihood that a forecasted transaction will take place (see paragraph 815-20-25-15(b)) should not be based solely on management's intent because intent is not verifiable. The transaction's probability should be supported by observable facts and the attendant circumstances. Consideration should be given to all of the following circumstances in assessing the likelihood that a transaction will occur.

- a. The frequency of similar past transactions
- b. The financial and operational ability of the entity to carry out the transaction
- c. Substantial commitments of resources to a particular activity (for example, a manufacturing facility that can be used in the short run only to process a particular type of commodity)
- d. The extent of loss or disruption of operations that could result if the transaction does not occur
- e. The likelihood that transactions with substantially different characteristics might be used to achieve the same business purpose (for example, an entity that intends to raise cash may have several ways of doing so, ranging from a short-term bank loan to a common stock offering).

Further, as discussed in ASC 815-20-55-25, both (1) the length of time that is expected to pass before a forecasted transaction is projected to occur and (2) the quantity of products or services that are involved in the forecasted transaction are considerations in determining probability. The guidance indicates that the more distant a forecasted transaction is or the greater the physical quantity or future value of a forecasted transaction, the less likely it is that the transaction would be considered probable and the stronger the evidence that would be required to support the assertion that it is probable.

In addition to the impact on qualifying for hedge accounting, the assessment of whether the forecasted transaction is probable of occurring also impacts potential discontinuance of the hedge and whether to reclassify amounts deferred in AOCI. See DH 10.4.8.1 for further information.

***Documentation***

In its formal hedge documentation, management should specify the circumstances that were considered in concluding that a transaction is probable. If a reporting entity has a pattern of subsequently determining that forecasted transactions are no longer probable of occurring, the appropriateness of management's previous assertions and its ability to make future assertions regarding forecasted transactions may be called into question. See DH 10.4.

***Counterparty creditworthiness***

Reporting entities should also consider the guidance in ASC 815-20-25-16(a). In addition to requiring entities to continually assess the likelihood of the counterparty's compliance with the terms of the hedging derivative, they are required to perform an assessment of their own creditworthiness and that of the counterparty (if any) to the hedged forecasted transaction to determine whether the forecasted transaction is probable.

This assessment should be performed at least quarterly at the time of hedge effectiveness testing. If the probability of the forecasted transaction changes as a result of a change in counterparty creditworthiness, the reporting entity would need to evaluate whether it continues to qualify for hedge accounting.

### ***Timing of the forecasted transaction***

When designating a forecasted transaction in a cash flow hedge, there may be a specific date on which the transaction is expected to occur (e.g., a forecasted interest payment will be made on December 15, 20X2). However, in many cases, a transaction may be expected to occur in a defined period rather than on a specific date. ASC 815-20-25-16 provides guidance on uncertainty of timing within a range.

#### **Excerpt from ASC 815-20-25-16(c)**

Uncertainty of timing within a range. For forecasted transactions whose timing involves some uncertainty within a range, that range could be documented as the originally specified time period if the hedged forecasted transaction is described with sufficient specificity so that when a transaction occurs, it is clear whether that transaction is or is not the hedged transaction. As long as it remains probable that a forecasted transaction will occur by the end of the originally specified time period, cash flow hedge accounting for that hedging relationship would continue.

Uncertainty within a time period does not preclude hedge accounting as long as the forecasted transaction is identified with sufficient specificity. The reporting entity should continue to monitor the expected timing of the forecasted transaction. If there is a change in the timing of the forecasted transaction such that it is no longer probable of occurring as originally documented, in general, the hedge should be discontinued. ASC 815-30-40-4 provides guidance on the treatment of derivative gains/losses deferred in AOCI when it is still probable or reasonably possible that the transaction will occur within two months of the originally specified time period.

#### **Excerpt from ASC 815-30-40-4**

The net derivative instrument gain or loss related to a discontinued cash flow hedge shall continue to be reported in accumulated other comprehensive income unless it is probable that the forecasted transaction will not occur by the end of the originally specified time period (as documented at the inception of the hedging relationship) or within an additional two-month period of time thereafter.

If it is determined that the forecasted transaction has become probable of not occurring within the documented time period plus a subsequent two-month period, then the hedging relationship should be discontinued and amounts previously deferred in AOCI should be immediately reclassified to earnings. See DH 10.4 for further information on discontinuance of cash flow hedges.

### **Question DH 6-5**

Would the designation of a five-year interest rate swap as a hedge of the variable-rate interest payments for the first five years of a fifteen-year debt instrument qualify for cash flow hedge accounting?



***PwC response***

Yes. Each of the designated variable cash flows from the financial instrument would be considered a separate hedged forecasted transaction. The swap eliminates the variability in cash flows for each individual forecasted transaction.

This view would be used for both the assessment of effectiveness and the accounting for the cash flow hedge.

**Question DH 6-6**

DH Corp is contemplating the acquisition of 100% of Company X. In conjunction with the anticipated acquisition, DH Corp is planning to issue variable-rate debt to fund the acquisition. To mitigate its future exposure of its forecasted debt issuance to changes in interest rates, DH Corp enters into a forward starting interest rate swap through which DH Corp receives a variable rate (six-month LIBOR) and pays a fixed rate starting at the time the debt is expected to be issued and continuing over the expected term of the debt. At inception, the critical terms of the interest rate swap are expected to match all of the critical terms of the variable rate debt expected to be issued.

May DH Corp designate the forward starting swap as a cash flow hedge of the variability of interest cash flows associated with its variable-rate debt, which is expected to be issued in conjunction with the acquisition of Company X?

***PwC response***

Generally, no. In this case, the forecasted transactions (the future interest payments associated with DH Corp's expected issuance of variable-rate debt) are contingent on the consummation of a business combination; that is, DH Corp will not incur the debt if the business combination is not consummated. Although the forecasted transactions do not directly impact the purchase accounting associated with the acquisition and there should be no significant difficulty in determining when to reclassify the gain/loss on the derivative, the forecasted transactions must also be considered probable of occurring.

In assessing the probability of the interest costs associated with the financing of a proposed acquisition, an assessment of the likelihood that the business combination will be completed within the prescribed timeframe is necessary. In almost all cases, business combinations will have too many contingencies to assert that the forecasted transactions are probable at the date of announcement. These contingencies may include regulatory approval, shareholder approval, completion of due diligence, availability of financing, likelihood of competing offers, and the nature of contractual provisions that enable one of the parties to back out.

Additionally, the length of time until consummation of the transaction would need to be considered. Even when contingencies do not exist, if there is more than a very short time period (e.g., more than a week) between hedge execution and the expected closing date of the transaction, it may not be possible to assert that the business combination is probable due to potential changes in market conditions or other factors.

Many times, a reporting entity may enter into the derivative before being able to demonstrate that the forecasted interest payments are probable of occurring. As a result, if they are later able to demonstrate that the forecasted transaction is probable, the hedging relationship may not be perfectly effective because the derivative is off-market at the hedge designation date.

## Question DH 6-7

Can the forecasted purchase of a marketable debt security be a hedged transaction?

### *PwC response*

Yes, if it is probable. ASC 815-20-25-16(b) requires the forecasted acquisition of a marketable debt security to be probable for it to be a hedged item in a cash flow hedge. ASC 815-20-25-16(b) specifically addresses how to evaluate probability when an option is the hedging instrument. That guidance indicates that the evaluation of whether the forecasted transaction is probable of occurring should be independent of the terms and nature of the derivative designated as the hedging instrument. That is, the probability of the marketable debt security being acquired should be evaluated without consideration of whether the option has an intrinsic value other than zero.

### *Hedging a group of forecasted transactions*

ASC 815-20-55-22 indicates that a group of transactions, such as forecasted variable-rate debt interest payments, may be designated as the hedged item in a cash flow hedge.

If the hedged transaction is a group of individual transactions, as contemplated in ASC 815-20-55-22, ASC 815-20-25-15(a)(2) requires that those individual hedged items or transactions share the “same risk exposure” for which they are designated as being hedged (e.g., risk of changes in cash flows due to changes in the contractually specified interest rate). Thus, if a particular forecasted transaction does not share the risk exposure that is germane to the transactions being hedged, that transaction cannot be part of the group that is being hedged. As a result, the guidance precludes forecasted interest payments and forecasted interest receipts from being grouped together since the risk exposures are different. ASC 815-20-55-23 further specifies that when hedging the forecasted interest payments on several variable-rate debt instruments, the interest payments (or interest receipts) must vary with the same index to qualify for hedging with a single derivative. Therefore, a group of LIBOR-based interest payments (or receipts) could not be combined with US prime-based interest payments or receipts within the same hedging relationship.

For fair value hedges, ASC 815-20-25-12(b)(1) also requires that the individual hedged items in a hedged group share the same risk exposure for which they are as being hedged. In addition, ASC 815-20-55-14 provides guidance for the quantitative evaluation of whether a portfolio of assets or liabilities share the same risk exposure in a fair value hedge. This quantitative test, known as the “similar assets/liabilities test,” is specific to fair value hedges. ASC 815-20-25-15 does not specifically require reporting entities to perform this test for cash flow hedges of groups of individual transactions. However, we believe that in most circumstances a quantitative test is needed for cash flow hedges when the hedged item is a portfolio of forecasted transactions that are similar but not identical.

In certain limited circumstances when the terms of the individual hedged items in the portfolio are aligned, a qualitative similar assets/liabilities test may be appropriate. For example, if a reporting entity intends to hedge a group of variable-rate nonprepayable financial assets together in a single hedging relationship when those financial assets all have the same contractually specified interest rate index and all reset and pay on the same dates, it may be able to qualitatively support that the individual items in the portfolio share the same risk exposure for which they are designated as being

hedged. The determination of whether a quantitative or qualitative analysis is sufficient is judgmental and will depend on the nature of the items being hedged.

### Question DH 6-8

Can a cash flow hedge of a group of forecasted interest receipts include as the hedged item different iterations of SOFR, such as overnight SOFR in arrears, overnight SOFR in advance, and one-month term SOFR as the hedged item?

#### ***PwC response***

It depends. When hedging groups of forecasted transactions in a cash flow hedge, ASC 815-20-25-15(a)(2) requires that those individual hedged items or transactions share the “same risk exposure” for which they are designated as being hedged and ASC 815-20-55-23 requires the interest payments (or interest receipts) to vary with the same index to qualify for hedging with a single derivative.

There is no definition of same index included within ASC 815 in the context of the similar asset test. However, in the context of the similar asset test we believe that same index can be interpreted to be the interest rate curve that the interest receipt is based on. Therefore, any interest receipt based on SOFR would qualify as varying with the same index for the purposes of the similar asset test.

However, to qualify as a cash flow hedge of a group of forecasted transactions, the interest receipts must share the same risk exposure. Since the different iterations of SOFR will not be identical in terms of interest reset dates, settlement dates, and calculation methodologies, among other items, we believe that a quantitative test will most likely be necessary in order to prove that the interest receipts share the same risk exposure. The results of this quantitative test will determine if overnight SOFR in arrears, overnight SOFR in advance, and one-month term SOFR can be included in the same hedging relationship.

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When facts and circumstances regarding the portfolio change, we expect a reporting entity to reconsider its similar assets/liabilities test. When changes are significant such that the original conclusion is no longer valid without additional support, we would expect a new comprehensive analysis to be performed at that time.

Consistent with the requirement for hedges of individual forecasted transactions, when hedging a group of forecasted transactions, the forecasted transactions need to be identified with sufficient specificity to make it clear whether a particular transaction is a hedged transaction when it occurs. For example, a reporting entity that expects to receive variable interest may identify the hedged forecasted transaction as the *first* LIBOR-based interest payments received during a four-week period that begins one week before each quarterly due date for the next five years on its \$100 million LIBOR-based loan.

#### **6.3.4 Hedging total change in cash flows**

When the hedged risk is the total variability in cash flows, as permitted by ASC 815-20-25-15(j)(1), the reporting entity needs to compare the total change in cash flows on the hedged item/transaction to the change in fair value of the hedging instrument. This may result in less effective hedges than those hedged for just interest rate risk, as discussed in DH 6.3.5, although the entire gain/loss on the derivative may be deferred through OCI if the hedge is highly effective.

### 6.3.5 *Hedging the contractually specified interest rate*

The Master Glossary defines interest rate risk differently for variable-rate and fixed-rate instruments. For variable-rate instruments, interest rate risk is defined as the change in cash flows due to the change in the contractually specified interest rate.

#### **Partial definition from the ASC Master Glossary**

**Interest Rate Risk:** For recognized variable-rate financial instruments and forecasted issuances or purchases of variable-rate financial instruments, interest rate risk is the risk of changes in the hedged item's cash flows attributable to changes in the contractually specified interest rate in the agreement.

When designating the risk of changes in a hedged item's cash flows attributable to changes in the contractually specified interest rate, any cash flows related to the credit spread or changes in the spread over the contractually specified interest rate are excluded from the hedging relationship.

For example, in a cash flow hedge of a pool of prime-rate loans, differences between the spreads above the prime rate for the loans that are being hedged would not impact the eligibility of the hedging relationship.

See example 6: *Cash Flow Hedge of Variable-Rate Interest-Bearing Asset*, in ASC 815-30-55-24 for an illustration of the accounting for a cash flow hedge.

#### 6.3.5.1 *Changes in the hedged risk*

There is a general principle in hedge accounting that a hedge needs to be dedesignated when any of the critical terms of the hedging relationship change. The guidance provides an exception if the change relates solely to the hedged risk in a cash flow hedge of a forecasted transaction and the revised hedging relationship remains highly effective.

#### **Excerpt from ASC 815-20-55-56**

If an entity wishes to change any of the critical terms of the hedging relationship (including the method designated for use in assessing hedge effectiveness), as documented at inception, the mechanism provided in this Subtopic to accomplish that change is the dedesignation of the original hedging relationship and the designation of a new hedging relationship that incorporates the desired changes. However, as discussed in paragraph 815-30-35-37A, a change to the hedged risk in a cash flow hedge of a forecasted transaction does not result in an automatic dedesignation of the hedging relationship if the hedging instrument continues to be highly effective at achieving offsetting cash flows associated with the hedged item attributable to the revised hedged risk.

#### **ASC 815-30-35-37A**

If the designated hedged risk changes during the life of a hedging relationship, an entity may continue to apply hedge accounting if the hedging instrument is highly effective at achieving offsetting cash flows attributable to the revised hedged risk. The guidance in paragraph 815-20-55-56 does not apply to changes in the hedged risk for a cash flow hedge of a forecasted transaction.

Reporting entities would have to assess effectiveness of the revised hedging relationship before continuing to apply hedge accounting.

### 6.3.5.2 *Auction rate securities*

Auction rate securities have their coupons determined by means of a Dutch auction, typically every 35 days or less. An issuer may structure a cash flow hedge of forecasted interest payments. The Basis for Conclusions in ASU 2017-12, *Targeted Improvements to Accounting for Hedging Activities*, specifies that a variable rate set via an auction process can be considered a contractually specified interest rate when it is the rate that is explicitly referenced in the variable-rate financial instrument being hedged.

If the Dutch auction fails, the reporting entity must ensure that the hedging strategy documented at inception of the hedging relationship is still valid. If the effect of the failed Dutch auction is that the hedged risk no longer exists (e.g., the interest rate on the auction rate security is now fixed) or that the hedging relationship is no longer highly effective, hedge accounting should be discontinued. See DH 10 for guidance on accounting for discontinued hedges.

### 6.3.6 *Swapping one variable rate for another variable rate*

ASC 815-20-25-50 and ASC 815-20-25-51 provide guidance on modifying interest receipts/payments from one variable rate to another variable rate. Often, this is achieved through a basis swap.

#### **ASC 815-20-25-50**

If a hedging instrument is used to modify the contractually specified interest receipts or payments associated with a recognized financial asset or liability from one variable rate to another variable rate, the hedging instrument shall meet both of the following criteria:

- a. It is a link between both of the following:
  1. An existing designated asset (or group of similar assets) with variable cash flows
  2. An existing designated liability (or group of similar liabilities) with variable cash flows
- b. It is highly effective at achieving offsetting cash flows.

#### **ASC 815-20-25-51**

For purposes of paragraph 815-20-25-50, a link exists if both of the following criteria are met:

- a. The basis (that is, the rate index on which the interest rate is based) of one leg of an interest rate swap is the same as the basis of the contractually specified interest receipts for the designated asset.
- b. The basis of the other leg of the swap is the same as the basis of the contractually specified interest payments for the designated liability.

In this situation, the criterion in paragraph 815-20-25-15(a) is applied separately to the designated asset and the designated liability.

The guidance in ASC 815-20-25-51 does not mean that receive or pay amounts have to be identical. For example, the criterion would be met if the pay leg of a swap was indexed to three-month LIBOR and the variable rate on the interest receipts was indexed to three-month LIBOR plus 100 basis points. However, the criterion would not be met if the interest receipts were based on a different rate, such as a different tenor of LIBOR (e.g., one-month LIBOR). ASC 815 does not permit a reporting entity to apply hedge accounting to this type of instrument since the variability in the net cash flows of the interest rate basis swap would not offset the variability in the cash flows associated with the financial instrument.

A basis swap can be an effective mechanism for locking in a spread or margin between variable interest-bearing assets and liabilities. If it is highly effective and meets the other cash flow hedge criteria, it will generally qualify for hedge accounting treatment.

The reporting entity should treat each leg of the basis swap, along with the respective designated asset and liability, as a separate hedging relationship and assess effectiveness separately for each relationship.

Basis swaps do not qualify as hedges of non-interest-bearing assets and liabilities because the guidance specifically refers to “a financial asset or liability” and states that the hedge must be used “to modify the interest receipts or payments associated with a “recognized” financial asset or liability from one variable rate to another variable rate.” Therefore, a forecasted transaction (e.g., the repricing or anticipated reissuance of short-term liabilities, such as certificates of deposit or commercial paper) cannot be a hedged item in a hedging relationship that involves a basis swap.

### **6.3.7 Interaction with credit loss and impairment principles**

A variable-rate asset or liability that has been designated as the hedged item in a cash flow hedge remains subject to the applicable requirements in GAAP for assessing impairments or credit losses under ASC 326 for that type of asset or for recognizing an increased obligation for that type of liability.

#### **ASC 815-30-35-42**

Existing requirements in generally accepted accounting principles (GAAP) for assessing asset impairment or credit losses or recognizing an increased obligation apply to an asset or liability that gives rise to variable cash flows (such as a variable-rate financial instrument) for which the variable cash flows (the forecasted transactions) have been designated as being hedged and accounted for pursuant to paragraphs 815-30-35-3 and 815-30-35-38 through 35-41. Those impairment or credit loss requirements shall be applied each period after hedge accounting has been applied for the period, pursuant to those paragraphs. The fair value or expected cash flows of a hedging instrument shall not be considered in applying those requirements. The gain or loss on the hedging instrument in accumulated other comprehensive income shall, however, be accounted for as discussed in paragraphs 815-30-35-38 through 35-41.

#### **ASC 815-30-35-43**

If, under existing requirements in GAAP, an asset impairment loss or writeoff due to credit losses is recognized on an asset or an additional obligation is recognized on a liability to which a hedged forecasted transaction relates, any offsetting net gain related to that transaction in accumulated other comprehensive income shall be reclassified immediately into earnings. Similarly, if a recovery is recognized on the asset or liability to which the forecasted transaction relates, any offsetting net loss

that has been accumulated in other comprehensive income shall be reclassified immediately into earnings.

If a reporting entity expects that at any time the continued deferral of a loss in AOCI will lead to the recognition of a net loss when combined with the hedged item in a future period, ASC 815-30-35-40 specifies that a loss should be immediately recognized in earnings for the amount that the entity does not expect to recover.

If the asset is impaired or written off due to credit losses, the reporting entity should also consider whether the probability of the forecasted transactions occurring has changed, as discussed in DH 10.4.8.1.

## 6.4 Hedging fixed-rate instruments

For fixed-rate financial instruments, a reporting entity may want to economically convert a financial instrument's cash flows from a fixed rate to a variable rate. This is referred to as a fair value hedge.

### 6.4.1 Accounting for fair value hedges

Gains and losses on a qualifying fair value hedge should be accounted for in accordance with ASC 815-25-35-1.

#### Excerpt from 815-25-35-1

Gains and losses on a qualifying fair value hedge shall be accounted for as follows:

- a. The gain or loss on the hedging instrument shall be recognized currently in earnings, except for amounts excluded from the assessment of effectiveness that are recognized in earnings through an amortization approach in accordance with paragraph 815-20-25-83A. All amounts recognized in earnings shall be presented in the same income statement line item as the earnings effect of the hedged item.
- b. The gain or loss (that is, the change in fair value) on the hedged item attributable to the hedged risk shall adjust the carrying amount of the hedged item and be recognized currently in earnings.

Unlike hedge accounting for cash flow hedges, which results in special accounting for the derivative designated in the cash flow hedging relationship, hedge accounting for fair value hedges results in special accounting for the designated hedged item.

The application of fair value hedge accounting requires (1) the changes in value of the designated hedging instrument and (2) the changes in value (attributable to the risk being hedged) of the designated hedged item to be recognized currently in earnings. As a result, any mismatch between the hedged item and hedging instrument is recognized currently in earnings. See DH 6.4.1.3 for information on excluded components.

#### 6.4.1.1 Adjusting the carrying amount of the hedged item

In a fair value hedge of an asset, a liability, or a firm commitment, the hedging instrument should be reflected on the balance sheet at its fair value, but the hedged item may often be reflected on the



balance sheet at a value that is different from both its historical cost and fair value, unless the total amount and all the risks were hedged when the item was acquired. This is because the hedged item is adjusted each period only for changes in fair value that are attributable to the risk that has been hedged since the inception of the hedge.

For example, if a reporting entity were to hedge the risk of changes in the benchmark interest rate on a nonprepayable fixed-rate loan, the carrying amount of the loan would be adjusted only for the change in fair value that is attributable to the hedged risk (interest rate risk) and would not be adjusted for changes in fair value that are attributable to the unhedged risks (e.g., credit risk).

When initially designating the hedging relationship and preparing the contemporaneous hedge documentation, a reporting entity must specify how hedge accounting adjustments will be subsequently recognized in income. The recognition of hedge accounting adjustments—also referred to as basis adjustments—will differ depending on how other adjustments of the hedged item’s carrying amount will be reported in earnings. See DH 6.4.7.

#### **6.4.1.2 *Accounting for a firm commitment that has been hedged***

If a firm commitment is designated as a hedged item, the changes in the fair value of the hedged commitment are recorded in a manner similar to how a reporting entity would account for any hedged asset or liability that it records. That is, changes in fair value that are attributable to the risk being hedged are recognized in earnings and recognized on the balance sheet as an adjustment to the hedged item’s carrying amount. Because firm commitments normally are not recorded, accounting for the change in the fair value of the firm commitment results in the reporting entity recognizing the firm commitment on the balance sheet. Subsequent changes in fair value attributable to the risk being hedged will be recognized as basis adjustments to the carrying amount of the firm commitment.

#### **6.4.1.3 *Excluded components***

As discussed in DH 6.3.1.2, as part of its risk management strategy, a reporting entity may exclude certain components of a hedging instrument’s change in fair value from the assessment of hedge effectiveness. The same components of a hedging instrument may be excluded for fair value hedges as for cash flow hedges, and the same recognition models are available. This may result in changes in fair values related to a component of a hedging instrument being recorded in AOCI.

#### **6.4.2 *Types of risks eligible for fair value hedge accounting***

ASC 815-20-25-12(f) permits a reporting entity to hedge the following risks individually or in combination in a fair value hedge of a financial asset or liability.

##### **Excerpt from ASC 815-20-25-12(f)**

1. The risk of changes in the overall fair value of the entire hedged item [DH 6.4.4]
2. The risk of changes in its fair value attributable to changes in the designated benchmark interest rate (referred to as interest rate risk) [DH 6.4.5]
3. The risk of changes in its fair value attributable to changes in the related foreign currency exchange rates (referred to as foreign exchange risk) [DH 8]



4. The risk of changes in its fair value attributable to both of the following (referred to as credit risk) [FV 8]
  - i. Changes in the obligor's creditworthiness
  - ii. Changes in the spread over the benchmark interest rate with respect to the hedged item's credit sector at inception of the hedge.

#### 6.4.2.1 *Hedging multiple risks*

As specified in ASC 815-20-25-12(f), reporting entities can hedge both the interest rate risk and the foreign currency risk on the same hedged item. For example, in an investment in a foreign currency-denominated, fixed-rate, available-for-sale debt security, an entity could:

- Enter into a single derivative instrument that hedges the security's interest rate and foreign currency exchange rate risks (e.g., a cross-currency interest rate swap), or
- Enter into a receive-variable, pay-fixed interest rate swap denominated in the same foreign currency as that of the available-for-sale debt security to hedge the interest rate risk and simultaneously enter into a separate foreign exchange contract to hedge the foreign currency risk, or
- Enter into a receive-variable, pay-fixed interest rate swap denominated in the same foreign currency as that of the available-for-sale debt security and simultaneously enter into a separate foreign exchange contract and jointly designate the instruments as a hedge of the security's interest rate and foreign currency exchange risks.

Hedging the interest rate and foreign exchange risk in a financial instrument or group of financial instruments is discussed in DH 8.

#### 6.4.3 *Eligible hedged items in a fair value hedge*

ASC 815 requires that the designated hedged item in a fair value hedge be a recognized asset or liability or an unrecognized firm commitment. An unrecognized asset or liability that does not embody a firm commitment is not eligible for fair value hedge accounting.

Hedge accounting may be applied to fair value hedging relationships when they fulfill the general qualifying criteria discussed in DH 6.2 and the criteria specific to fair value hedges in ASC 815-20-25-12.

##### **Excerpt from ASC 815-20-25-12**

An asset or a liability is eligible for designation as a hedged item in a fair value hedge if all of the following additional criteria are met:

- a. The hedged item is specifically identified as either all or a specific portion of a recognized asset or liability or of an unrecognized firm commitment.
- b. The hedged item is a single asset or liability (or a specific portion thereof) or is a portfolio of similar assets or a portfolio of similar liabilities (or a specific portion thereof), in which

circumstance:

1. If similar assets or similar liabilities are aggregated and hedged as a portfolio, the individual assets or individual liabilities shall share the risk exposure for which they are designated as being hedged. The change in fair value attributable to the hedged risk for each individual item in a hedged portfolio shall be expected to respond in a generally proportionate manner to the overall change in fair value of the aggregate portfolio attributable to the hedged risk. See the discussion beginning in paragraph 815-20-55-14 for related implementation guidance. An entity may use different stratification criteria for the purposes of Topic 860 impairment testing and for the purposes of grouping similar assets to be designated as a hedged portfolio in a fair value hedge.
2. If the hedged item is a specific portion of an asset or liability (or of a portfolio of similar assets or a portfolio of similar liabilities), the hedged item is one of the following:
  - i. A percentage of the entire asset or liability (or of the entire portfolio). An entity shall not express the hedged item as multiple percentages of a recognized asset or liability and then retroactively determine the hedged item based on an independent matrix of those multiple percentages and the actual scenario that occurred during the period for which hedge effectiveness is being assessed.
  - ii. One or more selected contractual cash flows, including one or more individual interest payments during a selected portion of the term of a debt instrument (such as the portion of the asset or liability representing the present value of the interest payments in any consecutive two years of a four-year debt instrument). Paragraph 815-25-35-13B discusses the measurement of the hedged item in hedges of interest rate risk.

#### **6.4.3.1 Eligible hedged items in a fair value hedge – prepayment options**

Reporting entities often seek to hedge the prepayment risk of financial instruments that have specific call/put dates or are prepayable at any time after issuance. In this regard, ASC 815-20-25-6 indicates that prepayment risk per se cannot be designated as a hedged risk. However, ASC 815-20-25-6 permits a hedge of the option component of a prepayable instrument as the hedged item, thus achieving the same economic result. ASC 815-20-25-12(b)(2)(iii) specifically lists an embedded put or call option that is not separated as an eligible hedged item even though, on a standalone basis, derivatives do not qualify as hedged items.

ASC 815-20-25-12(d) indicates that a hedged item in a fair value hedge can be a prepayment option embedded in a held-to-maturity debt security. In that case, the hedged risk is the risk of changes in the entire fair value of the option.

It may be difficult, however, to obtain a hedging instrument that is highly effective in offsetting the impact of prepayment risk.

Reporting entities cannot hedge prepayment risk in items derived from prepayable instruments, such as mortgage servicing rights, since the items do not themselves contain prepayment options. However, some entities may choose not to designate mortgage servicing rights in hedging relationships given the availability of fair value options under ASC 860-50 or ASC 825-10, respectively.

### 6.4.3.2 *Eligible hedged items in a fair value hedge – earnings exposure*

ASC 815-20-25-12(c) identifies earnings exposure as a criterion that must be met for an asset or liability to be the hedged item. The change in fair value of a hedged item attributable to the risk being hedged must have the potential to change the amount that could be recognized in earnings. This criterion is based on the premise that the objective of hedge accounting is to allow the gain or loss on a hedging instrument and the loss or gain on a designated hedged item to be recognized in earnings at the same time.

### 6.4.3.3 *Eligible hedged items in a fair value hedge – external party*

Hedge accounting is appropriate only when there is a hedgeable risk arising from a transaction with an external party (although certain intercompany hedges for foreign currency exposures are permitted).

### 6.4.3.4 *Hedging held-to-maturity debt securities*

ASC 815-20-25-12(d) provides guidance on the eligibility of held-to-maturity debt securities for designation as a hedged item in a fair value hedge.

#### **ASC 815-20-25-12(d)**

If the hedged item is all or a portion of a debt security (or a portfolio of similar debt securities) that is classified as held to maturity in accordance with Topic 320, the designated risk being hedged is the risk of changes in its fair value attributable to credit risk, foreign exchange risk, or both. If the hedged item is an option component of a held-to-maturity security that permits its prepayment, the designated risk being hedged is the risk of changes in the entire fair value of that option component. If the hedged item is other than an option component of a held-to-maturity security that permits its prepayment, the designated hedged risk also shall not be the risk of changes in its overall fair value.

The notion of hedging the interest rate risk in a security classified as held to maturity is inconsistent with the held-to-maturity classification under ASC 320, which requires the reporting entity to hold the security until maturity regardless of changes in market interest rates. For this reason, ASC 815-20-25-43(c)(2) indicates that interest rate risk may not be the hedged risk in a fair value hedge of held-to-maturity debt securities. However, hedging credit risk is permitted. It is not viewed as inconsistent with the held-to-maturity assertion since ASC 320 permits sales or transfers of a held-to-maturity security in response to significant deterioration in credit quality of the security. In addition, hedging foreign exchange risk or the fair value of embedded prepayment options in held-to-maturity securities is permitted, as discussed in DH 6.4.3.1.

### 6.4.3.5 *Eligible hedged items in a fair value hedge –leases*

ASC 815-20-25-12(b)(2)(iv) indicates that a hedged item may be the residual value in a lessor's net investment in a direct financing or sales-type lease.

Although the residual value in a lessor's net investment in a direct financing or sales-type lease may be designated as the hedged item, many contracts that are used as the hedging instrument in such a hedge may qualify for the scope exception in ASC 815-10-15-13 and ASC 815-10-15-59(d). A reporting entity should examine its hedging instruments to determine whether they meet the definition of a derivative or are scoped out. If a hedging instrument does not fall within the scope of ASC 815, the

corresponding transaction does not qualify for hedge accounting because only derivatives may be designated as hedging instruments with certain limited exceptions, as discussed in DH 8.2.2.

See DH 4.6.3 for a discussion of certain features of leases that may meet the definition of a derivative and thus need to be separated from the lease agreement and accounted for individually.

#### **6.4.3.6 Eligible hedged items in a fair value hedge – firm commitments**

A firm commitment is a binding agreement with a third party for which all significant terms are specified (e.g., quantity, price, timing of the transaction). The definition of a firm commitment requires that the fixed price be specified in terms of a currency (or an interest rate).

ASC 815 specifies that a firm commitment must include a disincentive for nonperformance that is sufficiently large to make performance probable. The determination of whether a sufficiently large disincentive for nonperformance exists under each firm commitment will be judgmental based upon the specifics and facts and circumstances. Example 13 in ASC 815-25-55-84 indicates that the disincentive for nonperformance need not be explicit in the contract. Rather, the disincentive may be present in the form of statutory rights (that exist in the legal jurisdiction governing the agreement) that allow a reporting entity to pursue compensation in the event of nonperformance (e.g., if the counterparty defaults) that is equivalent to the damages that the entity suffers as a result of the nonperformance.

#### **Question DH 6-9**

Can an intercompany commitment ever be considered “firm” and, therefore, be eligible for designation as a fair value hedged item?

#### ***PwC response***

No. As defined in ASC 815-25-20, a firm commitment must be entered into with an unrelated third party. However, even though a foreign currency-denominated intercompany commitment may not be eligible for designation as a fair value hedged item, the functional currency variability in the foreign currency cash flows under that commitment may be eligible for designation as a hedged forecasted transaction in a cash flow hedge. The functional currency equivalent of the foreign currency cash that is to be paid or received on the commitment will fluctuate based on changes in the exchange rate; therefore, the transaction has a hedgeable cash flow exposure.

#### **6.4.3.7 Items ineligible to be hedged items in fair value hedges**

In addition to the guidance discussed in DH 6.2 and DH 6.4.3 through DH 6.4.3.6, ASC 815-20-25-43(c) provides additional restrictions on items that cannot be hedged items in fair value hedges.

#### **Excerpt from ASC 815-20-25-43(c)**

1. If the entire asset or liability is an instrument with variable cash flows, an implicit fixed-to-variable swap (or similar instrument) perceived to be embedded in a host contract with fixed cash flows [see below]
2. For a held-to-maturity debt security, the risk of changes in its fair value attributable to interest rate risk [DH 6.4.3.4]

3. An asset or liability that is remeasured with the changes in fair value attributable to the hedged risk reported currently in earnings [see below]
4. An equity investment in a consolidated subsidiary [DH 6.2.2.1]
5. A firm commitment either to enter into a business combination or to acquire or dispose of a subsidiary, a noncontrolling interest, or an equity method investee [DH 6.2.2.1]
6. An equity instrument issued by the entity and classified in stockholders' equity in the statement of financial position
7. A component of an embedded derivative in a hybrid instrument—for example, embedded options in a hybrid instrument that are required to be considered a single forward contract under paragraph 815-10-25-10 cannot be designated as items hedged individually in a fair value hedge in which the hedging instrument is a separate, unrelated freestanding option.

### ***Implicit embedded features***

If the entire asset or liability is an instrument with variable cash flows, ASC 815-20-25-43(c)(1) states the hedged item cannot be deemed to be an implicit fixed-to-variable swap (or similar instrument) perceived to be embedded in a host contract with fixed cash flows. In other words, a reporting entity may not consider a variable-rate instrument to be implicitly embedded in a fixed-rate instrument to achieve a fair value hedge.

### ***No remeasurement for changes in fair value***

ASC 815-20-25-43(c)(3) does not permit hedge accounting for hedged items that are remeasured for changes in fair value because both the gains or losses on the hedging instrument and the offsetting losses or gains on the hedged item would be recorded in the income statement and would tend to naturally offset each other.

### **6.4.3.8 Portfolio of similar assets/liabilities**

ASC 815-20-25-12(b)(1) describes the “similar assets/liabilities test” that is required for fair value hedges of groups (portfolios) of assets or liabilities. Reporting entities seeking to fair value hedge a portfolio of assets or liabilities must generally perform a rigorous quantitative assessment at inception of the hedging relationship to document that the portfolio of assets or liabilities is eligible for designation as the hedged item in a fair value hedging relationship.

#### **Excerpt from ASC 815-20-25-12(b)**

The hedged item is a single asset or liability (or a specific portion thereof) or is a portfolio of similar assets or a portfolio of similar liabilities (or a specific portion thereof), in which circumstance:

1. If similar assets or similar liabilities are aggregated and hedged as a portfolio, the individual assets or individual liabilities must share the risk exposure for which they are designated as being hedged. The change in fair value attributable to the hedged risk for each individual item in a hedged portfolio must be expected to respond in a generally proportionate manner to the overall change in fair value of the aggregate portfolio attributable to the hedged risk.

Consistent with the ASC 815 prohibition on macro hedging, the designation of a group of assets or liabilities in a single hedging relationship is limited to only those similar assets or liabilities that share the same risk exposure for which they are designated as being hedged. ASC 815-20-55-14 indicates that the concept of similar assets or liabilities is interpreted very narrowly. The fair value of each individual item in the portfolio must be expected to change proportionate to the change in the entire portfolio. For example, when the changes in the fair value of the hedged portfolio attributable to the hedged risk alter that portfolio's fair value by 10% during a reporting period, the change in the fair value that is attributable to the hedged risk of each item in the portfolio should also be expected to be within a fairly narrow range of 10%.

#### **Excerpt from ASC 815-20-55-14**

If the change in fair value of a hedged portfolio attributable to the hedged risk was 10 percent during a reporting period, the change in the fair values attributable to the hedged risk for each item constituting the portfolio should be expected to be within a fairly narrow range, such as 9 percent to 11 percent. In contrast, an expectation that the change in fair value attributable to the hedged risk for individual items in the portfolio would range from 7 percent to 13 percent would be inconsistent with requirement in that paragraph [ASC 815-20-25-12(b)(1)].

ASC 815-20-55-15 provides guidance on aggregating a portfolio.

#### **ASC 815-20-55-15**

In aggregating loans in a portfolio to be hedged, an entity may choose to consider some of the following characteristics, as appropriate:

- a. loan type
- b. loan size
- c. nature and location of collateral
- d. interest rate type (fixed or variable)
- e. coupon interest rate or the benchmark rate component of the contractual coupon cash flows (if fixed)
- f. scheduled maturity or the assumed maturity if the hedged item is measured in accordance with paragraph 815-25-35-13B
- g. prepayment history of the loans (if seasoned)
- h. expected prepayment performance in varying interest rate scenarios.

In certain limited circumstances when the terms of the individual hedged items in the portfolio are aligned, a qualitative similar assets/liabilities test may be appropriate. For example, if a reporting entity intends to hedge a group of fixed-rate nonprepayable financial assets together in a single hedging relationship, when those financial assets all have the same benchmark component of the coupon, payment dates, and assumed maturity date (under the partial term hedging guidance), it may be able to qualitatively support that the individual items in the portfolio share the same risk exposure for which they are designated as being hedged. The determination of whether a quantitative or

qualitative analysis is sufficient is judgmental and will depend on the nature of the items being hedged.

The similar assets/liability test should be reperformed on an ongoing basis. In some cases, however, a full quantitative test may not be required, for instance, when there are no significant differences in the terms of the individual assets.

### Question DH 6-10

A financial institution economically hedges its interest rate spread through a macro hedge strategy, whereby hedging instruments are not linked to identifiable assets, liabilities, firm commitments, or forecasted transactions. Can such a strategy qualify for hedge accounting?

#### *PwC response*

No. Absent linkage to an identifiable asset, liability, firm commitment, or forecasted transaction (or a group of similar items), there is no objective method of either assessing the effectiveness of the hedging instruments or ultimately recognizing the results of the hedging instruments in income.

#### **6.4.4 Hedging the total change in fair value**

When the hedged risk is the total variability in fair value, as permitted by ASC 815-20-25-12(f)(1), the total change in fair value on the hedged item is offset in the income statement by the change in fair value of the hedging instrument. However, more effective hedges (with less impact to the income statement) may result if a reporting entity hedges just interest rate risk, as discussed in DH 6.4.5.

#### **6.4.5 Hedging the change in fair value-benchmark interest rate**

The Master Glossary defines interest rate risk differently for variable-rate and fixed-rate instruments. For recognized fixed-rate instruments, interest rate risk is defined as the change in fair value due to the change in the benchmark rate.

#### **Partial definition from the Master Glossary**

Interest Rate Risk: For recognized fixed-rate financial instruments, interest rate risk is the risk of changes in the hedged item's fair value attributable to changes in the designated benchmark interest rate. For forecasted issuances or purchases of fixed-rate financial instruments, interest rate risk is the risk of changes in the hedged item's cash flows attributable to changes in the designated benchmark interest rate.

#### **6.4.5.1 Designating the benchmark interest rate**

The Master Glossary defines the benchmark interest rate.

#### **Definition from the ASC Master Glossary**

Benchmark Interest Rate: A widely recognized and quoted rate in an active financial market that is broadly indicative of the overall level of interest rates attributable to high-credit-quality obligors in that market. It is a rate that is widely used in a given financial market as an underlying basis for



determining the interest rates of individual financial instruments and commonly referenced in interest-rate-related transactions.

In theory, the benchmark interest rate should be a risk-free rate (that is, has no risk of default). In some markets, government borrowing rates may serve as a benchmark. In other markets, the benchmark interest rate may be an interbank offered rate.

Additionally, ASC 815-20-25-6A defines the list of eligible benchmark interest rates in the US as the following.

- Interest rates of direct obligations of the US government
- LIBOR swap rate
- Fed Funds Effective Swap Rate (also referred to as the Overnight Index Swap Rate or OIS)
- Securities Industry and Financial Markets Association (SIFMA) Municipal Swap Rate
- Secured Overnight Financing Rate (SOFR) Overnight Index Swap Rate

The benchmark interest rate(s) a reporting entity selects will, at a minimum, be used to discount the hedged item's projected cash flows.

Reporting entities may elect any of the benchmark interest rates on a hedge-by-hedge basis.

### ***Note about ongoing standard setting***

On April 20, 2022, the FASB released an exposure draft that proposed amending the description of the SOFR swap rate within the list of eligible benchmark interest rates within ASC 815-20-25-6A to allow all SOFR swap rates to be eligible rather than just the SOFR Overnight Index Swap Rate. The proposed wording by the FASB would align the SOFR swap rate with the currently defined LIBOR swap rate and list the "Secured Overnight Financing Rate (SOFR) Swap Rate" as the eligible benchmark interest rate. Financial statement preparers and other users of this publication are therefore encouraged to monitor the status of the proposal.

### ***Benchmark interest rates outside the US***

The list of benchmark rates in ASC 815 is for the US market. The guidance does not specifically address markets outside the US, except that ASC 815-20-55-128 references Euribor as an eligible benchmark interest rate for euro-denominated financial assets or liabilities. It provides an example of a reporting entity designating an interest rate swap to hedge its exposure to changes in fair value of its euro-denominated debt obligation that is attributable to changes in Euribor interest rates.

The benchmark interest rate should be a risk-free rate, but may be an interbank offered rate that is not entirely free of risk. Euribor, for example, is sponsored by the European Banking Federation, is widely recognized, and is quoted in an active financial market by banks with high credit ratings. It is the rate at which euro interbank term deposits are offered by one prime bank to another prime bank. Reporting entities will need to consider the definition in ASC 815 when determining the eligibility of rates outside the US.



### 6.4.6 *Measuring the hedged item*

ASC 815-25-35-1 requires the carrying amount of the hedged item to be adjusted for the fair value changes attributable to the hedged risk (commonly referred to as basis adjustments). When the hedged risk is the overall fair value of the entire hedged item, the measurement of the hedged item should be consistent with ASC 820. However, when the hedged item is a financial asset or liability and the hedged risk is interest rate risk, ASC 815 provides two ways to project cash flows on the hedged item when measuring the changes in fair value of hedged item: total contractual coupon cash flows or the benchmark component of the contractual coupon cash flows.

Reporting entities can elect to use either the total coupon cash flows or the benchmark component of the coupon cash flows to measure the hedged item on a hedge-by-hedge basis. The ability to elect a method to measure the hedged item on a hedge-by-hedge basis is analogous to the ability to choose one of multiple benchmark interest rates, as discussed in DH 6.4.5.1. For reporting entities with a borrowing rate that is close to the benchmark rate, there may be limited differences in hedge results and earnings impact under either method.

The methodology to measure the gain or loss should be consistent with the original documented risk management strategy. When the risk designated is changes in fair value due to changes in the benchmark interest rate, documentation should include details related to:

- The designated benchmark rate
- Whether the contractual coupon or benchmark component of the contractual coupon will be used to project cash flows on the hedged item
- The portion of the term of the financial instrument being hedged
- The prepayment features embedded in the instrument, and whether those features will be considered in the measurement of the hedged item due to fluctuations in only the benchmark interest rate or all factors that would impact prepayment

#### 6.4.6.1 *Measuring the hedged item based on contractual coupon cash flows*

When using the total contractual coupon cash flows to measure the hedged item, reporting entities are not permitted to exclude some of the hedged item's contractual cash flows (e.g., the portion of the interest coupon that is in excess of the benchmark rate) at any point in the hedging relationship. No specific guidance is provided regarding the yield curve with which the hedged item's estimated cash flows should be discounted.

When using the total contractual coupon cash flows to determine the change in fair value of the hedged item attributable to the hedged risk, there will always be some amount of earnings mismatch when a fixed-rate interest-bearing asset or liability is being hedged for changes in the benchmark interest rate under the long-haul method. This is due to the difference between the interest coupon and the benchmark rate at inception of the hedging relationship, which is not economically reflected in the terms of the interest rate swap. The only way to avoid this result in a fair value hedge of the benchmark interest rate when the hedged item is measured based on total contractual coupon cash flows is to qualify for the shortcut method, which assumes that the change in the fair value of the hedged item attributable to the benchmark rate is equal to the change in the fair value of the interest

rate swap. However, as discussed in DH 9.4, the shortcut method is limited to only those hedging relationships that meet strict criteria.

### Question DH 6-11

DH Corp enters into an interest rate swap to hedge the risk of changes in a benchmark interest rate on fixed-rate debt. When recording the change in the fair value of the hedged item attributable to the hedged risk using the total contractual cash flows, should the following factors be considered in the estimation of changes in the debt's fair value attributable to the hedged risk (interest rate risk)?

- Changes in the entity's credit quality
- Changes in sector credit spreads
- Liquidity of the hedged item

#### *PwC response*

No. The provisions of ASC 815 indicate that, in accounting for the hedged item, DH Corp should adjust the carrying amount of the debt each reporting period solely to reflect changes in the debt's value that are attributable to the risk being hedged.

In this example, the risk being hedged comprises changes in the debt's fair value caused by changes in a benchmark interest rate. Accordingly, in estimating the changes in the debt's fair value for purposes of applying the guidance, DH Corp should not consider changes that are attributable to entity-level or sector-level credit risk or liquidity. However, those factors should be considered when disclosing the fair value of DH Corp's financial instruments pursuant to ASC 825 and ASC 820.

The risks should be considered in determining the fair value of the derivative hedging instrument, which is measured at its full fair value.

#### **6.4.6.2 Measuring the hedged item based on the benchmark component**

Measuring the hedged item in a fair value hedge based on the benchmark component of the coupon is permitted for fair value hedges of fixed-rate assets or liabilities, regardless of whether the coupon or yield is more or less than the benchmark rate. While "benchmark component" is not defined, it is meant to represent the current on-market benchmark rate as of the designation of the hedging relationship. In other words, the benchmark component may be viewed as the rate on the fixed leg of a swap that:

- is at-market (has a fair value of zero) on the designation date,
- has a floating leg with no spread, and
- has the same terms as the hedged item.

For example, if LIBOR is designated as the benchmark interest rate:

- The benchmark component of five-year non-callable fixed-rate debt is the fixed rate of an at-market LIBOR-flat (i.e., LIBOR with no spread) five-year swap.

- The benchmark component of five-year fixed-rate debt callable in year three is the fixed rate of an at-market LIBOR-flat five-year swap that is cancellable in year three.

If the swap used as the hedging instrument is executed contemporaneously with the start of the hedging relationship, is at-market, and has the same terms as the hedged item, use of the benchmark component of the contractual coupon will result in the following.

- The fixed rate on a LIBOR-flat swap and the assumed fixed rate on the hedged item would match. As such, only potential mismatches in discount rates for the hedged item and hedging instrument would generate earnings volatility for the hedging relationship.
- The initial value of the bond for hedge accounting purposes will be par. This eliminates the need for the “pull-to-par” calculations (highlighted in Example DH 6-3).

This will be true regardless of when the hedged item was issued in relation to the hedge designation date. If the debt was issued the same day or three years prior to execution of the hedged relationship, use of the benchmark component will still result in the debt’s initial value for hedge accounting purposes being par. This is because the benchmark component of the coupon is determined at the date of hedge designation. As a result, its use helps to alleviate the tension associated with using the shortcut method of assessing effectiveness for a “late-term” hedge, that is, one designated in a period after the hedged item was issued, as discussed in DH 9.4.2.8.

When measuring the hedged item based on the total contractual coupon cash flows, a reporting entity will sometimes add a fixed spread to the hedged item’s discount rate. That is typically done to force the initial value of the hedged item for hedge accounting purposes to be equal to par. Since use of the benchmark component of the contractual coupon cash flows results in the hedged item’s initial value being par (when those cash flows are discounted using the benchmark interest rate), we do not expect entities to add a spread to the discount rate when electing to use the benchmark component of the cash flows to measure the hedged item.

### 6.4.6.3 *Measuring the hedged item methodologies*

ASC 815 does not prescribe a specific method for a reporting entity to calculate changes in fair value attributable to the benchmark interest rate. In practice, reporting entities may use two methodologies to estimate the change in value attributable to the risk being hedged (i.e., the basis adjustment), referred to as the Example 9/120C and Example 11/FAS 138 methods.

#### *Example 9/120C method*

The first method is described in ASC 815-25-55-55 (Example 9) and is often referred to as the “120C method” (as originally described in paragraph 120C of FAS 133).

#### **ASC 815-25-55-55**

Under this method, the change in a hedged item’s fair value attributable to changes in the benchmark interest rate for a specific period is determined as the difference between two present value calculations that use the remaining cash flows as of the end of the period and reflect in the discount rate the effect of the changes in the benchmark interest rate during the period.

**Excerpt from ASC 815-25-55-56**

Both present value calculations are computed using the estimated future cash flows for the hedged item, which would be either its remaining contractual coupon cash flows or the LIBOR benchmark rate component of the remaining contractual coupon cash flows determined at hedge inception as illustrated by the following Cases:

- a. Using the full contractual coupon cash flows (Case A)
- b. Using the LIBOR benchmark rate component of the contractual coupon cash flows (Case B).

Under the 120C method, the change in the fair value of the hedged item over a specific period of time is calculated as the difference between:

- the present value of the cash flows as of the end of the period using the benchmark rate at the beginning of the period, and
- the present value of the cash flows as of the end of the period using the benchmark rate at the end of the period.

In other words, this method compares end-of-period cash flows associated with the hedged item discounted using the benchmark rate at the beginning and end of the specified period. Accordingly, the change in fair value attributable to changes in the benchmark rate (designated hedged risk) from the beginning of the period to the end of the period is isolated. This results in the change in fair value due to the passage of time being excluded from the measurement of the hedged item.

Absent any amortization policies, reporting entities using the Example 9 method may be left with “hanging” basis adjustments in the carrying value of the hedged item resulting in earnings volatility upon maturity of the hedged item (unless the hedging relationship is terminated earlier). Accordingly, reporting entities may choose to amortize basis adjustments each reporting period, as discussed in DH 6.4.7.

While the guidance does not specify the method of amortization, we believe the basis adjustment should be accounted for in the same manner as other components of the carrying amount of that asset or liability (e.g., the interest method).

Reporting entities should ensure basis adjustments are fully amortized upon the maturity of the hedged item.

***Example 11/FAS 138 method***

The more common method of measuring changes in fair value of a hedged item attributable to changes in a benchmark interest rate is illustrated in ASC 815-25-55-72 through ASC 815-25-55-77 (Example 11) and is often referred to as the “FAS 138 method” (since it was originally illustrated in the FASB staff’s examples issued in conjunction with FAS 138). Under this method, the changes in the fair value of the hedged item over a specific period of time are calculated as the difference between:

- the present value of the cash flows as of the beginning of the period using the benchmark rate at the beginning of the period, and

- the present value of the cash flows as of the end of the period using the benchmark rate at the end of the period.

Accordingly, the change in fair value attributable to changes in the benchmark interest rate (designated as the hedged risk) from the beginning of the period to the end of the period includes not only changes in the benchmark interest rate but also the change due to the passage of time. Adjustments may need to be made for the receipt/payment of cash.

When a reporting entity projects cash flows on the debt using the total contractual coupon (as discussed in DH 6.4.6.1), a debt instrument's present value is different from its book or par value at hedge inception since the total interest coupons are typically different from the benchmark rate. At maturity, the debt's present value will equal its par or redemption amount. In this scenario, the cumulative changes in present value of the debt instrument over the hedge period are not zero when using the present value technique under the Example 11 method. This is often referred to as the "pull-to-par" effect.

To illustrate this pull-to-par concept (pulling the present value of the debt at hedge inception to par upon maturity), consider a reporting entity with outstanding debt with a \$100 principal balance and \$105 present value at hedge inception. However, because the initial present value did not equal the par value, application of the Example 11 method without an additional adjustment would result in a \$5 gain at maturity of the hedged item. This would occur because under the Example 11 method, even if the benchmark interest rate did not change after hedge inception, the initial present value amount of the contractual cash flows would migrate toward par value over time. Consequently, the cumulative change in fair value not attributable to changes in a benchmark rate amounts to (\$5) over the hedge period (a decline from a \$105 present value at hedge inception to a \$100 fair value at hedge maturity). The (\$5) is the portion of the change in the present value calculations not attributable to a change in a benchmark interest rate, but to the natural migration of the initial present value to par over time. Therefore, the reporting entity would adjust the periodic basis adjustments on the hedged item to further isolate the change in value attributable to the hedged risk.

Specifically, a reporting entity should calculate the change in present value that would occur in each of the remaining reporting periods over the remaining term of the five-year debt assuming that the benchmark rate does not change. That calculated amount for each reporting period should be subtracted from the basis adjustments calculated under the Example 11 method for each corresponding reporting period to determine the net basis adjustment to be recognized.

In the first reporting period following hedge inception, the present value of \$105 may have become \$110 by the end of the period. The calculation that assumed no change in the benchmark rate would indicate that, if rates had not changed, the present value would have decreased from \$105 to \$103 as it migrates back to par. This difference of \$2 would need to be subtracted from the basis adjustment calculation of \$5 ( $\$110 - \$105$ ) resulting in \$7 ( $\$5 - (-\$2)$ ) as the net basis adjustment to be recognized against the hedged item. Consistently adjusting the basis adjustment each reporting period correctly accounts for any differences that existed at inception between the present value of future cash streams and par.

The Example 11 method is more common in practice than the Example 9 method, partly because the calculation of the change in fair value from the beginning of the period to the end of the period (including the passage of time) is supported by many Treasury valuation systems. Some Treasury valuation systems may not have the ability to isolate the change in value of the hedged item without the passage of time, as prescribed under the Example 9 method.

We believe the Example 11 method will continue to be more prevalent in practice after adoption of ASU 2017-12 now that the pull-to-par concerns have been mitigated through the ability to measure the hedged item using the benchmark component of the contractual coupon cash flows (as discussed in DH 6.4.6.2). Measuring the hedged item based upon the benchmark component of the contractual coupon cash flows will, in most cases, equate the hedged item's present value to par at hedge inception, as illustrated in Example DH 6-2.

### EXAMPLE DH 6-2

#### Measuring the hedged item based on the benchmark rate component of the contractual coupon under the Example 11 method

On January 1, 20X1, DH Corp issued a \$100,000, seven-year fixed-rate noncallable debt instrument with an annual 10% interest coupon at par. Two years after issuance, on December 31, 20X2, when the LIBOR swap rate for five years is 7% and the debt remains on the books at a carrying value equal to par, DH Corp enters into an on-market five-year receive-fixed (7%) pay-LIBOR interest rate swap and designates it as the hedging instrument in a fair value hedge of the \$100,000 liability due to changes in the benchmark interest rate (this is often referred to as a "late hedge"). DH Corp chooses to measure the hedged item based on the benchmark rate component of the contractual coupon cash flows.

The variable leg of the interest rate swap resets each year on December 31 for the payments due the following year. At the time of hedge designation, the debt is recorded on DH Corp's books at \$100,000. The present value of the debt including its full \$10,000 annual contractual coupons discounted at the benchmark interest rate is approximately \$112,300. However, when only the benchmark rate component of the coupon is used (i.e., 7%, resulting in \$7,000 per annum assumed cash flows), the present value of the debt discounted at the hedge inception benchmark rate is equal to the par value of the debt. The incremental \$3,000 per year of cash flows on the debt is not considered in the measurement of the hedged item due to the hedged risk since DH Corp chooses to measure the hedged item based upon the benchmark rate component of the contractual coupon cash flows.

Benchmark interest rates are as follows.

<b>Year</b>	<b>LIBOR swap rate</b>
20X2	7%
20X3	6.5%
20X4	6.0%
20X5	5.5%
20X6	5.0%
20X7	4.5%

How should DH Corp account for the fair value hedge using the benchmark rate component of the contractual coupon under the Example 11 method to measure the hedged item?

*Analysis*

When discounting the benchmark rate component of the contractual coupon cash flows at the designated benchmark interest rate, the present value of the bond's cash flows at the inception of the hedging relationship will equal par. When using the full contractual coupon, the present value of the cash flows would be greater than par. As a result, a pull-to-par adjustment resulting from this premium (i.e., the \$12,300 explained above and as used in Example DH 6-3) would otherwise be required to ensure the carrying value of the hedged item is equal to par at the maturity of the hedging relationship. Under the benchmark rate component of the contractual coupon, this premium may not exist. Under the Example 11 method, when a hedged item begins at par and is subsequently adjusted away from par due to changes in the benchmark rate, the calculations will return the hedged item back to par as it approaches the designated maturity. This is observable in years 20X6 and 20x7. In this example, interest rates decline each period by 50 basis points. A fixed-rate instrument should increase in present value when rates decline. However, as the instrument gets closer to the designated maturity, the changes in value calculated under the Example 11 method will revert the debt to par because the effects of discounting diminish as maturity approaches.

The calculations in this example are simplified by assuming that the interest rate applicable to a payment due at any future date is the same as the rate for a payment at any other future date (that is, the yield curve is flat for the term of the swap), and that all rates change only once per year on December 31 of each year.

DH Corp records the following journal entries (for the purposes of this example, any credit valuation adjustment (CVA) or debit valuation adjustment (DVA) impacts on the valuation of the swap have been ignored).

**December 31, 20X3**

Dr. Interest expense	\$1,713	
Cr. Debt		\$1,713

To record the change in fair value of debt for change in benchmark interest rates  
 $(\$7,000 \times [(1 - (1.065)^{-4}) \times (0.065)^{-1}] + \$100,000 \times (1.065)^{-4} = \$101,713 \text{ minus } \$100,000)$

Dr. Swap contract	\$1,713	
Cr. Interest expense		\$1,713

To record the change in fair value of the swap  
 $(\$7,000 \times [(1 - (1.065)^{-4}) \times (0.065)^{-1}] - \$6,500 \times [(1 - (1.065)^{-4}) \times (0.065)^{-1}])$

Dr. Interest expense	\$10,000	
Cr. Cash		\$10,000

To record payment of interest on the debt (\$100,000 @ 10%)

*Note: No cash settlement on the swap to be recorded as the fixed and floating legs were both 7% for 20x3*

**December 31, 20X4**

Dr. Interest expense	\$960	
Cr. Debt		\$960
To record the change in fair value of debt for change in benchmark interest rates $(\$7,000 \times [(1 - (1.06)^{-3}) \times (0.06)^{-1}] + \$100,000 \times (1.06)^{-3} = \$102,673 \text{ less } \$101,713)$		
Dr. Swap contract	\$960	
Cr. Interest expense		\$960
To record the change in fair value of the swap $(\$7,000 \times [(1 - (1.06)^{-3}) \times (0.06)^{-1}] - \$6,000 \times [(1 - (1.06)^{-3}) \times (0.06)^{-1}] = \$2,673 \text{ less } \$1,713)$		
Dr. Interest expense	\$10,000	
Cr. Cash		\$10,000
To record payment of interest on the debt (\$100,000 @ 10%)		
Dr. Cash	\$500	
Cr. Interest expense		\$500
To record the settlement on the swap (receive fixed \$7,000, pay float \$6,500)		

**December 31, 20X5**

Dr. Interest expense	\$96	
Cr. Debt		\$96
To record the change in fair value of debt for change in benchmark interest rates $(\$7,000 \times [(1 - (1.055)^{-2}) \times (0.055)^{-1}] + \$100,000 \times (1.055)^{-2} = \$102,769 \text{ less } \$102,673)$		
Dr. Swap contract	\$96	
Cr. Interest expense		\$96
To record the change in fair value of the swap $(\$7,000 \times [(1 - (1.055)^{-2}) \times (0.055)^{-1}] - \$5,500 \times [(1 - (1.055)^{-2}) \times (0.055)^{-1}] = \$2,769 \text{ less } \$2,673)$		
Dr. Interest expense	\$10,000	
Cr. Cash		\$10,000
To record payment of interest on the debt (\$100,000 @ 10%)		
Dr. Cash	\$1,000	
Cr. Interest expense		\$1,000
To record the settlement on the swap (receive fixed \$7,000, pay float \$6,000)		



**December 31, 20X6**

Dr. Debt	\$865	
Cr. Interest expense		\$865
To record the change in fair value of debt for change in benchmark interest rates $(\$7,000 \times [(1 - (1.05)^{-1}) \times (0.05)^{-1}] + \$100,000 \times (1.05)^{-1} = \$101,904 \text{ less } \$102,769)$		
Dr. Interest expense	\$865	
Cr. Swap contract		\$865
To record the change in fair value of the swap $(\$7,000 \times [(1 - (1.05)^{-1}) \times (0.05)^{-1}] - \$5,000 \times [(1 - (1.05)^{-1}) \times (0.05)^{-1}] = \$1,904 \text{ less } \$2,769)$		
Dr. Interest expense	\$10,000	
Cr. Cash		\$10,000
To record payment of interest on the debt (\$100,000 @ 10%)		
Dr. Cash	\$1,500	
Cr. Interest expense		\$1,500
To record the settlement on the swap (receive fixed \$7,000, pay float \$5,500)		

**December 31, 20X7**

Dr. Debt	\$1,904	
Cr. Interest expense		\$1,904
To record the change in fair value of debt for change in benchmark interest rates $(\$7,000 \times [(1 - (1.045)^{-0}) \times (0.045)^{-0}] + \$100,000 \times (1.045)^{-0} = \$100,000 \text{ less } \$101,904)$		
Dr. Interest expense	\$1,904	
Cr. Swap contract		\$1,904
To record the change in fair value of the swap No future settlements as swap has matured so fair value is zero (\$0-\$1,904)		
Dr. Interest expense	\$10,000	
Cr. Cash		\$10,000
To record payment of interest on the debt (\$100,000 @ 10%)		
Dr. Cash	\$2,000	
Cr. Interest expense		\$2,000
To record the settlement on the swap (receive fixed \$7,000, pay float \$5,000)		

Example DH 6-3 illustrates how to exclude the “pull-to-par” effect from the measurement of the hedged item under the Example 11 method when the hedged item is measured using the full

contractual coupon cash flows under ASC 815-25-35-13. We observe that when confronted with the differences in complexity between Example DH 6-2 and Example DH 6-3, most reporting entities will choose to use the benchmark rate component of the contractual coupon with the Example 11 method.

### EXAMPLE DH 6-3

#### Measuring the hedged item based upon the total contractual coupon using the Example 11 method

On January 1, 20X1, DH Corp issued a \$100,000, seven-year fixed-rate noncallable debt instrument with an annual 10% interest coupon at par. Two years after issuance, on December 31, 20X2, when the LIBOR swap rate for five-year debt is 7% and the debt remains on the books at a carrying value equal to par, DH Corp enters into an on-market five-year receive-fixed (7%) pay-LIBOR interest rate swap and designates it as the hedging instrument in a fair value hedge of the \$100,000 liability due to the change in the benchmark interest rate. DH Corp chooses to measure the hedged item based on the total contractual coupon cash flows.

The variable leg of the interest rate swap resets each year on December 31 for the payments due the following year. At the time of hedge designation, the debt is recorded on DH Corp's books at \$100,000; however, the present value of the contractual cash flows of the debt discounted at the benchmark interest rate is approximately \$112,300, a difference from par of \$12,300.

Benchmark interest rates are as follows.

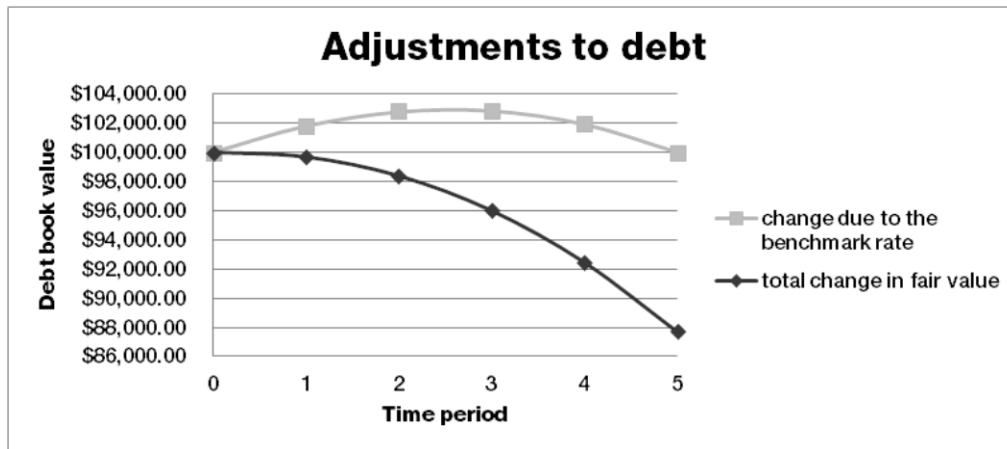
Year	LIBOR swap rate
20X2	7%
20X3	6.5%
20X4	6.0%
20X5	5.5%
20X6	5.0%
20X7	4.5%

How should DH Corp account for the fair value hedge using the total contractual coupon cash flows under the Example 11 method to measure the hedged item?

#### *Analysis*

If the book value of the debt is simply adjusted for the total change in value due to both interest rate changes and the changes in time, the pull-to-par effects of a debt's change in value from a premium (i.e., the \$12,300 in this example) down to par would, over time, bring the debt's ultimate carrying value down to \$87,700 by crediting the income statement in 20X3, 20X4, 20X5, 20X6, and 20X7. This amount is not reflective of a change in fair value due to changes in the benchmark interest rate. It would result in a \$12,300 loss at maturity; the debt will be settled for \$100,000 when the book value is \$87,700. (Reference the lower line in the below graph.)

To avoid this outcome, pull-to-par effects must be removed from the changes in fair value of the hedged item due to changes in the hedged risk calculation. To isolate the pull-to-par effects, the hedge accounting needs to be adjusted for the effects of \$12,300 of premium on the same debt instrument with rates remaining at the 7% initial hedge rate throughout the time of the hedge until maturity. The pull-to-par effect can be determined by calculating the change in fair value in each period after the hedge designation date, assuming no changes in discount rates (see the impact of passage of time in the following table).



Consistent with the example in ASC 815-25-55-54, the calculations in this example are simplified by assuming that the interest rate applicable to a payment due at any future date is the same as the rate for a payment at any other future date (that is, the yield curve is flat for the term of the swap), and that all rates may change only once per year on December 31 of each year.

This example illustrates one method of removing the pull-to-par effect from the changes in fair value of the hedged item due to changes in the hedged risk calculation. There may be other methods that are acceptable. For example, a company might include a fixed spread to the benchmark interest rate used to discount the cash flows when computing changes in fair value of the hedged item due to changes in the benchmark interest rate. The fixed spread would be determined such that the present value of cash flows at hedged inception equals the carrying amount of the hedged item and the fixed spread would remain fixed throughout the life of the hedging relationship.

**Change in present value of the cash flows due to both  
interest rates and time remaining until maturity**

<b>Date</b>	<b>12/31/X2</b>	<b>12/31/X3</b>	<b>12/31/X4</b>	<b>12/31/X5</b>	<b>12/31/X6</b>	<b>12/31/X7</b>	<b>Totals</b>
Present value (PV)	\$112,301	\$111,990	\$110,692	\$108,308	\$104,762	\$100,000	
Total change in present value (TC)	N/A	\$310	\$1,298	\$2,384	\$3,547	\$4,762	\$12,301

**Isolate the change in time adjustment under Example 11 method  
while keeping rates constant at 7%**

Date	12/31/X2	12/31/X3	12/31/X4	12/31/X5	12/31/X6	12/31/X7	
Present value	\$112,301	\$110,162	\$107,873	\$105,424	\$102,804	\$100,000	
Change in present value due to passage of time ( $\Delta t$ )	N/A	\$2,139	\$2,289	\$2,449	\$2,620	\$2,804	\$12,301

**Compute changes in fair value due to changes in the benchmark interest rate**

Date	12/31/X2	12/31/X3	12/31/X4	12/31/X5	12/31/X6	12/31/X7	
Total change in present value		\$310	\$1,298	\$2,384	\$3,547	\$4,762	\$12,301
Less impact of passage of time	$-\Delta t$	\$2,139	\$2,289	\$2,449	\$2,620	\$2,804	\$12,301
Change in present value due to changes in benchmark interest rate		(\$1,829)	(\$991)	(\$65)	\$927	\$1,958	\$0
		<i>a</i>	<i>c</i>	<i>e</i>	<i>g</i>	<i>i</i>	
Change in fair value of the swap		\$1,713	\$960	\$96	(\$865)	(\$1,905)	\$0
		<i>b</i>	<i>d</i>	<i>f</i>	<i>h</i>	<i>j</i>	
Earnings impact – difference in interest expense		(\$116)	(\$30)	\$31	\$62	\$53	

**December 31, 20X3**

Dr. Interest expense	\$1,829	
Cr. Debt		\$1,829
To record the change in fair value of debt for change in benchmark interest rates (a)		
Dr. Swap contract	\$1,713	
Cr. Interest expense		\$1,713
To record the change in fair value of the swap (b)		
Dr. Interest expense	\$10,000	
Cr. Cash		\$10,000

To record payment of interest on the debt (\$100,000 @ 10%)

*Note: No cash settlement on the swap to be recorded, as the fixed and floating legs were both 7% for 20x3*

**December 31, 20X4**

Dr. Interest expense	\$991	
Cr. Debt		\$991
To record the change in fair value of debt for change in benchmark interest rates (c)		
Dr. Swap contract	\$960	
Cr. Interest expense		\$960
To record the change in fair value of the swap (d)		
Dr. Interest expense	\$10,000	
Cr. Cash		\$10,000

To record payment of interest on the debt (\$100,000 @ 10%)

Dr. Cash	\$500	
Cr. Interest expense		\$500

To record the settlement on the swap (receive fixed \$7,000, pay float \$6,500)

**December 31, 20X5**

Dr. Interest expense	\$65	
Cr. Debt		\$65
To record the change in fair value of debt for change in benchmark interest rates (e)		
Dr. Swap contract	\$96	
Cr. Interest expense		\$96
To record the change in fair value of the swap (f)		
Dr. Interest expense	\$10,000	
Cr. Cash		\$10,000
To record payment of interest on the debt (\$100,000 @ 10%)		
Dr. Cash	\$1,000	
Cr. Interest expense		\$1,000
To record the settlement on the swap (receive fixed \$7,000, pay float \$6,000)		

**December 31, 20X6**

Dr. Debt	\$927	
Cr. Interest expense		\$927
To record the change in fair value of debt for change in benchmark interest rates (g)		
Dr. Interest expense	\$865	
Cr. Swap contract		\$865
To record the change in fair value of the swap (h)		
Dr. Interest expense	\$10,000	
Cr. Cash		\$10,000
To record payment of interest on the debt (\$100,000 @ 10%)		
Dr. Cash	\$1,500	
Cr. Interest expense		\$1,500
To record the settlement on the swap (receive fixed \$7,000, pay float \$5,500)		

**December 31, 20X7**

Dr. Debt	\$1,958	
Cr. Interest expense		\$1,958
To record the change in fair value of debt for change in benchmark interest rates (i)		
Dr. Interest expense	\$1,905	
Cr. Swap contract		\$1,905
To record the change in fair value of the swap (j)		
Dr. Interest expense	\$10,000	
Cr. Cash		\$10,000
To record payment of interest on the debt (\$100,000 @ 10%)		
Dr. Cash	\$2,000	
Cr. Interest expense		\$2,000
To record the settlement on the swap (receive fixed \$7,000, pay float \$5,000)		

**6.4.6.4 Partial-term hedging**

A partial-term hedge is a hedge for a portion of the time to maturity of a fixed-rate asset or liability, for example, the first two years of a four-year bond. ASC 815-20-25-12(b)(2)(ii) provides for partial-term hedging.

**ASC 815-20-25-12(b)(2)**

If the hedged item is a specific portion of an asset or liability (or of a portfolio of similar assets or a portfolio of similar liabilities), the hedged item is one of the following:

- i. A percentage of the entire asset or liability (or of the entire portfolio). An entity shall not express the hedged item as multiple percentages of a recognized asset or liability and then retroactively determine the hedged item based on an independent matrix of those multiple percentages and the actual scenario that occurred during the period for which hedge effectiveness is being assessed.
- ii. One or more selected contractual cash flows, including one or more individual interest payments during a selected portion of the term of the instrument (such as the portion of the asset or liability representing the present value of the interest payments in any consecutive two years of a four-year debt instrument). Paragraph 815-25-35-13B discusses the measurement of the change in fair value of the hedged item in partial-term hedges of interest rate risk using an assumed term.

ASC 815-25-35-13B provides measurement guidance for partial-term fair value hedging of interest rate risk.

**ASC 815-25-35-13B**

For a fair value hedge of interest rate risk in which the hedged item is for a partial term in accordance with paragraph 815-20-25-12(b)(2)(ii), an entity may measure the change in the fair value of the hedged item attributable to interest rate risk using an assumed term that begins when the first hedged cash flow begins to accrue and ends at the end of the designated hedge period. The assumed issuance of the hedged item occurs on the date that the first hedged cash flow begins to accrue. The assumed maturity of the hedged item occurs at the end of the designated hedge period. An entity may measure the change in fair value of the hedged item attributable to interest rate risk in accordance with this paragraph when the entity is designating the hedged item in a hedge of both interest rate risk and foreign exchange risk. In that hedging relationship, the change in carrying value of the hedged item attributable to foreign exchange risk shall be measured on the basis of changes in the foreign currency spot rate in accordance with paragraph 815-25-35-18. Additionally, an entity may have one or more separately designed partial-term hedging relationships outstanding at the same time for the same debt instrument (for example, 2 outstanding hedging relationships for consecutive interest cash flows in Years 1-3 and consecutive interest cash flows in Years 5-7 of a 10 year debt instrument).

Under a partial-term hedging strategy, an interest rate swap with a term of two years may be designated as hedging the corresponding interest payments of a fixed-rate debt instrument with a longer term of, say, four years. Thus, the four-year debt instrument is economically (i.e., synthetically) converted into an instrument whose interest rate floats with the market for two years (i.e., the hedged period) and is fixed for the other two years.

Mechanically, partial-term hedging under the new guidance is achieved by assuming that the term of the hedged item is the same as the term of the hedging instrument. The reporting entity should assume that any payments made at the contractual maturity of the hedged item are made at the conclusion of the hedge term (i.e., at the end of the partial-term period). Without this assumption, the hedge would likely not be highly effective.

See DH 6.4.7.1 for discussion of amortization of basis adjustments in partial-term hedges.

**Question DH 6-12**

On 1/1/20X1, DH Corp enters into a forward contract to purchase a fixed-rate bond of a private company on 6/30/20X1. The bond matures in 10 years and is prepayable by the issuer after 7 years. Once acquired, the bond will be classified as an available-for-sale debt security by DH Corp. The forward contract is not deemed to be a derivative pursuant to ASC 815 (i.e., it does not meet the net settlement criteria) and it is measured at fair value with changes in fair value recognized in other comprehensive income in accordance with ASC 815-10-35-5.

Can DH Corp begin a fair value hedge on 1/1/20X1 of the non-callable period by designating a forward starting 7-year pay fixed receive-variable interest rate swap with a forward start date of 6/30/20X1 and apply the partial-term hedging guidance in ASC 815-25-35-13B?

***PwC response***

No. For partial-term hedges under ASC 815-25-35-13B, a reporting entity may enter into a fair value hedge of interest rate risk in which the hedged item is designated as the selected contractual cash flows, including one or more individual interest payments, in accordance with ASC 815-20-25-



12(b)(2)(ii). On 1/1/20X1, DH Corp does not own the contractual rights to the bond's series of individual cash flows, it is merely the counterparty to the forward contract. The forward contract has a single cash flow at settlement on 6/30/20X1 and does not have a series of contractual cash flows that includes one or more individual interest payments. DH Corp should not look through the forward contract to the fixed-rate bond's contractual interest cash flows as the fixed-rate bond is not owned by DH Corp until the settlement of the forward contract. Therefore, on 1/1/20X1 the callable bond is not yet a recognized financial asset that is eligible to be a hedged item. DH Corp would have an instrument with one or more interest payments once the forward contract is settled and the fixed-rate bond is acquired on 6/30/20X1. At that point DH Corp could designate a hedge relationship using the partial-term hedge guidance under ASC 815-25-35-13B if all of the criteria to obtain hedge accounting are met. The forward starting swap will likely not have a fair value of zero on 6/30/20X1, which may impact an assessment of effectiveness.

### Question DH 6-13

On 1/1/20X1, DH Corp purchases a zero-coupon bond upon issuance of the bond at a significant discount to its par amount. The zero-coupon bond will mature in five years on 12/31/20X5. Can DH Corp enter into a fair value hedge to hedge the effective interest rate accruals for the first two years of the zero-coupon bond with an interest rate swap maturing on 12/31/20X2 using the partial-term hedging guidance in ASC 815-20-25-12(b)(ii)?

#### *PwC response*

No. ASC 815-20-25-12(b)(2)(ii) states that for a partial-term fair value hedge, the hedged item must be designated as one or more selected contractual cash flows, including one or more individual interest payments during a selected portion of the term of a debt instrument. The zero-coupon bond has only a single contractual cash flow that will occur at maturity on 12/31/20X5. Therefore, there are no eligible contractual cash flows to be designated as the hedged item over the partial-term period from 1/1/20X1 through 12/31/20X3.

#### 6.4.6.5 *Measuring prepayment risk*

In a fair value hedge of the benchmark interest rate risk in fixed-rate prepayable debt (that is not designated in a portfolio layer method hedge), prepayment risk needs to be measured in one of two ways, considering:

- only how fluctuations in the designated benchmark interest rate would affect the decision to settle the hedged item prior to its contractual maturity, or
- all factors that would affect the decision to settle the hedged item prior to its contractual maturity.

When considering the effect of a prepayment option only as it relates to changes in the benchmark interest rate to assess hedge effectiveness and calculate the change in fair value of the hedged item, the reporting entity will only consider how the change in the benchmark interest rate, not other factors such as credit risk, will impact the decision to call or put the instrument. Limiting consideration of the prepayment option to only benchmark interest rate risk will likely make hedges of prepayable assets and liabilities more effective.

The decision to consider only how the benchmark interest rate impacts the decision to prepay is independent of the decision to measure the hedged item using the benchmark component of

contractual cash flows. Reporting entities can use either the benchmark component or contractual coupon cash flows and still elect to evaluate the prepayment feature in this way.

### ***Measuring prepayment risk in combination with the partial-term guidance***

If the prepayment feature within the hedged item is outside the term of the hedging relationship, the measurement of the hedged item does not need to consider the prepayment risk. Figure DH 6-4 illustrates this point.

#### **Figure DH 6-4**

Considering optionality in measurement of hedged item

	<b>Hedging relationship 1</b>	<b>Hedging relationship 2</b>
Hedged item	Bond A	Bond B
Stated maturity	9/30/2025	9/30/2025
Optionality	Callable starting 10/1/2024	Callable starting 10/1/2024
Designated hedged term end date	9/30/2024	9/30/2025
Hedged item measurement include optionality?	No	Yes

In Hedging relationship 2, the optionality is considered in measuring the hedged item because the hedge period extends past the option exercise date.

#### **6.4.7 Amortizing basis adjustments**

ASC 815-25-35-8 and ASC 815-25-35-9 provide guidance on amortizing basis adjustments in fair value hedges.

#### **ASC 815-25-35-8**

The adjustment of the carrying amount of a hedged asset or liability required by ASC 815-25-35-1(b) shall be accounted for in the same manner as other components of the carrying amount of that asset or liability. For example, an adjustment of the carrying amount of a hedged asset held for sale (such as inventory) would remain part of the carrying amount of that asset until the asset is sold, at which point the entire carrying amount of the hedged asset would be recognized as the cost of the item sold in determining earnings.

**ASC 815-25-35-9**

An adjustment of the carrying amount of a hedged interest-bearing financial instrument shall be amortized to earnings. Amortization shall begin no later than when the hedged item ceases to be adjusted for changes in its fair value attributable to the risk being hedged.

For an interest-bearing asset or liability, a reporting entity has two options in dealing with basis adjustments for active hedging relationships (1) defer the amortization of the hedged item's basis adjustment or (2) immediately start amortizing any basis adjustment.

- If amortization of the hedged item's basis adjustment is deferred, a significant income statement impact may result in later periods.,
- In the case of a fair value hedge of interest rate risk that uses a swap contract, an entity would most likely want to start immediately amortizing any basis adjustments to offset the passage of time component of the changes in the swap's fair value.

Reporting entities may defer amortization of a basis adjustment until the hedged interest-bearing asset or liability ceases to be adjusted for changes in fair value that are attributable to the risk that is being hedged. The policy election may simplify the accounting and record-keeping that an entity might otherwise have to undertake to track and properly account for basis adjustments.

Depending on the methodology used to calculate the basis adjustment of the hedged item (discussed in DH 6.4.6.2), the choice that the reporting entity has made to begin amortization immediately may not be readily apparent without looking at the actual calculation of the basis adjustment. For example, if a reporting entity used the Example 11 method, the amortization that occurs is inherent in the basis adjustment calculation because it incorporates a "natural amortization." The implicit "natural amortization" occurs because the difference between the beginning-of-the-period present value of the hedge item's future cash flows and the end-of-the-period present value of the hedged item's future cash flows, after adjustments for cash payments, is added to or subtracted from the carrying amount of the fixed rate debt. The "natural amortization" will result in the match of accounting and economics that the reporting entity wanted to obtain when it elected hedge accounting. The Example 11 method will result in a close offset between the changes in the fair value of the interest rate swap and the change in the carrying value of the hedged item because the calculation incorporates a benchmark interest rate-based factor for the "passage of time."

In contrast, the reporting entity could choose to apply the Example 9 method. In that methodology, the difference between the two end-of-period present value cash flow streams will be added to or subtracted from the carrying amount of the fixed-rate debt. There is no passage of time captured or implicitly factored into the calculation, because both of the amounts are as of the end of the period. Therefore, no "natural amortization" will occur. If the reporting entity applies the Example 9 method, there will be a build-up in the debt's basis adjustments that could result in gains or losses at maturity, and it would not get the full offset between changes in fair value of the swap and debt without separately amortizing the basis adjustments. To achieve the accounting offset between the hedging instrument and the hedged item, the reporting entity can begin amortization of the basis adjustment immediately through an appropriate amortization method. Using a market-based amortization method, the results of the "natural amortization" in the Example 11 method could be duplicated. Under the Example 9 method, the amortization of the basis adjustment would be more evident than

under the Example 11 method, as the reporting entity would have to keep separate records and schedules to determine the amount of amortization each period.

When initially designating the hedging relationship and preparing the contemporaneous hedge documentation, a reporting entity must specify how hedge accounting adjustments will be subsequently recognized in income, and should elect a similar approach for similar hedges. This will prevent the entity from choosing to (1) defer amortization of basis adjustments that would result in a charge to current earnings and (2) currently amortize basis adjustments that result in an increase in earnings. We do not believe determining whether the effect of amortization is a debit or credit is an appropriate basis for distinguishing similar types of hedged items.

The recognition of basis adjustments will differ depending on how other adjustments of the hedged item's carrying amount will be reported in earnings. For example, gains and losses on an interest-bearing debt instrument that are attributable to interest rate risk are amortized as a yield adjustment.

Further, if the hedged item is a portfolio of similar assets or liabilities, except a closed portfolio in a portfolio layer method hedge, a reporting entity must allocate the hedge accounting adjustments to individual items in the portfolio. Information about such allocations is required, for example, when (1) the assets are sold or liabilities are settled, (2) the hedging relationship is discontinued, (3) the hedged item is assessed for impairment and (4) for the purposes of presentation and disclosure. Portfolio layer method hedges are addressed in DH 6.5.

#### **6.4.7.1 Basis adjustments in partial-term hedges**

If a reporting entity elects to amortize a basis adjustment in a partial-term hedge while the hedging relationship is in place, it would amortize the basis adjustment over the life of the hedge (that is, over the partial-term period). However, if the hedge is discontinued early, the remaining basis adjustment would be amortized in accordance with the guidance in ASC 310-20, *Nonrefundable Fees and Other Costs*. Thus, the amortization period may change upon termination.

#### **6.4.7.2 Basis adjustments in fair value hedges of AFS debt securities**

For fair value hedges of available-for-sale debt securities, ASC 815-25-35-6 requires that the basis adjustment be recognized in earnings, rather than through OCI, to offset the gain or loss on the hedging instrument. For example, if a reporting entity hedges only the risk of changes in fair value due to changes in the benchmark interest rate of a fixed-rate available-for-sale debt security, the guidance requires that (1) changes in the fair value that are due to benchmark interest rate risk be recorded in earnings while (2) changes in the fair value that are due to credit risk and other unhedged risks be recorded through OCI.

#### **6.4.7.3 Purchased callable debt securities**

ASC 310-20, *Receivables — Nonrefundable Fees and Other Costs*, indicates that premiums on callable debt securities purchased at a premium (i.e., a price in excess of par) should be amortized to the earliest call date (as opposed to through the maturity date). The Basis for Conclusions in ASU 2017-08, *Premium Amortization on Purchased Callable Debt Securities*, indicates that the guidance does not impact the amortization of basis adjustments from fair value hedges of interest rate risk. However, when the hedging relationship is discontinued and a hedge accounting basis adjustment remains, a reporting entity would follow the guidance in ASC 310-20.

#### 6.4.7.4 ***Effect of basis adjustments on capitalization of interest***

ASC 815-25-35-14 addresses how hedge accounting should be treated for capitalization purposes under ASC 835-20, *Capitalization of Interest*.

##### **ASC 815-25-35-14**

Amounts recorded in an entity's income statement as interest costs shall be reflected in the capitalization rate under Subtopic 835-20. Those amounts could include amortization of the adjustments of the carrying amount of the hedged liability, under paragraphs 815-25-35-9 through 35-9A, if an entity elects to begin amortization of those adjustments during the period in which interest is eligible for capitalization.

#### 6.4.7.5 ***Basis adjustments in portfolio layer hedges***

See DH 6.5.3 for information on basis adjustments in portfolio layer hedges.

#### 6.4.8 ***Impairment or credit losses of hedged item***

This section assumes adoption of ASU 2016-13. ASC 815-25-35-10 states that assets and liabilities that have been designated as hedged items in a fair value hedging relationship remain subject to the normal requirements to assess impairment or credit losses (or to assess the need to recognize an increase in an obligation) that are prescribed by other GAAP, for example:

- Lower of cost or fair value under ASC 948-310-35-1
- Impairment of loans under ASC 326-20
- Impairment of securities under ASC 326-30
- Impairment of long-lived assets under ASC 360-10-35-20, and valuation of inventory under ASC 330-10-35-13

With the exception of hedges designated under the portfolio layer method, a reporting entity must apply the relevant impairment or credit losses requirements *after* hedge accounting is applied for the period and the hedged item's carrying amount has been adjusted to reflect changes in fair value that are attributable to the risk that is being hedged. Because the hedging instrument is recognized separately as an asset or a liability, its fair value or expected cash flows will not be considered in the application of the impairment or allowance assessments to the hedged asset or liability. See DH 6.5 for information on hedges under the portfolio layer method.

#### 6.4.8.1 ***Interaction with measurement of credit losses***

This section assumes adoption of ASU 2016-13. ASC 815-25-35-11 indicates that the measurement of credit losses under ASC 326-20 is implicitly affected by hedge accounting (outside of active hedges designated under the portfolio layer method) by requiring the present value of expected future cash flows to be discounted by the new effective rate based on the adjusted amortized cost basis of a hedged loan, not the original effective rate.

ASC 326-20-55-9 requires that when the amortized cost basis of a loan has been adjusted under fair value hedge accounting, the effective rate is the discount rate that equates the present value of the loan's future cash flows with that adjusted amortized cost basis. The adjustment under fair value hedge accounting of the loan's carrying amount for changes in fair value attributable to the hedged risk should be considered to be an adjustment of the loan's amortized cost basis (except for active hedges designated under the portfolio layer method). Since ASC 815-25-35-10 requires that the loan's carrying amount be adjusted for hedge accounting before the credit allowance requirements of ASC 326-20 are applied, the calculation of the credit allowance is impacted by the fair value hedge accounting basis adjustment (except for active hedges designated under the portfolio layer method).

The guidance in ASC 815-25-35-11 is applicable to all entities applying ASC 326-20 to financial assets that are hedged items in a fair value hedge regardless of the entities' policy for amortizing basis adjustments. However, as discussed further in DH 6.5, basis adjustments in active portfolio layer method hedges should be maintained against the portfolio of assets but not allocated to individual assets and thus the guidance in ASC 815-25-35-10 and ASC 815-25-35-11 is not applicable to active portfolio layer method hedges.

### Question DH 6-14

On January 1, 20X1, DH Financial Institution hedges a 10-year, \$50-million fixed-rate, nonprepayable loan receivable with an interest rate swap, perfectly matching the terms of the loan and qualifying for the shortcut method of accounting. On December 31, 20X3, the fair value of the swap is a loss of \$800,000, and the carrying amount of the loan is \$50.8 million (inclusive of the basis adjustment from the application of hedge accounting).

The borrower's credit quality has deteriorated and the loan is considered impaired. In accordance with the requirements of ASC 310-10, DH Financial Institution computes the present value of expected future cash flows discounted at the loan's new effective interest rate, considering the new carrying amount of the loan after being adjusted through hedge accounting (rather than at the loan's original effective interest rate), as being \$48 million.

What is the amount of the impairment loss that DH Financial Institution should record?

#### ***PwC response***

DH Financial Institution should record an impairment loss of \$2.8 million (\$50.8 million carrying amount less the \$48 million present value) on the loan through earnings as per ASC 310-10.

The fair value of the interest rate swap is not considered in the assessment of impairment for the loan.

#### **6.4.8.2 Credit losses on debt securities**

A reporting entity that is holding investments may wish to reduce its exposure to changes in the fair value of its investments through a hedging transaction. Because of the special accounting rules under ASC 320 applicable to debt securities classified as available-for-sale, the application of hedge accounting is different from that for other investments.

Once hedge accounting has been applied, a reporting entity must perform an impairment assessment on the hedged item under ASC 326-30 for available-for-sale investments. Therefore, if an impairment exists on an available-for-sale security designated as a hedged item, there may be cumulative amounts in other comprehensive income that need to be reclassified into the income statement that represented

the portion of the change in the hedged item's fair value attributable to risks not hedged. If the available-for sale security was hedged for changes in fair value due to changes in interest rates, amounts previously recognized in earnings due to the recognition of basis adjustments related solely to interest rates. The impairment assessment under ASC 326-30 would identify if any remaining unrealized loss amounts in other comprehensive income should be recognized in earnings due to credit losses.

As discussed in ASC 320-10-35-20A, individual securities in a closed portfolio hedged using the portfolio layer method should not consider any basis adjustments as a result of an active hedge when performing the impairment assessment.

#### **6.4.9 *Measuring the hedging instrument***

When the hedging instrument is discounted by an Overnight Index Swap (OIS) rate (as discussed in FV 6.7.1), but the benchmark interest rate upon which the hedged item will be discounted is designated as LIBOR, US Treasury, SOFR, or SIFMA, the difference in the discount rates will be a source of earnings volatility.

## **6.5 *Portfolio layer method***

This section assumes adoption of ASU 2022-01. The “portfolio layer” method permits reporting entities to designate the portion of a closed portfolio of financial assets, beneficial interests secured by financial assets, or a combination of the two, that is not expected to be prepaid during the hedge period as the hedged item in a fair value hedge. Although the portfolio layer model (originally referred to as the last-of-layer model) was designed to consider prepayable mortgage loans or mortgage-backed securities, it may be applicable to other assets as well. ASU 2022-01 specifically allows for a closed portfolio of financial assets to include both prepayable and non-prepayable assets. The guidance allows an entity to essentially ignore prepayment risk in the hedge relationship even when prepayable assets are present in the closed portfolio. It does so by permitting designation of the portion of the pool not expected to be prepaid, defaulted, or sold as the hedged item. The guidance, however, does not extend to financial liabilities.

This hedging strategy leverages the guidance related to partial-term fair value hedges and the ability to measure the hedged item based on the benchmark component of the total contractual coupon. The combination of these decisions impacts the application of the similar assets test (required for all hedges of groups of assets to prove that the individual assets share the same risk exposure for the risk designated as being hedged).

- If the hedged item is designated using the partial-term guidance (i.e., the hedge period is not through the maturity date of the assets in the portfolio), the remaining term of all assets in the portfolio may be the same for hedge accounting purposes. In order to apply the portfolio layer method, the partial-term guidance will frequently be used.
- If the remaining term is the same, the benchmark rate component of the contractual cash flows on each asset in the portfolio will be similar because the benchmark rate component is determined as of hedge designation. A reporting entity is not required to use the benchmark rate component of the contractual cash flows to implement portfolio layer method hedging but would be required to quantitatively assess the similar assets test if not used. In addition, if the benchmark rate component guidance is not used, there may be additional complexities in calculating the change in



fair value of the hedged item. As a result, we believe for practical reasons, most entities will elect to use the benchmark component of contractual cash flows since assessing similar assets and effectiveness and measuring the change in fair value of the hedged item would be more difficult when using the full contractual cash flows because each asset may have different contractual cash flows.

- The guidance indicates that prepayments do not need to be considered in measuring the hedged item in a portfolio layer method hedge because what is being hedged is a portion of the portfolio that will remain throughout the assumed maturity (i.e., through the end of the designated partial term period).

In certain circumstances, the use of a qualitative assessment may be acceptable for the portfolio of hedged items in a portfolio layer method hedge to satisfy the similar assets test.

#### **ASC 815-20-55-14A**

If both of the following conditions exist, the quantitative test described in paragraph 815-20-55-14 may be performed qualitatively on a hedge-by-hedge basis and only at hedge inception:

- a. The hedged item is a hedged layer in a portfolio layer hedge designated in accordance with paragraph 815-20-25-12A.
- b. An entity measures the change in fair value of the hedged item based on the benchmark rate component of the contractual coupon cash flows in accordance with paragraph 815-25-35-13.

Using the benchmark rate component of the contractual coupon cash flows when all assets have the same assumed maturity date and prepayment risk does not affect the measurement of the hedged item results in all hedged items having the same benchmark rate component coupon cash flows.

### **6.5.1 Designation of portfolio layer method hedges**

Portfolio layer method hedges are designated as the “last x dollar amount” of financial assets in a closed portfolio for a defined hedge period. The reporting entity needs to support its expectation that the designated hedged amount will remain outstanding through the defined partial-term hedge period. This is not a forecasted transaction, as in a cash flow hedge, but rather an estimate of the hedged item in a fair value hedge. As such, the reporting entity does not need to assert that the hedged amount is probable of being outstanding throughout the hedge period. The hedged layer is the balance that is “anticipated to be outstanding” considering “current expectations of prepayments, defaults, and other factors,” such as sales, throughout the defined hedge period. We believe entities should use their best estimate in order to determine if their current expectations indicate that there will be sufficient assets in the closed pool to support a hedged layer. Entities may consider utilizing the same assumptions as used in other areas of GAAP, such as when using a discounted cash flow for impairment purposes or computing fair value. When assets are removed from the closed portfolio through those events, they are deemed to be the ones that are not hedged, provided the removal of those assets does not cause the remaining balance of the portfolio to fall below the designated hedged layer amount.

The reporting entity needs to support and document its expectation that the hedged balance will remain outstanding through the end of the designated hedge period and update that expectation each period. On a quarterly basis (at a minimum), the analysis performed under ASC 815-20-25-12A(a)



must be reperformed using then-current expectations of prepayments, defaults, and other factors affecting the timing and amount of cash flows associated with the closed portfolio to ensure the hedged balance is still expected to be outstanding at the end of the defined partial-term period. If expectations change, an entity should revisit the hedged balance. There is no concept of tainting, as there is with hedges of forecasted transactions in the cash flow hedging model. As a result, the reporting entity can re-evaluate its assumptions and adjust the hedged balance through partial voluntary dedesignation of the hedging relationship when necessary, if it identifies the need to do so when the remaining assets in the pool are projected to fall below or actually fall below the hedged amount designated. If at any point the reporting entity projects that it will not have sufficient assets in the future to support a hedged layer, it has an anticipated breach and must partially or fully dedesignate that hedged layer. An actual breach would occur if at any point the actual assets in the closed portfolio fall below the hedged amount.

Discontinuance of portfolio layer method hedges is addressed in DH 10.3.8.

ASU 2022-01 allows entities to designate multiple portfolio layer method hedges of the same closed portfolio of assets. For each designated hedged layer, however, the closed portfolio must have an amount of assets that is expected to remain outstanding to support each hedged layer individually and in totality. For instance, if a reporting entity has a portfolio of prepayable fixed rate loans that total \$100 million of principal and expects that \$70 million of the pool of assets would still remain outstanding after five years and \$50 million of the pool of assets would still exist after seven years, an entity could enter into both a five-year hedge with a designated hedge amount of \$20 million fair value hedge, and a seven-year hedge with a designated hedge amount of \$50 million. In this situation, the reporting entity would be hedging \$70 million of assets in the first five years since both hedges will be active during that time and would only be hedging \$50 million of assets in years six and seven after the first hedge layer matures. Each hedged layer would require separate hedge documentation even though the hedges reference the same closed portfolio of assets.

ASU 2022-01 also allows for the use of amortizing notional swaps or forward starting swaps when entering into a portfolio layer method hedge. The use of an amortizing notional swap would be considered a hedge of a single layer. As a result, the hedge objectives discussed in the previous paragraph could be accomplished using two spot starting swaps as illustrated or using a spot starting swap and a forward starting swap or an amortizing notional swap.

When creating a closed pool of assets, entities may wish to use assets with different maturity dates. For example, assume an entity creates a closed pool of assets comprised of the following:

- \$100m of assets with a three-year maturity
- \$200m of assets with a five-year maturity
- \$225m of assets with a seven-year maturity

Also assume that an entity has two interest rate swaps designated as hedging instruments in two portfolio layer method hedges with this closed pool of assets identified as the hedged item:

- \$25m swap with a five-year maturity
- \$50m swap with a seven-year maturity

In assessing whether the entity expects to have sufficient assets over the hedged period, different groups of assets would be available to support different hedges:

Hedging instrument	Assets supporting the hedging relationship
\$25m five-year swap	<ul style="list-style-type: none"> <li>\$200m of five-year assets</li> <li>\$225m of seven-year assets that, for the purposes of this hedge relationship, are assumed to be five-year assets using the partial term hedging guidance</li> </ul>
\$50m seven-year swap	<ul style="list-style-type: none"> <li>\$225m of seven-year assets</li> </ul>

In this example, the only assets available to support the seven-year hedging relationship are the seven-year assets. As a result, the entity should assess how much of the seven-year assets are expected to remain outstanding through their contractual maturity to support the seven-year hedging relationship. The portion of the seven-year asset group that is not being relied upon to support the seven-year hedging relationship would be available to support the five-year hedging relationship.

Note that in this situation, the \$100m of three-year assets within the closed pool are not supporting either hedging relationship. However, since assets cannot be added to a closed pool once it is established, entities may want to include assets (such as three-year assets in this example) to support future shorter-term hedge relationships.

In this situation, the seven-year assets support the five-year hedge relationship (or the five-year layer) and the seven-year hedge relationship (the seven-year layer). In a portfolio layer method hedging relationship, the individual assets that support each hedge relationship are not specifically identified. For the purposes of supporting the five-year hedge relationship, the seven-year assets are assumed to be five-year assets through the use of the partial-term hedging guidance and, assuming an entity elects to hedge the benchmark interest rate component of the contractual cash flows, will have an assumed coupon based on the five-year benchmark interest rate. As a result, an entity may be able to conclude that the hedged components of the seven-year assets are similar to the five-year assets when performing the similar asset analysis. These assumed terms for the seven-year assets will also be used for the purposes of measuring change in fair value of the hedged item. For the purposes of supporting the seven-year hedge relationship, the seven-year assets have a seven-year maturity and, assuming an entity elects to hedge the benchmark interest rate component of the contractual cash flows, will have an assumed coupon based on the seven-year benchmark interest rate.

Refer to DH 10.3.8 for discussion on how reporting entities would select which layers to dedesignate in a multiple hedged layer strategy when there is a voluntary designation, anticipated, or actual breach.

### 6.5.2 *Measurement of the hedged item in a portfolio layer hedge*

Under the portfolio layer method, a reporting entity is not required to incorporate prepayment risk into the measurement of the hedged item.

#### **ASC 815-20-25-12A**

For a closed portfolio of financial assets or one or more beneficial interests secured by a portfolio of financial instruments, an entity may designate as the hedged item or items a hedged layer or layers if

the following criteria are met (this designation is referred to throughout Topic 815 as the “portfolio layer method”).

- a. As part of the initial hedge documentation, an analysis is completed and documented to support the entity’s expectation that the hedged item or items (that is, the hedged layer or layers in aggregate) is anticipated to be outstanding for the designated hedge period hedged. That analysis shall incorporate the entity’s current expectations of prepayments, defaults, and other factors affecting the timing and amount of cash flows associated with the closed portfolio.
- b. For purposes of its analysis in (a), the entity assumes that as prepayments, defaults, and other factors affecting the timing and amount of cash flows occur, they first will be applied to the portion of the closed portfolio that is not hedged.
- c. The entity elects to apply the partial-term hedging guidance in paragraph 815-20-25-12(b)(2)(ii) to the assets or beneficial interests used to support the entity’s expectation in (a). An asset that matures on a hedged layer’s assumed maturity date meets this requirement.

The measurement of the hedged item will be based on the assumed maturity date (and perhaps the proposed investment date) of the hedged item utilizing the partial term hedging guidance (see DH 6.5.1). The measurement of the hedged item may also be based on the benchmark component of the contractual cash flows if an entity elects to apply that guidance.

ASU 2022-01 clarified that multiple portfolio layers are allowable within a single closed portfolio of assets (codified in ASC 815-20-25-12B).

#### **ASC 815-20-25-12B**

After a closed portfolio is established in accordance with paragraph 815-20-25-12A, an entity may dedesignate new hedging relationships associated with the closed portfolio without dedesignating any existing hedging relationships associated with the closed portfolio if the criteria in paragraph 815-20-25-12A are met for those newly designated hedging relationships.

### **6.5.3 Basis adjustments in portfolio layer method hedges**

Basis adjustments on the closed portfolio in a portfolio layer method hedge should not be allocated to the individual assets in the portfolio until the hedge is dedesignated.

For an active portfolio layer method hedge, basis adjustments should be maintained on the closed portfolio of assets, however, the basis adjustment would not be allocated to individual assets and an entity is prohibited from considering the basis adjustment when determining if an available-for-sale security is impaired or when measuring expected credit losses. Consistent with the guidance in ASC 815-25-35-6, the basis adjustment associated with available-for-sale securities would result in an adjustment to the amount recorded in AOCI for those securities. For available-for-sale securities subject to fair value hedges, changes in the fair value of the security for the hedged risk are recognized in earnings as opposed to AOCI.

If the closed pool of assets are presented in different financial statement line items within the statement of financial position, the portfolio layer method basis adjustments should be allocated to

those line items using a systematic and rational method. One such method would be proportional based on the unpaid principal/par amount of assets within the closed portfolio presented on each line.

Once a portfolio layer method hedge is discontinued, the remaining basis adjustment should be allocated to the individual assets within the closed pool. If the hedge is voluntarily dedesignated or is dedesignated as part of an anticipation of a breach, the basis adjustment associated with the dedesignated amount of the hedged layer should be allocated to the remaining individual assets within the closed portfolio that are available to support the hedged layer or layers (that is, those assets with a contractual maturity date on or after the end of the hedge period for the dedesignated layer or layers). In either a single or multiple hedged layer strategy, the basis adjustments should be allocated to individual assets using a systematic and rational method. Partial dedesignations are allowed, so only the basis adjustment associated with the amount dedesignated would be allocated to individual assets.

If an actual breach occurs, an entity must determine the amount of the basis adjustment associated with the amount of the hedged layer that exceeds the remaining closed portfolio. That basis adjustment should be recognized immediately in interest income. Partial dedesignations are also allowed in the event of an actual breach, and any amount dedesignated in excess of the actual breach amount would be treated the same as in a voluntary or anticipated breach and allocated to the remaining assets in the closed pool.

The basis adjustments allocated to individual assets should be amortized into income in a manner consistent with amortization of premiums or discounts for that asset. Refer to DH 10.3.8 for further discussion on the dedesignation of portfolio layer method hedges.

#### **6.5.4 Transition guidance for ASU 2022-01**

The provisions of ASU 2022-01 are required to be adopted by public business entities for fiscal years beginning after December 15, 2022 and by all other entities for fiscal years beginning after December 15, 2023. Early adoption of the standard is permitted on any date subsequent to the issuance of ASU 2022-01.

All provisions of the standard are to be adopted on a prospective basis with the exception of the accounting for basis adjustments, which must be adopted on a modified retrospective basis. As discussed in DH 6.5.3, under ASU 2022-01, basis adjustments should not be allocated to individual assets within the closed portfolio of assets, but maintained against the closed portfolio of assets as a whole. Reporting entities that had previously entered into portfolio layer method hedges (at which time they were known as “last-of-layer” hedges) and had allocated basis adjustments to the individual assets associated with these hedges, should reverse this allocation on all active portfolio layer method hedges. For active hedges, this may result in a cumulative effect adjustment to the opening balance of retained earnings as the removal of the basis adjustments from the individual assets will have an impact to the accounting at the individual asset level, including in recording credit loss and accounting for premiums and discounts.

ASU 2022-01 allows reporting entities to make a one-time reclassification of debt securities that are currently classified as held to maturity to available for sale. In order to reclassify a debt security, the security must be included in a closed portfolio that is designated in a portfolio layer method hedge within 30 days of the date of adoption of the standard. As a result of this special transition provision, this reclassification would not call into question the reporting entity’s previous assertions that it had the intent and ability to hold these debt securities until maturity.

## 6.6 Hedging a forecasted issuance of debt

To economically fix the interest payments on debt, reporting entities may engage in hedging activities related to a forecasted issuance of debt. For hedging strategies involving the forecasted issuance of debt, support for the assertion that the forecasted issuance is probable of occurring is necessary to designate the interest payments as hedged items. The designated hedging instrument in this type of hedge strategy is typically an interest rate swaption or a forward starting interest rate swap.

Regardless of whether the forecasted debt issuance being hedged is expected to have a fixed or variable interest rate, the hedging relationship will fall under the forecasted transaction cash flow hedging model.

### 6.6.1 Hedging a forecasted issuance of fixed-rate debt

For the forecasted issuance of a fixed-rate financial instrument, the hedge accounting model is much different from that applied for an existing fixed-rate financial instrument. Hedging the interest rate risk in an existing fixed-rate financial instrument is considered a fair value hedge, while hedging the interest rate risk in the forecasted issuance of a fixed-rate financial instrument is considered a cash flow hedge.

Hedge accounting is generally terminated at the debt issuance date because the reporting entity will no longer be exposed to cash flow variability subsequent to issuance. Accumulated amounts recorded in AOCI at that date are then released to earnings in future periods to reflect the difference in (1) the fixed rates economically locked in at the inception of the hedge and (2) the actual fixed rates established in the debt instrument at issuance. Because of the effects of the time value of money, the actual interest expense reported in earnings will not equal the effective yield locked in at hedge inception multiplied by the par value. Similarly, this hedging strategy does not actually fix the interest payments associated with the forecasted debt issuance.

Fixing the interest payments associated with debt may be achieved by committing to issue debt in the future at a specific fixed interest rate and then hedging the net proceeds from the issuance of the debt. In such a hedge, the proceeds or payments resulting from the termination of the hedging instrument will offset the cash discount or premium received from the lender at debt issuance. In future periods, the amortization of the premium or discount on the debt will be offset by the release of a corresponding amount from AOCI.

The hedged risk can be designated as the risk of changes in either (1) the coupon payments (or the interest element of the final cash flow if interest is paid only at maturity) related to the forecasted issuance of fixed-rate debt or (2) the total proceeds attributable to changes in the benchmark interest rate related to the forecasted issuance of fixed-rate debt.

#### Question DH 6-15

DH Corp expects to issue at par ten-year fixed-rate debt in 6 months on June 15, 20X1, and management has determined that the future issuance of debt is probable and that it is probable that there will be ten years of interest payments.

DH Corp wants to hedge the changes in the benchmark interest rate from January 15, 20X1 to June 15, 20X1 that will impact the debt's fixed interest rate. DH Corp executes a Treasury rate lock on January 15, 20X1.

Can DH Corp designate the Treasury lock to hedge the risk of changes in the cash flows due to the changes in the benchmark interest rate of the ten years of interest payments resulting from the forecasted debt issuance?

***PwC response***

Yes, assuming the hedging relationship meets all of the appropriate requirements of ASC 815, DH Corp can hedge the benchmark interest rate in a forecasted issuance of fixed-rate debt.

A Treasury rate lock agreement is a financial instrument that allows a reporting entity to “lock in” the current benchmark interest rate applicable to US Treasury securities and results in a net cash payment at the settlement of the agreement based on the difference between the current benchmark Treasury yield and the rate that was locked-in via the Treasury rate lock. Because a Treasury lock locks in the current benchmark Treasury rate, it acts as a natural economic hedge for the portion of the variability on the future interest payments of a forecasted fixed-rate debt issuance due to the benchmark interest rate risk because the debt’s fixed rate will not be determined until the pricing date of the debt issuance and will be based on then-current market interest rates.

If DH Corp uses a Treasury lock as the hedging instrument, due to the nature of how it is valued and settled, the Treasury rate lock generally will not be a perfectly effective hedging instrument.

The valuation and settlement of a Treasury lock will be based on the then-current yield on the most recently issued on-the-run Treasury security for a particular maturity (e.g., at its maturity, the settlement of a ten-year Treasury rate lock will be based on the yield of the most recently issued ten-year Treasury security). As a result, once a new Treasury security for the relevant maturity has been issued, the Treasury lock will be priced based on this new security. Normally, securities underlying the Treasury lock (i.e., the current or any future Treasury issuance of the appropriate maturity) will not have cash flows that match those of the forecasted debt issuance exactly. For example, assume a Treasury lock was executed on January 15 with a maturity date of June 15 to hedge ten years of semi-annual interest payments to occur each December 15 and June 15. Further assume that the relevant on-the-run ten-year Treasury security had semi-annual interest payment dates of November 15 and May 15. As a result, the yield on the underlying Treasury security (which, again, is the basis for the settlement of the Treasury rate lock) will be calculated based on a different set of cash flows than the cash flows on the debt being hedged.

The Treasury lock is not likely to be a perfectly effective hedging instrument because even at hedge inception, it is highly unlikely that the timing of the interest payments relating to the Treasury security underlying the Treasury lock will exactly match the timing of the interest payments relating to the forecasted debt issuance. In addition, subsequent issuances of Treasury securities may result in more mismatch in the relationship and if a quantitative assessment of effectiveness is used, will result in more complex calculations.

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Example DH 6-4 illustrates use of a swaption to hedge the forecasted issuance of fixed-rate debt.

## EXAMPLE DH 6-4

### Use of a swaption to hedge a forecasted issuance of debt

On January 1, 20X1, DH Corp anticipates that on January 1, 20X2, it will issue \$10 million of two-year, fixed-rate debt with the coupon set at the market interest rate at that date. Interest will be paid annually on December 31 each year.

To protect itself from an increase in the benchmark interest rate for the two-year forward period of January 1, 20X2 to December 31, 20X3, during the one-year period from January 1, 20X1 to January 1, 20X2 DH Corp purchases, for a premium of \$20,000, an option that gives it the right, but not the obligation, to enter into a two-year, receive-variable (one-year LIBOR), pay-fixed (8%) interest-rate swap (a swaption) as of January 1, 20X2, based on a notional amount of \$10 million. Fixed interest payments on the swap would be made on an annual basis on December 31 if the option to enter the swap is exercised by DH Corp.

The interest rate curve is flat. The LIBOR swap rate is 8% on January 1, 20X1 and 10% on December 31, 20X1. The interest rate change from 8% to 10% occurred on the last day of the year (December 31, 20X1).

DH Corp designates the swaption as a cash flow hedge of changes in the forecasted interest payments due to benchmark interest rate risk related to the forecasted issuance of fixed-rate debt. DH Corp assesses hedge effectiveness based on changes in the option's intrinsic value and elects to recognize the excluded component (i.e., time value) using an amortization approach. Per the guidance in ASC 815-20-25-83A, DH Corp recognizes the amortization of the initial value of the excluded component in earnings over the life of the hedging instrument. DH Corp elected to amortize the excluded component on a straight-line basis, but other methods could be acceptable.

The swaption's fair value increased in value to \$50,000, to \$230,000, and to \$300,000 at each of the first three respective quarter-ends during 20X1. On January 1, 20X2, the swaption is settled with the original counterparty at a fair value of \$347,107. The swaption is terminated at the debt issuance date, January 1, 20X2, since DH Corp will no longer be exposed to interest rate variability after the pricing date of the fixed-rate debt issuance.

How should DH Corp account for the hedging relationship?

#### *Analysis*

Upon documenting the hedge and performing effectiveness testing, DH Corp is able to assert that the hedge is expected to be highly effective in offsetting changes in the designated hedged risk. The swaption contract would be recorded on the balance sheet at fair value as an asset or liability. As an effective cash flow hedge, the swaption's gain or loss would be deferred through OCI until the hedged transactions, the forecasted interest payments, impact earnings. When the forecasted interest payments impact earnings, the swaption's gain or loss would be reclassified from AOCI to the same income statement line item as the hedged item.

The journal entries to record the hedging relationship are as follows. The figures are calculated based on the effective yield method of releasing AOCI using the debt's effective rate of 8.10352% (similar to amortization of a premium of \$347,107). Other methods of releasing AOCI to earnings may also be acceptable.



DH Corp would record the following journal entries.

**January 1, 20X1**

Dr. Swaption contract	\$20,000	
Cr. Cash		\$20,000
To record the purchase of the swaption		

**March 31, 20X1**

Dr. Swaption contract	\$30,000	
Cr. Other comprehensive income		\$30,000
To record the change in the fair value of the swaption		
Dr. Interest expense	\$5,000	
Cr. Other comprehensive income		\$5,000
To record the amortization of the initial time value of the swaption		

**June 30, 20X1**

Dr. Swaption contract	\$180,000	
Cr. Other comprehensive income		\$180,000
To record the change in the fair value of the swaption		
Dr. Interest expense	\$5,000	
Cr. Other comprehensive income		\$5,000
To record the amortization of the initial time value of the swaption		

**September 31, 20X1**

Dr. Swaption contract	\$70,000	
Cr. Other comprehensive income		\$70,000
To record the change in the fair value of the swaption		
Dr. Interest expense	\$5,000	
Cr. Other comprehensive income		\$5,000
To record the amortization of the initial time value of the swaption		

**December 31, 20X1**

Dr. Swaption contract	\$47,107	
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Cr. Other comprehensive income		\$47,107
To record the change in the fair value of the swaption		
Dr. Interest expense	\$5,000	
Cr. Other comprehensive income		\$5,000
To record the amortization of the initial time value of the swaption		

**January 1, 20X2**

Dr. Cash	\$347,107	
Cr. Swaption contract		\$347,107
To record the settlement of the swaption		
Dr. Cash	\$10,000,000	
Cr. Debt		\$10,000,000
To record the issuance of the fixed-rate debt		

For simplicity and to more easily illustrate the concepts of the release of amounts accumulated in other comprehensive income, annual journal entries are shown subsequent to the debt offering (quarterly entries would be required).

**December 31, 20X2**

Dr. Interest expense	\$1,000,000	
Cr. Cash		\$1,000,000
To record the interest payment on the debt		
Dr. Accumulated other comprehensive income	\$166,836	
Cr. Interest expense		\$166,836
To amortize a portion of the gain on the swaption as an adjustment of the interest expense on the debt.		

**December 31, 20X3**

Dr. Interest expense	\$1,000,000	
Cr. Cash		\$1,000,000
To record the interest payment on the debt		
Dr. Accumulated other comprehensive income	\$180,271	
Cr. Interest expense		\$180,271

To amortize a portion of the gain on the swaption as an adjustment of the interest expense on the debt

Dr. Debt	\$10,000,000	
Cr. Cash		\$10,000,000
To record the repayment of the fixed-rate debt		

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### **6.6.2 Hedge of forecasted interest payments on variable-rate debt**

For the forecasted issuance of a floating-rate debt instrument, the hedged item is typically designated as forecasted interest payments, and the hedged risk is the contractually specified interest rate expected to be in the variable-rate debt. This is the same manner in which the hedged item and hedged risk are designated when hedging an existing variable-rate financial instrument. Thus, the cash flow hedging model for hedging variable interest payments/receipts is similar for both existing financial instruments and forecasted issuances of financial instruments.

When hedging the future variable-rate interest payments associated with a forecasted issuance of debt, the hedging instrument (e.g., a forward starting interest rate swap) could technically remain outstanding until the maturity of the debt instrument.

However, it is not uncommon to terminate the existing swap and enter into a new swap that exactly matches the debt issued to facilitate cash flow hedging under a qualitative assessment method. The amounts in AOCI for the terminated hedge associated with the forecasted issuance of the variable-rate financial instrument will be reclassified into earnings in a manner that reflects the economically fixed yield established at inception of the hedge.

#### **6.6.2.1 Using a swaption to hedge forecasted interest payments**

Consistent with Example DH 6-4 related to hedging fixed-rate debt issuances, a reporting entity could designate a swaption (that is, an option to enter into a predefined swap) as a cash flow hedge of the variability in the contractually specified interest rate index payments in the forecasted debt instrument in excess of a specified strike price defined in the swaption. The reporting entity may designate only changes in the intrinsic value of the contractually specified interest rate index in interest payments as the risk being hedged. Assuming the swaption had no intrinsic value at inception, and the entity elected to amortize the excluded component, the premium paid for the swaption would be amortized to interest expense over the life of the swaption from the date the swaption is transacted through the debt issuance date. Note that this “cost of hedging” is recorded as interest expense prior to the debt being recognized on the books of the reporting entity. The intrinsic value of the swaption hedge deferred in AOCI (if any) would be amortized to interest expense as the hedged interest payments occur after the debt issuance. If the swaption is exercised and the reporting entity accepts the swap contract underlying the swaption as settlement and the reporting entity wants to apply hedge accounting to the swap contract, this new instrument would have to be separately designated in a new hedge relationship of the future variability in the interest payments on the debt. Since the swap received as settlement for the swaption does not have a fair value of zero (its pay-leg is lower than that of an at-the-market instrument), at a minimum, an initial quantitative test to demonstrate high effectiveness would be required.

**6.6.3 *Hedge of forecasted interest when the coupon rate is unknown***

If the reporting entity does not know whether it will issue fixed- or variable-rate debt, it would designate the hedged risk as the variability in cash flows attributable to changes in a rate that would qualify as both a benchmark rate and a contractually specified rate.

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***Chapter 7:  
Hedges of nonfinancial assets  
and liabilities—updated July  
2022***

## 7.1 *Hedges of nonfinancial assets and liabilities overview*

This chapter addresses relevant considerations in the application of hedge accounting to nonfinancial assets. The chapter focuses on the unique aspects and requirements of hedging risks associated with nonfinancial items, including:

- Eligibility criteria, including eligible risks, transactions, and hedging instruments
- Hedging the contractually specified component of a forecasted transaction
- Accounting for fair value and cash flow hedges of nonfinancial assets, forecasted purchases/sales of nonfinancial assets, and nonfinancial assets in inventory

The concepts within this chapter should be applied in conjunction with information in other chapters in this guide, including the overview of hedge accounting and documentation requirements for all hedges (DH 5), foreign currency and intercompany hedges (DH 8), effectiveness assessments (DH 9), and discontinuance of hedge accounting (DH 10).

## 7.2 *Introduction to hedges of nonfinancial items*

Reporting entities that are exposed to risks from nonfinancial items mitigate them with derivatives, such as futures, forwards, call and put options, and swaps.

Contracts that meet the definition of a derivative and do not qualify for or are not otherwise designated under a scope exception are accounted for at fair value. If a reporting entity executes derivatives to manage risk associated with managing inventory or purchases or sales of commodities, it may seek to apply hedge accounting to such derivatives to minimize volatility associated with recording changes in fair value in the income statement. Risks are managed using hedging instruments to transform potentially variable cash flows to fixed cash flows (cash flow hedges), and conversely, fixed cash flows to potentially variable cash flows (fair value hedges). For effective cash flow hedges, changes in the fair value of the derivative are initially recorded through other comprehensive income (OCI) and remain deferred in accumulated other comprehensive income (AOCI) until the underlying forecasted transaction impacts earnings or the forecasted transaction is deemed probable of not occurring.

This section discusses general considerations related to all hedges of nonfinancial items, including matters related to the eligibility of the risk to be hedged, hedged items and transactions, and hedging instruments. It is followed by discussion of specific considerations for fair value and cash flow hedges.

### 7.2.1 *Eligibility of risk to be hedged*

A reporting entity may apply hedge accounting only to the eligible risks defined by ASC 815. Eligible risks represent a change in fair values or cash flows that could affect reported earnings and are:

- Price risk
- Interest rate risk
- Foreign exchange risk
- Credit risk

ASC 815 focuses on these four risks because a change in the price associated with one of these risks will ordinarily have a direct effect on the fair value of an asset or liability in a determinable or predictable manner. The hedged risk must result in exposure to a change in fair values or cash flows that could affect reported earnings, which is a requirement for all hedge accounting relationships.

From a nonfinancial perspective, a reporting entity may seek to manage price risk associated with raw materials or finished products. That risk could be the total price risk or the risk of a component of the price. Reporting entities may also separately hedge foreign exchange risk in a cash flow hedge of a forecasted purchase or sale of a nonfinancial asset. Risks such as liquidity, theft, weather, catastrophe, competition, and seasonality do not qualify for hedge accounting under ASC 815.

Figure DH 7-1 provides examples of the types of risks associated with nonfinancial items that are eligible for hedge accounting, together with the related hedged items, and the type of hedge accounting that may be applied. Whether hedge accounting is permitted for each hedging relationship depends on the specific terms of the hedged item and the hedging instrument.

**Figure DH 7-1**  
Types of risks associated with nonfinancial items

<b>Risk</b>	<b>Hedged item</b>	<b>Type of hedge</b>
Changes in fair value while holding inventory for consumption or sale	Recognized asset Firm commitment to acquire inventory	Fair value hedge (DH 7.4)
Changes in cash flows associated with holding inventory for sale	Forecasted sale of recognized asset Forecasted sale of inventory resulting from a firm commitment	Cash flow hedge (DH 7.3) “All-in-one” cash flow hedge (DH 7.3.4)
Risk associated with purchasing commodities with variable cash flows	Forecasted transaction (in its entirety) Contractually specified component of a forecasted transaction	Cash flow hedge (DH 7.3)
Foreign exchange risk - Risk associated with settling commodity purchases or sales in a currency other than the entity’s functional currency	Forecasted transaction denominated in a foreign currency	Foreign currency hedge (see DH 8)

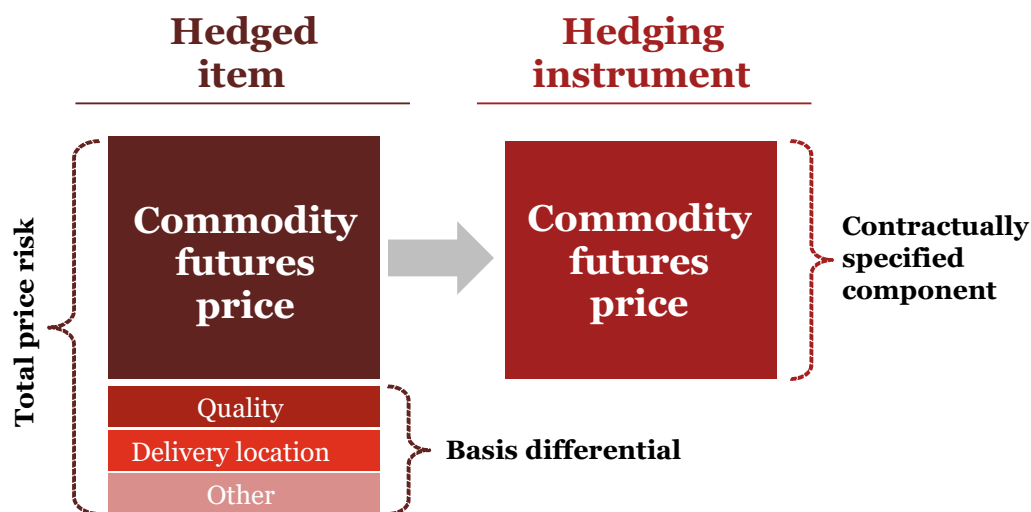
A reporting entity may apply different strategies to hedge the risks associated with nonfinancial transactions. In some circumstances, it may be more effective to hedge only a portion or component of the risk exposure.

### 7.2.1.1 Hedging component price risk

ASC 815 permits reporting entities to hedge a “contractually specified component” (i.e., a component of total price risk) of the cash flows related to a forecasted nonfinancial transaction. For example, purchase and sale contracts for nonfinancial assets may be priced based on a traded commodity index plus or minus a basis differential. If the traded commodity index is eligible to be designated as a contractually specified component, a reporting entity would not be required to designate the total price risk (i.e., overall variability in cash flows) associated with the hedged item as its hedged risk. As illustrated in Figure DH 7-2, a hedge of only a component of the price may result in a more effective hedge because delivery location and other basis differences would not be considered in the effectiveness assessment.

**Figure DH 7-2**

Total price risk versus component risk in a hedge of a nonfinancial item



Often, a reporting entity will not be able to obtain a hedging instrument that perfectly offsets the risk associated with a nonfinancial item that an entity is looking to mitigate (i.e., the total price risk related to hedged item). Hedging instruments that are used to mitigate risk exposures related to nonfinancial items are often standardized contracts that are traded on exchanges (e.g., futures contracts) and the quantities, quality or grade, and delivery location may not match the hedged item. As a result, use of this type of contract may not fully mitigate the underlying risk. Similarly, for bilateral contracts (e.g., over-the-counter forwards, swaps), counterparties may not wish to absorb some risk exposures related to certain basis differentials.

If a reporting entity designates the hedged risk as only a component of total price risk, changes in the value of the hedged item related to any basis differential are excluded from the hedging relationship, and thus, also excluded from the assessment of effectiveness. As a result, risk management strategies may qualify for hedge accounting – and may even be perfectly effective – even when a hedging instrument does not address the entire change in cash flows. See DH 7.3.3.

### 7.2.1.2 *Hedging multiple risks*

ASC 815 requires each designated risk to be accounted for separately. As such, simultaneous fair value and cash flow hedge accounting is not permitted for hedges of the same risk because there is only one earnings exposure. Once the change in the value of a hedged item that is attributable to a particular risk has been offset by the change in the value of a hedging derivative, another derivative cannot be an effective hedge of the same risk. However, if a reporting entity has only hedged a portion of a designated risk (e.g., it expects to procure 30,000 MMBtus of natural gas in October 20X1 at a specified location and has only hedged purchases of 20,000 MMBtus), it could use a second derivative to hedge the remaining exposure, if the forecasted transaction is probable and all other hedging requirements are met.

### 7.2.1.3 *Excluded components*

As part of its risk management strategy, a reporting entity may exclude certain components of a hedging instrument's change in fair value from the assessment of hedge effectiveness. ASC 815-20-25-82 discusses the items that may be excluded, including components of the change in time value (theta, vega, and rho), as well as spot and forward or futures price differences.

A reporting entity must elect a policy for recognizing excluded components that is consistently applied for similar hedges. There are two choices for recognition: an amortization approach (ASC 815-20-25-83A) or a mark-to-market approach (ASC 815-20-25-83B). The amortization approach is the default method, and the mark-to-market approach is the alternative.

#### **Excerpt from ASC 815-20-25-83A**

For fair value and cash flow hedges, the initial value of the component excluded from the assessment of effectiveness shall be recognized in earnings using a systematic and rational method over the life of the hedging instrument. Any difference between the change in fair value of the excluded component and amounts recognized in earnings under that systematic and rational method shall be recognized in other comprehensive income.

#### **ASC 815-20-25-83B**

For fair value and cash flow hedges, an entity alternatively may elect to record changes in the fair value of the excluded component currently in earnings. This election should be applied consistently to similar hedges in accordance with paragraph 815-20-25-81 and shall be disclosed in accordance with paragraph 815-10-50-4EEEE.

The initial value attributable to an excluded component (that may be amortized over the life of the hedging instrument) depends on the type of derivative. When the time value of an option contract is the excluded component, the time value generally is the option premium paid (provided the option is at or out of the money at inception). The value attributable to forward points in a forward contract is the difference between the market forward rate and the spot rate, undiscounted. The fair values of these excluded components change over time as markets change but must converge to zero by the maturity of the hedging instrument. Because of that, the FASB permits a systematic and rational amortization method. ASU 2019-04 clarified that entities that do not separately report earnings (e.g., certain not-for-profit entities) cannot make the election to record changes in the fair value of the excluded component in AOCI and amortize amounts into earnings.



When a reporting entity excludes all or a portion of the time value in an option-based derivative, such as a cap or floor, from the assessment of effectiveness, and elects to recognize it using an amortization approach, it must determine a systematic and rational method for recognizing the time value in earnings. We believe a systematic and rational method for recognizing time value must result in a portion of the excluded component being recognized in earnings during each reporting period between the hedge designation date and the occurrence of the hedged transaction. We believe that recognizing the total premium paid for a cap/floor on a straight-line basis may be a systematic and rational method to recognize time value when it is excluded from the assessment of hedge effectiveness.

Presentation of excluded components is discussed in FSP 19.4.

### **7.2.2 Eligibility of item or transaction to be hedged**

To reduce exposure to changes in the fair value and cash flows associated with recognized balances and future transactions, reporting entities can hedge:

- an existing recognized asset or liability (fair value or cash flow hedge);
- a firm commitment (fair value hedge);
- a forecasted transaction resulting from a firm commitment (“all in one” cash flow hedge);
- a forecasted transaction in its entirety (cash flow hedge); or
- a contractually specified component of a forecasted transaction (cash flow hedge).

Nonfinancial items and transactions eligible to be hedged are further discussed in DH 7.3 and DH 7.4 for cash flow and fair value hedges, respectively. In addition, general eligibility criteria applicable to all hedges are further discussed in the following sections.

#### **7.2.2.1 General eligibility criteria**

The item or transaction to be hedged must present an earnings exposure and cannot be something that is already measured at fair value through earnings (or a forecasted acquisition of an asset or incurrence of a liability that subsequently will be similarly remeasured at fair value). Thus, items meeting the definition of a derivative are not permitted to be the hedged item in a hedging relationship. However, an instrument that meets the definition of a derivative under ASC 815 but qualifies for, and is designated under, the normal purchases and normal sales exception may be designated as a hedged item if the qualifying criteria are met. See Question DH 7-9 for further discussion.

#### ***Earnings exposure / Third party***

In accordance with ASC 815, hedge accounting is appropriate only when there is a hedgeable risk arising from a transaction with an external party and that risk must represent an exposure that could affect earnings. This concept is consistent for all designated hedges under ASC 815, including fair value, cash flow, and foreign currency hedges, except that the hedged transaction does not need to be with an external party for certain forecasted foreign currency intercompany transactions.

### 7.2.2.2 *Items or transactions that are not eligible for hedge accounting*

ASC 815-20-25-15 and ASC 815-20-25-43 discuss certain items that are prohibited from being the hedged item in a fair value or cash flow hedge, including:

- An asset or liability measured at fair value with changes in fair value reported currently in earnings or a forecasted transaction to purchase such an asset or liability
- A firm commitment or forecasted transaction for a business combination
- A firm commitment or forecasted transaction involving either: (1) a parent entity's interests in consolidated subsidiaries or (2) an entity's own equity interests
- The risk of a transaction not occurring

#### Question DH 7-1

Can inventory carried at fair value be the hedged item in a fair value hedge?

#### *PwC response*

No. ASC 815-20-25-43(c)(3) states that assets or liabilities remeasured through earnings cannot be designated as a hedged item or transaction.

ASC 815 does not require special accounting for these hedged items because both the gains or losses on the hedging instrument and the offsetting losses or gains on the hedged item would be recorded in the income statement and would tend to naturally offset each other.

#### Question DH 7-2

Can a reporting entity designate a forecasted transaction of an equity method investee as the hedged item in a cash flow hedge?

For example, can DH Corp hedge the forecasted cash flows (e.g., the forecasted sales of gold) of its equity method investee by entering into a forward contract that would otherwise qualify for hedge accounting?

#### *PwC response*

No. A forecasted transaction is not eligible for designation as a hedged transaction in a cash flow hedge when the transaction is between the reporting entity's equity method investee and a third party.

Also, ASC 815-20-25-46A addresses the use of intra-entity derivatives as hedging instruments and states that the term "subsidiary" means consolidated subsidiary; therefore, the guidance cannot be applied to an equity method investee. As a result, a reporting entity is not allowed to apply hedge accounting to a forecasted transaction of an equity method investee since the reporting entity is not directly exposed to the risk. Similarly, a reporting entity would not be permitted to apply hedge accounting to a (1) recognized asset or liability or (2) firm commitment of an equity method investee.

**Question DH 7-3**

Can a reporting entity designate a forecasted transaction with an equity method investee as the hedged item in a cash flow hedge?

***PwC response***

Yes. A forecasted purchase or sale with an equity method investee can qualify as a hedgeable risk exposure under the cash flow hedging model if all of the other criteria for cash flow hedging are met.

Although ASC 815 states that forecasted transactions between members of a consolidated entity (except for intercompany transactions that are denominated in a foreign currency) are not hedgeable transactions, except in the standalone financial statements of a subsidiary, equity method investees are not members of the consolidated group so the prohibition is not applicable.

However, the hedge will need to be considered in the normal elimination entries in ASC 323-10-35 for preparing consolidated financial statements.

**Question DH 7-4**

Would the expected phase-out of a tax credit qualify as a hedged item in a cash flow hedge?

***PwC response***

No. The expected phase-out of a tax credit would not fall within one of the cash flows included as a qualifying hedged item. A tax credit is not a specifically identified cash flow as it is only received through a reduction in the reporting entity's overall tax liability and cannot be transferred or sold to a third party. Further, it does not meet any of the criteria in ASC 815-20-25-15(i) or 25-15(j) for the component items of a forecasted transaction that are eligible for designation in a hedging relationship.

**Question DH 7-5**

Would net assets of a discontinued operation that are presented as a single line item on the balance sheet qualify as a hedged item in a fair value hedge?

***PwC response***

No. Although the net assets of a discontinued operation are presented as one line item on the balance sheet, it represents a group of dissimilar assets and liabilities. Under ASC 815-20-25-12, only specific individual assets or liabilities, or groups of similar assets or liabilities, qualify as hedged items in fair value hedges. Exceptions to this rule are net investment hedges (DH 8.6) and portfolio layer method hedges (DH 6.5).

**7.2.2.3 *Dynamic hedging strategies***

The guidance permits use of a dynamic hedging strategy, either (1) increasing or decreasing the quantity of hedging instruments necessary to achieve the objective of hedging a specific risk at a specific level or (2) changing the percentage of the hedged item that is designated. For example, a reporting entity may hedge the price risk on 80% of next year's forecasted sales and later adjust the

hedge strategy so that only 50% of next year's forecasted sales are hedged. However, the reporting entity could never designate more than 100% of the forecasted transaction. The use of dynamic hedging strategies may require dedesignation and redesignation of hedging relationships that may create additional complexities.

### **7.2.3 Eligibility of instruments used to hedge**

Generally, only a derivative as defined in ASC 815 can qualify as a hedging instrument; however, as discussed in DH 8, there are limited circumstances related to foreign currency hedging when a nonderivative instrument may be used. Forward or futures contracts are commonly used in hedges of nonfinancial assets and commodity purchases and sales. However, options, price caps, floors, and collars are also common products for hedging the risk of (1) price increases when forecasting purchases or (2) price decreases when holding inventory or forecasting sales.

ASC 815-20-25-71 specifically prohibits the use of certain items as the hedging instrument, including (1) a hybrid financial instrument that is measured at fair value and (2) the individual components of a compound derivative that are separated from the host contract.

#### **7.2.3.1 Using proportions of derivatives / Multiple derivatives**

ASC 815 allows an entire derivative or a proportion of a derivative, as well as multiple derivatives together (or proportions of them), to be designated as a hedging instrument. However, a derivative cannot be separated into different time periods or different components because those would have different risk profiles.

#### **Excerpt from ASC 815-20-25-45**

Either all or a proportion of a derivative instrument (including a compound embedded derivative that is accounted for separately) may be designated as a hedging instrument. Two or more derivative instruments, or proportions thereof, may also be viewed in combination and jointly designated as the hedging instrument. A proportion of a derivative instrument or derivative instruments designated as the hedging instrument shall be expressed as a percentage of the entire derivative instrument(s) so that the profile of risk exposures in the hedging portion of the derivative instrument(s) is the same as that in the entire derivative instrument(s).

Multiple derivatives, whether entered into at the same time or at different times, may be designated as a hedge of the same item. ASC 815-20-25-45 clarifies that two or more derivatives may be viewed in combination and be jointly designated as the hedging instrument. For example, a reporting entity can designate two purchased options as a hedge of the same hedged item even if the options are acquired at different times. However, an entity is not permitted to hedge the same portion of a hedged item for the same risk more than once as that would not be a hedging transaction (it would be "over hedging").

ASC 815-20-25-45 requires that the proportion of the derivative being designated be expressed as a percentage of the derivative's notional amount over the entire term (e.g., 40% of 20,000 MMBtus over the entire term of a one-year natural gas swap). In some instances, that percentage may not be *explicitly* documented. If (1) the designated proportion of the notional amount and (2) the total notional amount of the derivative hedging instrument are documented in such a way that the percentage can be calculated, then the hedge designation would meet the requirement. We believe that the term "expressed as a percentage" was meant to emphasize that the proportion of the derivative

designated as the hedging instrument has the same profile of risk exposures as that of the entire derivative.

A reporting entity may also use proportions of a derivative in separate hedging relationships. For example, if 40% of the notional of a natural gas swap is used in one hedging relationship, all or a proportion of the remaining notional could be used in a separate hedging relationship. Each individual hedging relationship would have to be assessed separately to determine whether it meets the requirements for hedge accounting.

### 7.2.3.2 *Separating a derivative into components*

Separating a derivative into components representing different risks so that the components can be designated as a hedging instrument is not permitted. For example, if a reporting entity were to enter into a compound derivative for the purchase of natural gas and power, it would not be permitted to separate the natural gas component to solely hedge the natural gas price risk. This would not be a proportion of a total derivative.

#### Question DH 7-6

Can a reporting entity select only certain months of a one-year derivative with monthly settlements to hedge forecasted transactions of those specific months?

#### *PwC response*

No. ASC 815 precludes designating a portion of a derivative that represents different risks as a hedging instrument. ASC 815-20-25-45 requires a proportion of a derivative designated as a hedging instrument to match the risk profile of the entire derivative. For example, a company could designate 25% of the entire one-year derivative as a hedging instrument. It could not, however, designate the first three months of the derivatives payments as a hedging instrument.

As an alternative, the reporting entity could enter into separate contracts for different time periods during the year and designate the separate contracts as hedges.

### 7.2.3.3 *Written options as hedging instruments*

A written option requires the seller (writer) of the option to fulfill the obligation of the contract should the purchaser (holder) choose to exercise it. In return for providing that option to the holder, the writer receives a premium from the holder. For example, a written call option provides the purchaser of that option the right to call, or buy, a commodity, financial or equity instrument at a price during or at a time specified in the contract. The writer would be required to honor that call. As a result, written options provide the writer with the possibility of unlimited loss, but limit any gain to the amount of the premium received. In other words, written options can have the opposite effect of what a hedge is intended to accomplish. Thus, they are generally not permitted to be used as hedging instruments.

However, there are circumstances when a written option may be a more cost-effective strategy than using other instruments—for example, when used to hedge the call option feature in fixed-rate debt rather than issuing fixed-rate debt that is not callable. If a reporting entity wishes to use a written option as a hedging instrument, the instrument must pass the “written option test.” The test includes a requirement to ensure that, when considering the written option in combination with the hedged item,

the “upside” potential (for gains or favorable cash flows) is equal to or greater than the “downside” potential (for losses or unfavorable cash flows), as described in ASC 815-20-25-94.

The written option test applies specifically to recognized assets, liabilities, or unrecognized firm commitments. As a result, we do not believe that a written option (or a net written option) can qualify as a hedging instrument in a hedge of a forecasted transaction.

#### **ASC 815-20-25-94**

If a written option is designated as hedging a recognized asset or liability or an unrecognized firm commitment (if a fair value hedge) or the variability in cash flows for a recognized asset or liability or an unrecognized firm commitment (if a cash flow hedge), the combination of the hedged item and the written option provides either of the following:

- a. At least as much potential for gains as a result of a favorable change in the fair value of the combined instruments (that is, the written option and the hedged item, such as an embedded purchased option) as exposure to losses from an unfavorable change in their combined fair value (if a fair value hedge).
- b. At least as much potential for favorable cash flows as exposure to unfavorable cash flows (if a cash flow hedge).

The combined position’s relative potential for gains and losses is only evaluated at hedge inception. It is based on the effect of a change in price, and the possibility for upside should be as great as the possibility for downside for *all* possible price changes.

#### ***Excluding time value from the written option test***

ASC 815-20-25-96 allows a reporting entity to exclude the time value of a written option from the written option test, provided that the entity also specifies that it will base its assessment of effectiveness only on the changes in the option’s intrinsic value.

#### ***Covered calls***

ASC 815-20-55-45 precludes hedge accounting for “covered call” strategies. In writing a covered call option, a reporting entity provides a counterparty with the option of purchasing an asset (that the entity owns) at a certain strike price. In some cases, the reporting entity may then purchase an option to buy the same underlying at a higher strike price. A reporting entity may enter into this type of structure to generate income by selling some, but not all, of the upside potential of the securities that it owns. Under such a strategy, the net written option does not qualify for hedge accounting because the potential gain is less than the potential loss.

#### ***Combination of options***

Hedging strategies can include various combinations of instruments, for example, forward contracts with written options, swaps with written caps, or combinations of one or more written and purchased options. A derivative that results from combining a written option and a non-option derivative is considered a written option. Reporting entities considering using a combination of instruments that

include a written option as a hedging derivative should evaluate whether they have, in effect, a net written option and therefore are required to meet and document the results of the written option test.

ASC 815-20-25-89 outlines certain requirements for a combination of options to qualify as a net purchased option or zero-cost collar, in which case the written option test is not required.

#### **ASC 815-20-25-89**

For a combination of options in which the strike price and the notional amount in both the written component and the purchased option component remain constant over the life of the respective component, that combination of options would be considered a net purchased option or a zero cost collar (that is, the combination shall not be considered a net written option subject to the requirements of 815-20-25-94) provided all of the following conditions are met:

- a. No net premium is received.
- b. The components of the combination of options are based on the same underlying.
- c. The components of the combination of options have the same maturity date.
- d. The notional amount of the written option component is not greater than the notional amount of the purchased option component.

ASC 815-20-25-89 applies only when the strike price and the notional amount in both the written and purchased option components of a combination of options remain constant over the life of the respective components. If either or both the strike price or notional amounts change, the assessment to determine whether the combination of options is a written option is evaluated with respect to each date that either the strike price or the notional amount changes.

If a combination of options fails to meet all of the criteria in ASC 815-20-25-89, it cannot be considered a net purchased option and is subject to the written option test. For example, if a collar includes a written floor based on the three-month Treasury rate and a purchased cap based on three-month LIBOR, the underlyings of the components are not the same, and therefore, the collar would be considered a net written option subject to the written option test.

A combination of options entered into contemporaneously is considered a written option if either at inception or over the life of the options a net premium is received in cash or as a favorable rate or other term. Further, a derivative that results from combining a written option and any other non-option derivative is a written option.

Under certain circumstances, a reporting entity that has combined two options might attempt to satisfy the requirement that the hedge provide as much potential for gains as it does for losses. However, the entity would not be permitted to apply hedge accounting to the combined position unless it were to satisfy this requirement for *all* possible price changes.

#### ***Redesignation of a combination of options***

When redesignating a hedging relationship involving a zero-cost collar or a combination of options, a reporting entity needs to re-assess whether the combination of options is a net purchased option or a



net written option. The new assessment is based on their current fair values. For example, assume a reporting entity has a collar that at its inception was not considered a net written option and was designated in a hedging relationship. The reporting entity later dedesignates the original hedging relationship and wants to designate the existing collar in a new hedging relationship. In this situation, if the existing collar is deemed a net written option on the date of redesignation, the reporting entity would need to perform the written option test at the inception of the new hedging relationship based on the economics of the collar on that date.

### Question DH 7-7

If a noncancellable swap with no embedded options has an initial value of \$100,000, would it be considered a written option?

#### *PwC response*

No. The \$100,000 received at the initiation of the contract is not a premium received for a written option. The swap contract does not contain an option element. Rather, the initial value of \$100,000 is an indication that the contract is off-market. The counterparty to the contract is paying for this initial value and expects to be repaid through future periodic settlements.

In essence, the swap contract contains a financing element. If it is more than insignificant, a reporting entity needs to consider ASC 815-10-45-11 through ASC 815-10-45-15. If the \$100,000 financing element is significant enough to disqualify the entire swap contract from meeting the definition of a derivative, then the contract should be accounted as a debt host and evaluated for whether it contains an embedded derivative that should be bifurcated (see DH 4 for a discussion of embedded derivatives).

Example DH 7-1 illustrates application of the written option test in a cash flow hedge using a collar.

### EXAMPLE DH 7-1

#### Using a three-way zero-cost collar as a hedging instrument

In January 20X1, DH Gas Company (DH Gas) hedges its November 20X3 forecasted natural gas sales at Henry Hub, expected to be 10,000 MMBtus per day, by entering into a zero-cost collar comprised of two contracts with the same counterparty:

- A collar with a written call option for \$8.00/MMBtu and a purchased put option for \$4.00/MMBtu for 10,000 MMBtus
- A written put option for \$3.75/MMBtu for 10,000 MMBtus

Both contracts were for 10,000 MMBtus per day at Henry Hub in the month of November 20X3, and the combination of these contracts does not result in any premium paid or received by DH Gas.

Is the written option test in ASC 815-20-25-94 required to be performed to determine if the collar is eligible to be designated at the hedging instrument in a hedge of DH Gas' forecasted November 20X3 gas sales?



*Analysis*

Yes. In this example, the combination of options does not meet all four requirements in ASC 815-20-25-89 for a combination of options to qualify as a net purchased option or zero-cost collar. It provides for a total notional on the written options of 20,000 MMBtus per day, compared with 10,000 MMBtus per day on the purchased option component. As such, the hedging instrument does not meet the criteria in ASC 815-20-25-89(d) that the notional amount of the written option component is not greater than the notional amount of the purchased option, and is subject to the written option test.

As a net written option, the collar would not qualify as a hedging instrument because it does not provide at least as much potential for favorable cash flows as exposure to unfavorable cash flows, per ASC 815-20-25-94(b).

**7.2.3.4 Contracts with fixed and variable pricing**

ASC 815-20-55-46 and ASC 815-20-55-47 indicate that a commodity contract that has index pricing with a fixed spread cannot be designated as a hedging instrument in the cash flow hedge of a forecasted transaction (e.g., a contract for the purchase of natural gas at the NYMEX Henry Hub spot price plus \$1.00). The guidance indicates that the underlying in these types of contracts is related only to changes in the basis differential (i.e., the fixed spread). As a result, using such an instrument to hedge a forecasted transaction when the variability in cash flows is based both on the basis spread and the index price would result in only a portion of the variability in cash flows being offset.

**Excerpt from ASC 815-20-55-47**

The entity is not permitted to designate a cash flow hedging relationship as hedging only the change in cash flows attributable to changes in the basis differential. For an entity to be able to conclude that such a hedging relationship is expected to be highly effective in achieving offsetting cash flows, the entity would need to consider the likelihood of changes in the base commodity price as remote or insignificant to the variability in hedged cash flows (for the total purchase or sales price). However, the mixed-attribute contract may be combined with another derivative instrument whose underlying is the base commodity price, with the combination of those derivative instruments designated as the hedging instrument in a cash flow hedge of the overall variability of cash flows for the anticipated purchase or sale of the commodity.

Reporting entities wishing to hedge a forecasted transaction using a derivative that is priced at index plus a fixed spread should evaluate whether the hedge will be effective at inception and on an ongoing basis.

***Basis swaps***

Basis swaps are similar to contracts with variable pricing plus a fixed spread in that a basis swap represents the difference between two locations or underlyings, and therefore, is used to limit such differences (similar to a fixed spread, which is generally intended to compensate for location differences). Because a basis swap does not fix the price, it cannot be used as a hedging instrument on a standalone basis. ASC 815-20-25-50 permits a reporting entity to use a basis swap as a hedge of interest-bearing assets and liabilities if specified criteria are met; however, this paragraph specifically mentions “a financial asset or liability” and states that the hedge is used to “modify the interest

receipts or payments associated with a recognized financial asset or liability from one variable rate to another variable rate.” Therefore, ASC 815-20-25-50 restricts hedge accounting to interest-bearing assets and liabilities when a basis swap is involved.

However, a basis swap can be used in combination with a forward or futures contract as a combined (jointly designated) hedging instrument to hedge a forecasted transaction. For example, a reporting entity may use this strategy if the forecasted transaction will occur at a location for which there is no standalone index (e.g., hedging a forecasted transaction at Houston Ship Channel with a NYMEX future priced based on Henry Hub). The futures contract would be used to fix the price of natural gas and the basis swap would be used to bridge the two indices (i.e., from the NYMEX future to the actual location of the forecasted transaction, in this case Houston Ship Channel).

Example DH 7-2 and Example DH 7-3 illustrate the use of basis swaps in combination with other hedging instruments.

### **EXAMPLE DH 7-2**

#### **Use of a natural gas futures contract and basis swap in combination to hedge a forecasted transaction**

DH Gas Company (DH Gas) has forecasted sales of 10,000 MMBtus of natural gas per day in the month of April 20X1 at Houston Ship Channel. It decides to hedge the forecasted transactions.

On January 1, 20X1, DH Gas enters into a NYMEX futures contract priced based on Henry Hub for 10,000 MMBtus of natural gas per day for April 20X1. Subsequently, on February 15, 20X1, it enters into a receive Houston Ship Channel, pay Henry Hub basis swap for 10,000 MMBtus of natural gas per day in April 20X1. The total notional amount is 300,000 MMBtus.

Can DH Gas designate the futures contract as a cash flow hedge on January 1, 20X1?

#### *Analysis*

Yes. Assuming that all of the hedge criteria have been met, including the assessment that using the NYMEX futures contract will result in a highly effective hedge, DH Gas can designate the futures contract as a cash flow hedge of the total cash flows in the sale of natural gas expected to occur in April 20X1. This hedging relationship would not be perfectly effective due to the Henry Hub-Houston Ship Channel basis difference. As long as the hedge is highly effective, any mismatch would not be recorded in current earnings.

When DH Gas enters into the basis swap on February 15, 20X1, the original hedge would need to be dedesignated and redesignated if DH Gas wants the basis swap to be designated (jointly designated with the futures contract) as a hedge for accounting purposes. The basis swap cannot be designated by itself as the hedging instrument (because it does not fix the cash flows) and also cannot be added to the existing hedging relationship (without dedesignation and redesignation). Further, because the NYMEX futures contract will have a fair value on February 15, 20X1 other than zero, DH Gas would need to consider the impact of the fair value at the inception of the hedging relationship on hedge effectiveness.

In implementing this strategy, DH Gas may alternatively elect to retain the original hedging relationship and allow the basis swap to be recorded directly to earnings (rather than designating it in a hedge).

**EXAMPLE DH 7-3****Use of combination hedging instruments to hedge forecasted purchases of natural gas by a manufacturer**

DH Steel Corp, a steel manufacturer, would like to hedge its natural gas cost expected to be incurred in October 20X1. DH Steel purchases natural gas at the first-of-month SoCal Border index price. Historical records show that DH Steel uses at least 50,000 MMBtus during October to support its operations.

On January 1, 20X1, DH Steel enters into a commodity forward contract for 50,000 MMBtus of natural gas to hedge the forecasted purchase of natural gas. It concludes that the forecasted transaction is probable based on its historical and forecasted purchases. Under the terms of the forward, it will pay \$7.50/MMBtu and receive the Henry Hub spot price. There will be no physical deliveries under this forward contract, but rather a net cash settlement of the fixed and variable prices. Because the actual purchase of natural gas will be at SoCal Border, and not Henry Hub, DH Steel also enters into a basis forward contract between Henry Hub and SoCal Border to fix the forward price at SoCal Border during October 20X1. The basis spread at the time of execution was \$0.50/MMBtu (i.e., DH Steel pays Henry Hub + \$0.50 and receives SoCal on the basis forward contract).

On January 1, 20X1, DH Steel jointly designates the commodity forward and the basis forward in combination as a cash flow hedge of the variability of total cash flows associated with its first 50,000 MMBTUs of natural gas purchased in October 20X1 at the SoCal Border first of month index price.

DH Corp assumes the hedge is perfectly effective using the critical terms match method in ASC 815-20-25-84 as follows:

- The combination commodity forward and basis forward is for the same notional (50,000 MMBtus), same commodity (natural gas), same time (October 1, 20X1) and location (the basis swap effectively converts the pricing from Henry Hub location to SoCal Border, which is the location where the actual purchases will occur).
- The fair value of the commodity and basis forward contracts are zero at inception.
- The change in the expected cash flows of the forecasted transaction is based on the first-of-month forward price for the natural gas at the SoCal Border.

The spot and forward market prices for natural gas are as follows:

Date	Henry Hub spot price	SoCal spot price	Henry Hub forward price—October	SoCal forward price—October	Difference in forward price
January 1, 20X1			\$7.50	\$8.00	\$0.50
March 31, 20X1			7.75	8.40	\$0.65
June 30, 20X1			7.90	8.45	\$0.55
September 30, 20X1			8.10	8.80	\$0.70
October 1, 20X1	\$8.10	\$8.80	N/A	N/A	N/A

The fair values of the commodity swap and basis forward contracts are as follows:

Date	Fair value of commodity forward *	Change in fair value of commodity forward *	Fair value of forward on SoCal basis *	Change in fair value of forward on SoCal basis *
January 1, 20X1	-		-	
March 31, 20X1	\$12,138	\$12,138	\$7,283	\$7,283
June 30, 20X1	19,705	7,567	2,463	(4,820)
September 30, 20X1	29,995	10,290	9,998	7,535
October 1, 20X1	30,000	5	10,000	2

\* Amounts are discounted at 6% per year.

How should DH Corp account for the hedging relationship?

### *Analysis*

As a highly effective cash flow hedge, the gain or loss on the derivative hedging instruments is recorded through OCI and reclassified from AOCI to earnings when the actual 50,000 MMBtus of natural gas purchased is expensed through cost of goods sold.

DH Steel Corp would make the following journal entries during the hedging relationship. No entry would be made at inception to record the fair values of the commodity or basis forward contracts because they were at-market at inception (i.e. they had a fair value of zero at inception).

#### **March 31, 20X1**

Dr. Commodity forward	\$12,138	
Cr. Other comprehensive income		\$12,138

To record the change in fair value of the commodity forward

Dr. Forward on SoCal basis	\$7,283	
Cr. Other comprehensive income		\$7,283

To record the change in fair value of the forward on basis

#### **June 30, 20X1**

Dr. Commodity forward	\$7,567	
Cr. Other comprehensive income		\$7,567

To record the change in fair value of the commodity forward

Dr. Other comprehensive income	\$4,820	
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Cr. Forward on SoCal basis		\$4,820
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To record the change in fair value of the forward on basis

**September 30, 20X1**

Dr. Commodity forward	\$10,290	
Cr. Other comprehensive income		\$10,290

To record the change in fair value of the commodity forward

Dr. Forward on SoCal basis	\$7,535	
Cr. Other comprehensive income		\$7,535

To record the change in fair value of the forward on basis

**October 1, 20X1**

Dr. Cash	\$40,000	
Cr. Forward on SoCal basis		\$9,998
Cr. Commodity forward		\$29,995
Cr. Other comprehensive income		\$7

To record the change in fair value and settlement of the commodity and basis forwards (settlement period ignored for simplicity)

**October 31, 20X1**

Dr. Natural gas expense	\$440,000	
Cr. Accounts payable		\$440,000

To record the purchase and usage of the first 50,000 MMBtus of natural gas (50,000 MMBtus × SoCal Border spot price at first of month October 1, 20X1 price of \$8.80/MMBtu)

Dr. Accumulated other comprehensive income	\$40,000	
Cr. Natural gas expense		\$40,000

To reclassify the gain on the swaps in AOCI to earnings

Through the hedge, DH locks in the purchase price at \$8.00, which is the SoCal forward price on January 1, 20X1 and the Henry Hub forward price plus the initial basis spread.

As an alternative, DH Steel may not need the basis swap if the purchase of natural gas and the derivative were based on the same or a highly correlated index.

## 7.3 *Cash flow hedges of nonfinancial assets and liabilities*

A reporting entity may designate a derivative as a hedge of the exposure to the variability in expected future cash flows that is attributable to a particular risk, such as a change in price (a *cash flow hedge*). This exposure may be associated with an existing recognized asset or liability (such as forecasted sales of inventory) or a forecasted transaction (such as forecasted purchases or sales of a commodity).

The primary purpose of a cash flow hedge is to link together the income statement recognition of the hedging instrument and a hedged transaction whose changes in cash flows are expected to offset each other. For a reporting entity to achieve this offsetting or “matching” of cash flows, the change in the fair value of the derivative instrument included in the assessment of effectiveness is (1) initially reported as a component of other comprehensive income and (2) later reclassified into earnings in the same period or periods during which the hedged transaction affects earnings (e.g., when a forecasted sale occurs).

A common example of a cash flow hedge of a nonfinancial item is the hedge of a forecasted sale or purchase of a commodity, such as natural gas, with forward, future or option contracts.

### 7.3.1 *Types of risks eligible for cash flow hedging*

A cash flow hedge of a recognized asset or liability or a forecasted transaction must meet the general hedge criteria, as discussed in DH 7.2. In addition, in a cash flow hedge of the forecasted purchase or sale of a nonfinancial asset, ASC 815-20-25-15(i) limits the risks that may be hedged.

#### **Excerpt from ASC 815-20-25-15(i)**

If the hedged transaction is the forecasted purchase or sale of a nonfinancial asset, the designated risk being hedged is any of the following:

1. The risk of changes in the functional-currency-equivalent cash flows attributable to changes in the related foreign currency exchange rates
2. The risk of changes in the cash flows relating to all changes in the purchase price or sales price of the asset reflecting its actual location if a physical asset (regardless of whether that price and the related cash flows are stated in the entity’s functional currency or a foreign currency), not the risk of changes in cash flows relating to the purchase or sale of a similar asset in a different location
3. The risk of variability in cash flows attributable to changes in a contractually specified component.

See further discussion of additional criteria related to hedges of contractually specified components in DH 7.3.3. See also a discussion of foreign currency hedges in DH 8.

### 7.3.2 *Eligible hedged items in a cash flow hedge of a nonfinancial item*

Hedge accounting may be applied to cash flow hedging relationships when the relevant general qualifying criteria discussed in DH 7.2 and the criteria specific to cash flows hedges in ASC 815-20-25-13 and ASC 815-20-25-15 are met.

**Excerpt from ASC 815-20-25-13**

An entity may designate a derivative instrument as hedging the exposure to variability in expected future cash flows that is attributable to a particular risk. That exposure may be associated with either of the following:

- a. An existing recognized asset or liability (such as all or certain future interest payments on variable-rate debt)
- b. A forecasted transaction (such as a forecasted purchase or sale).

Cash flow hedges are frequently used to hedge the forecasted purchase or sale of a commodity, such as natural gas, coal, power, or fuel oil. A cash flow hedge can also be used to hedge (1) the future purchase of physical inventory (to protect against the risk of changes in the price of the inventory prior to the forecasted purchase) or (2) the future sale of physical inventory (to protect against the risk of changes in the sales price prior to the forecasted sale).

ASC 815-20-25-20 defines a forecasted transaction.

**Definition from ASC 815-20-20**

**Forecasted Transaction:** A transaction that is expected to occur for which there is no firm commitment. Because no transaction or event has yet occurred and the transaction or event when it occurs will be at the prevailing market price, a forecasted transaction does not give an entity any present rights to future benefits or a present obligation for future sacrifices.

In addition to needing to meet the basic criteria for hedge accounting, ASC 815-20-25-15 outlines the additional criteria for a forecasted transaction to qualify as the hedged transaction in a cash flow hedge. The key requirements include the following:

- The transaction is specifically identified as either a single transaction or group of transactions.
- The transaction is probable of occurring.
- The transaction represents an exposure to variable cash flows that impacts earnings and is with a third party.
- The transaction is not the acquisition of an asset or incurrence of a liability that will subsequently be measured at fair value, such as a derivative (i.e., a reporting entity cannot hedge a derivative with a derivative).
- If the hedged item is a nonfinancial transaction (e.g., a purchase or sale with physical delivery), the risk being hedged should be for all of the cash flows relating to the forecasted purchase or sale (i.e., the variability in all cash flows, including transportation to the item's location should be hedged), or for a contractually specified component.

See DH 7.3.3 for further discussion of cash flow hedges involving a contractually specified component of a forecasted transaction. Each of the other requirements is further discussed in this section.

### 7.3.2.1 *The forecasted transaction is specifically identified*

When hedging a forecasted transaction, reporting entities have flexibility to hedge individual transactions or groups of individual transactions that share similar risks.

#### **ASC 815-20-25-15(a)**

The forecasted transaction is specifically identified as either of the following:

1. A single transaction
2. A group of individual transactions that share the same risk exposure for which they are designated as being hedged. A forecasted purchase and a forecasted sale shall not both be included in the same group of individual transactions that constitute the hedged transaction.

In either case, the cash flow hedge documentation should identify the forecasted transaction with sufficient specificity. The documentation requirement is further detailed in ASC 815-20-25-3(d)(1)(vi).

#### **ASC 815-20-25-3(d)(1)(vi)**

The hedged forecasted transaction shall be described with sufficient specificity so that when a transaction occurs, it is clear whether that transaction is or is not the hedged transaction. Thus, a forecasted transaction could be identified as the sale of either the first 15,000 units of a specific product sold during a specified 3-month period or the first 5,000 units sold in each of 3 specific months, but it could not be identified as the sale of the last 15,000 units of that product sold during a 3-month period (because the last 15,000 units cannot be identified when they occur, but only when the period has ended).

When preparing hedge documentation, a reporting entity should ensure that there is sufficient specificity so that it is clear what forecasted transaction is being hedged so that when it occurs, it is clear whether or not it is hedged. The designation and documentation of the hedged transaction depends on the nature of the forecasted transaction and, absent an all-in-one hedge of a firm commitment (see DH 7.3.4), linkage back to a specific vendor, customer, or contract is not required. For example, if a reporting entity is selling a commodity into the open market, it should document details about the quantity, location, and timing of the forecasted sales, but it would not typically need to designate a specific contract or counterparty.

Reporting entities should consider how they describe the forecasted transaction in their documentation because it may impact the accounting upon discontinuance of the hedge. For example, if the documentation of a hedged transaction identifies forecasted sales to a specific counterparty, a subsequent conclusion that sales to that counterparty are probable of not occurring would lead to discontinuance of the hedging relationship and immediate release of amounts in AOCI. In contrast, if the designation is more general, changes in the customer mix alone would not affect the hedging designation, but it may impact the assessment of effectiveness.

#### ***Hedging a group of forecasted transactions***

Provided that the forecasted transactions are identified with sufficient specificity, a reporting entity may hedge a group of forecasted transactions.



**Excerpt from ASC 815-20-55-22**

A single derivative instrument of appropriate size could be designated as hedging a given amount of aggregated forecasted transactions, such as any of the following:

- a. Forecasted sales of a particular product to numerous customers within a specified time period, such as a month, a quarter, or a year
- b. Forecasted purchases of a particular product from the same or different vendors at different dates within a specified time period

If the hedged transaction is a group of individual transactions, as contemplated in ASC 815-20-55-22, ASC 815-20-25-15(a)(2) requires that those individual hedged items or transactions share the “same risk exposure” for which they are designated as being hedged (e.g., risk of changes in cash flows due to changes in a commodity index). Thus, if a particular forecasted transaction does not share the risk exposure that is germane to the group of transactions being hedged, that transaction cannot be part of the group that is being hedged. As a result, the guidance precludes a forecasted purchase and a forecasted sale from being grouped together since the risk exposures are different.

Moreover, a group of commodity sales at the same delivery location could be considered to have a similar risk if all other features of the contract are aligned. However, if the commodity sales are at different locations or for different grades or types of the commodity, the variability of cash flows relating to those different locations or grades would need to be sufficiently correlated to support that the sales share the same risk exposure. In general, we would not expect a group including more than one commodity or different pricing structures (e.g., monthly, daily) to qualify for designation as the hedged item because the forecasted transactions would not qualify under the similar asset test. For example, it may be difficult to group physical transactions at the SoCal Border (a market hub for natural gas located in California) and Houston Ship Channel (a market hub for natural gas located in Houston, Texas).

For fair value hedges, ASC 815-20-25-12(b)(1) also requires that the individual hedged items in a hedged group share the same risk exposure for which they are as being hedged. In addition, ASC 815-20-55-14 provides guidance for the quantitative evaluation of whether a portfolio of assets or liabilities share the same risk exposure in a fair value hedge. This quantitative test, known as the “similar assets/liabilities test,” is specific to fair value hedges. ASC 815-20-25-15 does not specifically require reporting entities to perform this test for cash flow hedges of groups of individual transactions. However, we believe that in most circumstances, a quantitative test is needed for cash flow hedges when the hedged item is a portfolio of forecasted transactions that are similar but not identical.

In certain limited circumstances when the terms of the individual hedged items in the portfolio are aligned, a qualitative similar assets test may be appropriate. The determination of whether a quantitative or qualitative analysis is sufficient is judgmental and will depend on the nature of the commodity being hedged.

When facts and circumstances regarding the portfolio change, we expect reporting entities to reconsider their similar assets test. When changes are significant such that the original conclusion is no longer valid without additional support, we would expect a new comprehensive analysis to be performed at that time.

Example DH 7-4 illustrates the evaluation when a group of individual transactions is designated as a single hedged item.

### **EXAMPLE DH 7-4**

#### **Similar assets test — group of forecasted sales of natural gas**

DH Gas Company sells natural gas at five locations in Texas. To mitigate cash flow volatility associated with fluctuating natural gas prices, DH Gas decides to hedge its forecasted sales. However, because it manages all of its sales in Texas as one portfolio, instead of designating a hedging relationship for each separate location, DH Gas designates all of its forecasted sales within one hedging relationship. The group of forecasted sales is hedged with NYMEX pay floating, receive fixed swaps based on the monthly Henry Hub index price. For purposes of this example, assume all physical sales are also based on a monthly index price.

Does DH Gas need to perform a similar assets test?

#### *Analysis*

To hedge the forecasted sales at all locations as a group (rather than individual transactions or locations), DH Gas performs a quantitative similar assets test at inception to demonstrate that the sales at all five of the locations have similar risks. In general, it may be difficult to pass the similar assets test when locations are geographically disbursed or when prices at some locations are impacted by congestion or other factors that would not impact all locations equally.

When facts and circumstances regarding the portfolio change, DH Gas would need to reconsider its similar assets test to confirm that the five locations continue to share similar risks. If at any point in the hedging relationship, one or more of the five locations fails the similar assets test, the entire hedging relationship should be dedesignated. However, DH Gas may be able to enter into a new hedging relationship with the remaining locations that continue to qualify under the similar assets test.

Another challenge in grouping transactions for hedge accounting is in establishing the perfect hypothetical derivative for purposes of assessing effectiveness. The reporting entity will need to make an initial assessment of the mix of transactions (e.g., 50% Houston Ship Channel, 50% Henry Hub) and would use that hypothetical derivative in its testing. The perfect hypothetical derivative would need to be updated if the forecast changes, which may reduce the effectiveness of the hedge in a particular period. In addition, if a reporting entity is unable to accurately forecast the mix of sales, it may not be able to apply a group method.

#### **7.3.2.2 The forecasted transaction is probable of occurring**

A key requirement to qualify to hedge a forecasted transaction is that the transaction is probable of occurring.

#### **Excerpt from ASC 815-20-55-24**

An assessment of the likelihood that a forecasted transaction will take place (see paragraph 815-20-25-15(b)) should not be based solely on management's intent because intent is not verifiable. The transaction's probability should be supported by observable facts and the attendant circumstances.

Consideration should be given to all of the following circumstances in assessing the likelihood that a transaction will occur.

- a. The frequency of similar past transactions
- b. The financial and operational ability of the entity to carry out the transaction
- c. Substantial commitments of resources to a particular activity (for example, a manufacturing facility that can be used in the short run only to process a particular type of commodity)
- d. The extent of loss or disruption of operations that could result if the transaction does not occur
- e. The likelihood that transactions with substantially different characteristics might be used to achieve the same business purposes (for example, an entity that intends to raise cash may have several ways of doing so, ranging from a short-term bank loan to a common stock offering).

Further, as discussed in ASC 815-20-55-25, both (1) the length of time that is expected to pass before a forecasted transaction is projected to occur and (2) the quantity of products or services that are involved in the forecasted transaction are considerations in determining probability.

#### **ASC 815-20-55-25**

Both the length of time until a forecasted transaction is projected to occur and the quantity of the forecasted transaction are considerations in determining probability. Other factors being equal, the more distant a forecasted transaction is or the greater the physical quantity or future value of a forecasted transaction, the less likely it is that the transaction would be considered probable and the stronger the evidence that would be required to support an assertion that it is probable.

Therefore, a reporting entity should consider whether the volume of planned sales or purchases for the particular commodity, location, and timing for the forecasted transaction support a probable assertion. In making the probable assessment, the reporting entity should consider the volume of forecasted transactions (sales) and/or needs (purchases) compared to the designated hedge volume. Absent a contractual volume commitment, it may be challenging for a reporting entity to assert that a forecasted sale constituting a high percentage of its sales is probable due to potential volatility in market demand. Similarly, if a reporting entity is purchasing a specific commodity for use in production and wants to hedge its supply, it may be difficult to support designating a high percentage of its forecasted purchases if its sales are highly dependent on market conditions.

Assessing the probability that a forecasted transaction will occur requires judgment. “Probable” in the context of hedge accounting is used in the same manner as in ASC 450. Specifically, the term probable means that “the future event or events are likely to occur.” Thus, although ASC 815 and ASC 450 do not establish bright lines, a probable likelihood of occurrence should be a significantly greater threshold than the 50% threshold associated with “more likely than not.” In addition, there should be compelling evidence to support management’s assertion that a forecasted transaction is probable.

In addition to the impact on initially qualifying for hedge accounting, a change in the probability of the forecasted transaction may impact whether discontinuance of the hedge is required and whether reclassification of amounts deferred in AOCI is required. See DH 10.4.8.1 for further information.

### **Documentation**

In its formal hedge documentation, management should specify the circumstances that were considered in concluding that a transaction is probable. If a reporting entity has a pattern of determining that forecasted transactions are no longer probable of occurring, the appropriateness of management's previous assertions and its ability to make future assertions regarding forecasted transactions may be called into question.

### **Counterparty creditworthiness**

In addition to requiring entities to continually assess the likelihood of the counterparty's compliance with the terms of the hedging derivative, they are required to perform an assessment of their own creditworthiness and that of the counterparty (if any) to the hedged forecasted transaction to determine whether the forecasted transaction is probable. See ASC 815-20-25-16(a).

This assessment should be performed at least quarterly at the time of hedge effectiveness testing. If the probability of the forecasted transaction changes as a result of a change in counterparty creditworthiness, the reporting entity would need to evaluate whether it continues to qualify for hedge accounting.

### **Timing of the forecasted transaction**

When designating a forecasted transaction in a cash flow hedge, there may be a specific date on which the transaction is expected to occur (e.g., there is a contractual commitment for delivery on December 15, 20X1). However, in many cases, delivery will be expected during a defined period rather than on a specific date. For example, deliveries of a commodity may be expected to occur during the third quarter, but there may be uncertainty regarding the delivery month. ASC 815-20-25-16 provides guidance on the timing and probability of a forecasted transaction and uncertainty within a range.

#### **Excerpt from ASC 815-20-25-16(c)**

Uncertainty of timing within a range. For forecasted transactions whose timing involves some uncertainty within a range, that range could be documented as the originally specified time period if the hedged forecasted transaction is described with sufficient specificity so that when a transaction occurs, it is clear whether that transaction is or is not the hedged transaction. As long as it remains probable that a forecasted transaction will occur by the end of the originally specified time period, cash flow hedge accounting for that hedging relationship would continue.

Therefore, although uncertainty within a time period does not preclude hedge accounting (as long as the forecasted transaction is identified with sufficient specificity), the reporting entity should continue to monitor whether there are changes in the timing of the forecasted transaction. If there is a change in the timing of the forecasted transaction such that the forecasted transaction is no longer probable of occurring as originally documented, in general, the hedge should be discontinued. However, ASC 815-30-40-4 provides guidance when it is still reasonably possible that the transaction will occur within two months of the original timing.

**Excerpt from ASC 815-30-40-4**

The net derivative instrument gain or loss related to a discontinued cash flow hedge shall continue to be reported in accumulated other comprehensive income unless it is probable that the forecasted transaction will not occur by the end of the originally specified time period (as documented at the inception of the hedging relationship) or within an additional two-month period of time thereafter.

If it is determined that the forecasted transaction has become probable of not occurring within the documented time period plus a subsequent two-month period, then the hedging relationship should be discontinued and amounts previously deferred in AOCI should be immediately reclassified to earnings. The subsequent two-month period discussed in ASC 815-30-40-4 is relevant only in assessing when amounts should be reclassified to earnings from AOCI; it is not considered when determining if a hedge should be discontinued. A hedge should be discontinued if it is no longer probable the hedged forecasted transaction will occur by the end of the originally specified time period. See DH 10.4 for further information on discontinuance of cash flow hedges.

**Question DH 7-8**

If a reporting entity is uncertain about the timing of a forecasted transaction, can it use a range of time in designating its forecasted transaction?

***PwC response***

Yes, if the range is defined appropriately. As described in ASC 815-20-25-3, the hedged forecasted transaction needs to be documented with sufficient specificity so that it is clear what is being hedged. If only a general timeframe for occurrence of the forecasted transaction is documented, it may not be clear when the hedged transaction occurs. For example, if a reporting entity expects to sell at least 300,000 units of a particular product in its next fiscal quarter, it might designate the sales of the first 300,000 units during that quarter as the hedged transaction. Alternatively, it might designate the first 100,000 sales in each month of that quarter as the hedged transaction. By designating the hedged transaction as the first number of units sold during the specified period, a reporting entity is not “locked in” to a specific date, and if the transaction does not occur on that specific date, the reporting entity’s hedge will not be affected (as long as it occurs within the documented range).

It would be insufficient to identify the hedged item in this scenario as any sales of 300,000 units during the quarter or the last 300,000 sales of the quarter. By designating the hedge in either of these ways, a reporting entity would be able to select which transactions are the hedged transactions after the fact, which is inconsistent with the requirements in ASC 815-20-25-3(d)(1)(vi).

**Question DH 7-9**

Can a contract designated under the normal purchases and normal sales scope exception qualify as the hedged item (forecasted transaction) in a cash flow hedge?

***PwC response***

It depends. A derivative cannot be a hedged item, but once the normal purchases and normal sales scope exception (discussed in DH 3.2.4) is elected, the contract is no longer within the scope of ASC 815. ASC 815-20-25-7 through ASC 815-20-25-9 provides guidance on the designation of a normal

purchase or normal sale contract as a hedged item. The contract can be designated as the hedged item in a fair value hedge if it meets the definition of a firm commitment, otherwise it could be the hedged transaction in a cash flow hedge.

Whether the contract is a firm commitment will depend on whether the contract contains a fixed price and a disincentive for nonperformance that is sufficiently large such that performance under the contract is probable (which is the definition of firm commitment from ASC 815-20-20). However, if the contract pricing is based on an index or other variable pricing, the reporting entity continues to have an earnings exposure and would be able to designate the contract as a forecasted transaction in a cash flow hedge, provided all the other criteria for cash flow hedging are met.

### **7.3.3 Contractually specified component**

In addition to hedging the total cash flows associated with a forecasted transaction, ASC 815 also permits a reporting entity to hedge a contractually specified component of a forecasted transaction. As a result, a reporting entity may be able to designate certain hedging relationships that would not be effective if a reporting entity were required to hedge the entire change in cash flows of the hedged item. This may result in a more effective hedge, depending on the component identified and the terms of the related hedging instrument. In these situations, when determining how effective a hedging relationship is, a reporting entity would be able to compare the changes in the value (or cash flows) of the derivative to just the changes in the component that the reporting entity is managing, rather than needing to compare the derivative to the entire risk exposure.

For example, a manufacturer may enter into a contract to purchase natural gas at a future date. The contract is based on the price of natural gas at a specific location (e.g., Henry Hub) plus the transportation cost to a specified delivery point. Rather than manage the total risk associated with the natural gas purchase, the manufacturer may seek to mitigate just the risk associated with the prices at Henry Hub. Accordingly, it may enter into a derivative indexed to the price of natural gas at Henry Hub for the anticipated date of purchase. This risk would qualify as the hedged risk because the price of natural gas at Henry Hub is contractually specified.

To qualify as a cash flow hedge of a contractually specified component, a forecasted transaction must meet all of the criteria discussed in DH 7.2 and the additional criteria discussed in this section. After identifying a contractually specified component, a reporting entity should assess whether it is eligible to be designated as the hedged risk. This evaluation will depend on whether the reporting entity has an existing contract (DH 7.3.3.2) or forecasted transaction (DH 7.3.3.3).

#### **Question DH 7-10**

Can a reporting entity designate a contractually specified component of a firm commitment as the hedged risk in a cash flow hedge?

#### ***PwC response***

No. The designation of a contractually specified component only applies to eligible forecasted purchases and sales of nonfinancial assets and does not apply to firm commitments.

A firm commitment does not expose a reporting entity to variable price risk and thus, generally cannot be the hedged item in a cash flow hedge. In some cases, a reporting entity may designate a firm commitment that is accounted for as a derivative as the hedging instrument in a cash flow hedge of a

forecasted transaction that will be consummated upon gross settlement of the firm commitment itself (an “all-in-one” hedge, discussed in DH 7.3.4). However, an all-in-one hedge inherently involves variability of cash flows relating to all changes in the purchase or sale price of a specific asset at a specified location and thus evaluation of contractually specified components would not be applicable.

### 7.3.3.1 **Identifying a contractually specified component**

To qualify as the hedged risk, the item being hedged must qualify as a contractually specified component as defined in the ASC Master Glossary.

#### **Definition from ASC Master Glossary**

**Contractually Specified Component:** An index or price explicitly referenced in an agreement to purchase or sell a nonfinancial asset other than an index or price calculated or measured solely by reference to an entity’s own operations.

In accordance with this definition, the contractually specified component generally should be *explicitly* referenced in the agreement used to determine the purchase or sale price. In assessing whether the component is explicitly referenced, a reporting entity may also consider related agreements, as discussed in ASC 815-20-55-26A.

#### **Excerpt from 815-20-55-26A**

The definition of a contractually specified component is considered to be met if the component is explicitly referenced in agreements that support the price at which a nonfinancial asset is purchased or sold. For example, an entity intends to purchase a commodity in the commodity’s spot market. If as part of the governing agreements of the transaction or commodity exchange it is noted that the price is based on a pre-defined formula that includes a specific index and a basis, those agreements may be utilized to identify a contractually specified component.

The guidance that the contractually specified component may be “referenced in agreements that support the price” does not mean that the pricing can be based on market convention. The FASB considered expanding the allowable risks to include market convention, but ultimately rejected this approach, as discussed in the Background Information and Basis for Conclusions to ASU 2017-12:

#### **Excerpt from BC58 in ASU 2017-12**

In initial deliberations, the Board considered, but rejected, a variation of the contractually specified component model. This model would have encompassed all contractually specified components included in the Board’s decision plus components that are not contractually specified but for which it is the “market convention” to use the component as an underlying basis for determining the price of the overall product. That is, market participants in a particular commodities market would know the pricing conventions in that market. Under this alternative, a contract exists, but the components that would be eligible to be designated as the hedged item are not contractually specified. The Board rejected this model because the concept of market convention would be difficult to define across industries, would lead to confusion in instances in which there was no market convention or there were multiple market conventions, and potentially could be difficult to demonstrate objectively to third parties.



In some cases, a derivative that hedges the risk of a component of a price that is not contractually specified would still qualify as a highly effective hedge of all changes in the price of an asset reflecting its actual location, quantity, and grade (as applicable). For example, a natural gas swap priced to Henry Hub may be a highly effective hedge of a natural gas purchase at Houston Ship Channel, even if the Houston Ship Channel price does not specifically reference Henry Hub. If the hedge is highly effective, the impact of basis differences would not impact the reporting entity's ability to defer the entire change in fair value of the derivative through OCI.

### 7.3.3.2 ***Contractually specified components in existing contracts***

ASC 815 limits the contractually specified components that can be hedged in existing contracts.

#### **ASC 815-20-25-22A**

For existing contracts, determining whether the variability in cash flows attributable to changes in a contractually specified component may be designated as the hedged risk in a cash flow hedge is based on the following:

- a. If the contract to purchase or sell a nonfinancial asset is a derivative in its entirety and an entity applies the normal purchases and normal sales scope exception in accordance with Subtopic 815-10, any contractually specified component in the contract is eligible to be designated as the hedged risk. If the entity does not apply the normal purchases and normal sales scope exception, no pricing component is eligible to be designated as the hedged risk.
- b. If the contract to purchase or sell a nonfinancial asset is not a derivative in its entirety, any contractually specified component remaining in the host contract (that is, the contract to purchase or sell a nonfinancial asset after any embedded derivatives have been bifurcated in accordance with Subtopic 815-15) is eligible to be designated as the hedged risk.

In accordance with this guidance, to be eligible for hedge accounting, the contractually specified component cannot be extraneous or unrelated to the purchase or sale of the nonfinancial asset. Such pricing features would preclude application of the normal purchases and normal sales scope exception or would be separated from a host contract that is not a derivative in its entirety. However, the remaining host contract could then be evaluated to determine if it includes a contractually specified component that is eligible to be the hedged risk in a cash flow hedge.

Existing contracts that meet the definition of a derivative, but are not firm commitments, include contracts to purchase or sell commodities at the future spot market price, often including a transportation basis adjustment. These contracts may qualify for the normal purchases and normal sales scope exception; however, in practice, the contracts may not be designated as normal purchases and normal sales because the fair value is de minimis. A reporting entity that is interested in designating the contractually specified component of such contracts in a cash flow hedge would first need to evaluate the contract for the normal purchases and normal sales scope exception. If qualified, they would need to affirmatively elect the normal purchases and normal sales election.

If a contract does not meet the definition of a derivative in its entirety (e.g., because the contract does not have a notional amount, as would be the case in an index-based requirements contract), a reporting entity is required to evaluate whether the contract includes any embedded derivatives requiring bifurcation and then evaluate whether the contract contains a contractually specified



component that would qualify for hedge accounting. In evaluating a contract without a notional amount, the reporting entity would need to assess whether the future purchases and sales are probable, similar to the evaluation that is performed for a forecasted transaction designated in a hedging relationship.

### 7.3.3.3 **Contractual components in not-yet existing contracts**

The ability to designate a contractually specified component is not limited to existing contracts. ASC 815-20-25-22B provides criteria for designating contractually specified components in forecasted purchases or sales of nonfinancial assets.

#### **ASC 815-20-25-22B**

An entity may designate the variability in cash flows attributable to changes in a contractually specified component in accordance with paragraph 815-20-25-15(i)(3) to purchase or sell a nonfinancial asset for a period longer than the contractual term or for a not-yet-existing contract to purchase or sell a nonfinancial asset if the entity expects that the requirements in paragraph 815-20-25-22A will be met when the contract is executed. Once the contract is executed, the entity shall apply the guidance in paragraph 815-20-25-22A to determine whether the variability in cash flows attributable to changes in the contractually specified component can continue to be designated as the hedged risk. See paragraphs 815-20-55-26A through 55-26E for related implementation guidance.

Consistent with this guidance, a reporting entity may designate a contractually specified component of forecasted purchases or sales for which it has not entered into a contract if the expected future payment terms meet the criteria for existing contracts discussed in DH 7.3.3.2 (i.e., the pricing cannot include any extraneous pricing elements). Further, once the reporting entity executes a contract, the contract would need to be evaluated under ASC 815-20-25-22A to ensure that it still qualifies as a contractually specified component.

#### **Question DH 7-11**

When hedging a contractually specified component, can the spread added to the component be negative or variable?

#### **PwC response**

Yes. ASC 815 includes examples that address variable and negative spreads, as follows:

- Example 22: *Assessing Effectiveness of a Cash Flow Hedge of a Forecasted Purchase of Inventory with a Forward Contract (Contractually Specified Component)*, includes a variable spread for transportation in a hedge of a contractually specified component; and
- Example 23: *Designation of a Cash Flow Hedge of a Forecasted Purchase of Inventory for Which Commodity Exposure Is Managed Centrally*, includes a negative spread in a hedge of a contractually specified component.

### 7.3.4 *All-in-one hedges*

A reporting entity may wish to manage the risk of changing cash flows due to price variability prior to the purchase or sale by entering into a firm purchase commitment. Generally, non-foreign-currency-denominated firm commitments are not eligible for designation as a hedged item in a cash flow hedging transaction because there is no variability in cash flows due to the fixed price in the firm commitment. However, the FASB provided an exception in ASC 815-20-25-22 to permit a non-foreign-currency-denominated firm commitment to be designated as the hedging instrument in a cash flow hedge of a forecasted transaction that will be consummated upon gross settlement of the firm commitment itself. For a contract to qualify for designation in an all-in-one hedge, it must meet the definitions of both (1) a firm commitment and (2) a derivative.

#### **Definition in ASC 815-20-20**

**All-in-One Hedge:** In an all-in-one hedge, a derivative instrument that will involve gross settlement is designated as the hedging instrument in a cash flow hedge of the variability of the consideration to be paid or received in the forecasted transaction that will occur upon gross settlement of the derivative instrument itself.

Reporting entities often apply an all-in-one hedging strategy to firm commitments for commodities that do not qualify for the normal purchases and normal sales scope exception, which is discussed in DH 3.2.4.

An all-in-one hedge must be a hedge of total variability in cash flows, not a hedge of a contractually specified component.

#### **Question DH 7-12**

DH Gas Company enters into a contract for the purchase of 10,000 MMBtus of natural gas per day in the month of July 20x1 for \$3.00/MMBtu. The contract meets the definition of a derivative, but DH Gas does not elect the normal purchases and normal sales scope exception. Management has determined that the contract is probable of being physically settled.

Can DH Gas designate the contract as an all-in-one hedge?

#### ***PwC response***

Yes. DH Gas could designate the contract as an all-in-one hedge of the future purchase of natural gas because it has a firm commitment for the daily purchase of 10,000 MMBtus at a fixed price.

See DH 9.5.1.1 for information on how to assess effectiveness of an all-in-one hedge.

### 7.3.5 *Accounting for cash flow hedges of nonfinancial items*

In a qualifying cash flow hedge, a derivative's entire gain or loss included in the assessment of effectiveness is recorded through OCI. ASC 815-30-35-3(b) indicates that the amounts in AOCI related to the fair value changes in the hedging instrument are released into earnings when the hedged item affects earnings. This is to align the earnings impact of the hedged item and the hedging instrument.

**Excerpt from ASC 815-30-35-3(b)**

Amounts in accumulated other comprehensive income related to the derivative designated as a hedging instrument included in the assessment of hedge effectiveness are reclassified to earnings in the same period or periods during which the hedged forecasted transaction affects earnings in accordance with paragraphs 815-30-35-38 through 35-41... The balance in accumulated other comprehensive income associated with the hedged transaction shall be the cumulative gain or loss on the derivative instrument from inception of the hedge less all of the following:

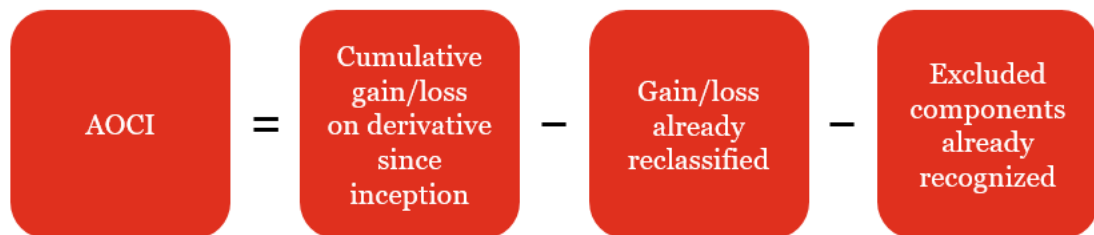
- 1a. The derivative instrument's gains or losses previously reclassified from accumulated other comprehensive income into earnings pursuant to paragraphs 815-30-35-38 through 35-41.
- 1b. The cumulative amount amortized to earnings related to excluded components accounted for through an amortization approach in accordance with paragraph 815-20-25-83A.
- 1c. The cumulative change in fair value of an excluded component for which changes in fair value are recorded currently in earnings in accordance with paragraph 815-20-25-83B.

In determining how to reclassify amounts in AOCI into earnings, reporting entities should consider both the amount and timing of reclassification. ASC 815-30-35-3(b) notes that the amount of AOCI should equal the cumulative gain or loss on the hedging instrument since hedge inception, less (1) previously reclassified gains and losses, and (2) amounts related to excluded components already recognized in earnings.

Figure DH 7-3 illustrates what the balance in AOCI represents.

**Figure DH 7-3**

Components related to hedging in AOCI



When an economic hedging relationship continues even though hedge accounting was not permitted in a specific period (e.g., because the retrospective effectiveness assessment for that period indicated that the relationship had not been highly effective), the cumulative gains or losses under ASC 815-30-35-3(b) exclude the gains or losses occurring during that period. This situation may arise if the reporting entity was applying hedge accounting to a hedging relationship, but (1) was forced to discontinue hedge accounting for a period when the hedge was not highly effective due an anomalous market event, and then (2) designated the derivative in a new hedge relationship of the same hedged item that is highly effective.

### 7.3.5.1 *Reclassification of amounts in AOCI*

The amounts deferred in AOCI related to the fair value changes in the hedging instrument are generally released into the reporting entity's earnings when the hedged item/transaction affects earnings.

#### **Excerpt from ASC 815-30-35-38**

Amounts in accumulated other comprehensive income that are included in the assessment of effectiveness shall be reclassified into earnings in the same period or periods during which the hedged forecasted transaction affects earnings (for example, when a forecasted sale actually occurs) and shall be presented in the same income statement line item as the earnings effect of the hedged item in accordance with paragraph 815-20-45-1A.

#### **ASC 815-30-35-39**

If the hedged transaction results in the acquisition of an asset or the incurrence of a liability, the gains and losses in accumulated other comprehensive income that are included in the assessment of effectiveness shall be reclassified into earnings in the same period or periods during which the asset acquired or liability incurred affects earnings (such as in the periods that depreciation expense, interest expense, or cost of sales is recognized).

A change in the fair value of a derivative that is used to hedge price changes of anticipated inventory purchases is not deferred as a basis adjustment of the inventory, but is deferred in AOCI until earnings are impacted by the purchased item. In this situation, the gain or loss on the derivative would be deferred in AOCI until the inventory is sold or consumed in production.

For example, if a reporting entity is hedging a purchase of raw materials that will be held in inventory for resale or use in production of finished goods, it is important to understand the subsequent accounting for the materials purchased and when the related expense will be recorded in cost of goods sold. If the materials are held for resale, the recognition of the amounts deferred in AOCI should be recorded consistent with the inventory costing method (e.g., first-in, first-out; last-in, first-out; weighted average). If the materials are used in the production of finished goods, the amounts deferred in AOCI would not be reclassified until the finished goods are sold. Certain costing models, such as LIFO and average cost, often result in long-term deferrals in AOCI because the hedged inventory does not turn over for long periods of time.

Similarly, when a transaction involves the purchase of equipment, the gain or loss on the derivative that is deferred in AOCI should be reclassified to earnings as the equipment is depreciated. The amount of the derivative's gain or loss that is taken out of AOCI and reclassified to earnings should be proportionate to the percentage of depreciation expense recorded each period.

Example DH 7-5 illustrates a cash flow hedge of a forecasted purchase of inventory with an option.

#### **EXAMPLE DH 7-5**

**Cash flow hedge of a forecasted purchase of inventory, time value recognized through an amortization approach**

DH Jewelry Manufacturing Corp purchases gold from its suppliers based on the market COMEX spot price. DH Jewelry decides to purchase New York COMEX call options on gold to hedge the price risk

of its probable forecasted purchase of 200 ounces of gold on April 30, 20X1. The options give DH Jewelry the right, but not the obligation, to buy gold at a specific price.

- If gold prices increase, the profit on the purchased call options will approximately offset the higher price that DH Jewelry must pay for the gold to be used in its manufacturing process.
- If gold prices decline, DH Jewelry will lose the premium it paid for the call options, but can then buy gold at the lower price in the spot market.

On January 1, 20X1, DH Jewelry purchases two at-the-money spot call options for April 30, 20X1 delivery at \$291 per ounce for a premium of \$7.50 per ounce. Each call option is for a notional amount of 100 ounces of gold. The call options are derivatives under ASC 815 because of their contractual provisions, which permit net cash settlement. They protect DH Jewelry from the risk of gold prices increasing above \$291 per ounce.

On April 30, 20X1, the spot price of gold is \$316 per ounce. DH Jewelry settles its two April calls on April 30, 20X1 and buys 200 ounces of gold from its suppliers at the COMEX spot price.

Information regarding the transactions is summarized as follows:

Date	COMEX spot price of gold	Strike price — April call option	Option premium	Estimated option fair value	Change in estimated option fair value
January 1, 20X1		\$291	\$7.50	1,500	-
January 31, 20X1				3,100	1,600
February 28, 20X1				4,000	900
March 31, 20X1				4,500	500
April 30, 20X1	\$316			5,000	500

The estimated option fair value at January 1, 20X1 includes only the time value (premium) of \$1,500. In subsequent periods, the fair value includes both the remaining time value and the intrinsic value.

On January 20X1, DH Jewelry designates the hedging relationship as a cash flow hedge of the first 200 ounces of forecasted gold purchases during the month of April 20X1 at the then-spot gold price delivered to DH Jewelry's facility. DH Jewelry assesses effectiveness based on the option's intrinsic value and recognizes the time value using an amortization approach. Straight-line amortization is determined to be a systematic and rational approach.

How should DH Jewelry account for the hedging relationship?

### *Analysis*

As a highly effective cash flow hedge of a forecasted purchase of a nonfinancial asset (gold), the call options' change in fair value would be deferred through OCI and reclassified to earnings when the related inventory is sold. The time value would be amortized on a straight-line basis. The change in fair value, which includes the change in time value, would be recorded through OCI.

DH Jewelry would record the following journal entries for the hedging relationship.

**January 1, 20X1**

Dr. Call options	\$1,500	
Cr. Cash		\$1,500

To record the premium paid on the purchase of the call options (2 options × 100 ounces per option × \$7.50/ounce premium)

**January 31, 20X1**

Dr. Cost of goods sold	\$375	
Cr. Other comprehensive income		\$375

To record straight-line amortization of the time value on the call options in the same line item as the hedged transaction (\$1,500 divided by 4 months)

Dr. Call options	\$1,600	
Cr. Other comprehensive income		\$1,600

To record the change in fair value of the call options

**February 28, 20X1**

Dr. Cost of goods sold	\$375	
Cr. Other comprehensive income		\$375

To record straight-line amortization of the time value on the call options in the same line item as the hedged transaction (\$1,500 divided by 4 months)

Dr. Call options	\$900	
Cr. Other comprehensive income		\$900

To record the change in fair value of the call options

**March 31, 20X1**

Dr. Cost of goods sold	\$375	
Cr. Other comprehensive income		\$375

To record straight-line amortization of the time value on the call options in the same line item as the hedged transaction (\$1,500 divided by 4 months)

Dr. Call options	\$500	
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Cr. Other comprehensive income		\$500
To record the change in fair value of the call options		
<b>April 30, 20X1</b>		
Dr. Cost of goods sold	\$375	
Cr. Other comprehensive income		\$375
To record straight-line amortization of the time value on the call options in the same line item as the hedged transaction (\$1,500 divided by 4 months)		
Dr. Call options	\$500	
Cr. Other comprehensive income		\$500
To record the change in fair value of the call options		
Dr. Cash	\$5,000	
Cr. Call options		\$5,000
To record the cash settlement of the call options		
Dr. Gold inventory	\$63,200	
Cr. Cash		\$63,200
To record the purchase of 200 ounces of gold (\$316 per ounce × 200 ounces)		

The gain in AOCI will be reclassified to earnings when the related inventory is sold (i.e., when earnings are impacted) according to how DH Jewelry accounts for its inventory (e.g., LIFO, FIFO).

Alternatively, DH Jewelry could elect to assess effectiveness based on the terminal value of the option. In that case, the entire change in fair value of the option would be deferred through OCI if the hedge is highly effective. However, many manufacturers believe that an intrinsic value approach better reflects the true cost of inventory. The premium paid is akin to insurance that locks in the cost of the inventory.

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### 7.3.5.2 *Excluded components*

As discussed in DH 7.2.1.3, a reporting entity's risk management strategy may exclude certain components from the assessment of hedge effectiveness. Such amounts will be recognized in earnings either currently or following an amortization approach.

### **7.3.5.3 *When a forecasted transaction becomes a firm commitment***

Because ASC 815 prescribes different accounting provisions for hedges of forecasted transactions (as cash flow hedges) and firm commitments (as fair value hedges, discussed in DH 7.4.3.2), the question arises of how to account for a change in circumstances that results in the conversion of a forecasted transaction to a firm commitment (e.g., when a reporting entity enters into a purchase order specifying penalties that will apply if the counterparty does not fulfill its performance obligations with respect to a previously anticipated purchase of inventory).

A hedging instrument that was initially intended as a cash flow hedge of a forecasted transaction must be effective in offsetting the variability in future cash flows (i.e., the purpose of the derivative would be to lock in a fixed price for the forecasted transaction). However, once the reporting entity enters into a firm commitment, the price will be fixed, and the original objective of the hedge will no longer exist. A hedge of a firm commitment is a fair value hedge and a derivative must be effective in offsetting changes in the fair value of the firm commitment. Accordingly, the original derivative that was effective as a cash flow hedge will not be effective as a fair value hedge, and cash flow hedge accounting should be discontinued.

A reporting entity could subsequently designate the now-firm commitment as the hedged item in a fair value hedge and use a derivative instrument that is different from the one used for the cash flow hedge. In addition, the reporting entity may designate the firm commitment itself as an “all-in-one” cash flow hedge (see DH 7.3.4).

Regardless of the subsequent accounting for the firm commitment, the amount deferred in AOCI as a result of the initial cash flow hedge should be reclassified to earnings only when the original forecasted transaction (which has now become a firm commitment) impacts earnings.

### **7.3.5.4 *Accounting for a contractually specified component***

A hedge of a contractually specified component of a forecasted transaction follows the same accounting model as other cash flow hedges. If the hedging instrument has pricing components that do not exactly match the contractually specified component in the hedged item, any differences would need to be considered when determining if the hedging instrument is highly effective.

Assuming that the hedge relationship is highly effective, the entire change in fair value of the hedging instrument (less excluded components, if any, as discussed in DH 7.2.1.3) would be recorded through OCI.

### **7.3.5.5 *Cash flow hedges related to discontinued operations***

If a reporting entity disposes of a component of its operations that met the requirements for classification of a discontinued operation, management should consider the original hedge documentation of the cash flows being hedged to determine whether amounts remaining in AOCI should be released. Refer to DH 10.4.6 for further discussion.

Refer to FSP 27.4.2.7 for considerations on the income statement presentation for cash flow hedges of items related to the disposal group.



### 7.3.6 *Capitalization of interest*

ASC 815 prohibits reporting gains or losses on cash flow hedging instruments as basis adjustments of the qualifying assets. Instead, ASC 815 requires reclassification of amounts deferred in AOCI into earnings in the same period(s) during which the hedged forecasted transaction affects earnings. ASC 815-30-35-45 provides specific guidance for cash flow hedges of borrowings related to plant under construction.

#### **ASC 815-30-35-45**

If the variable-rate interest on a specific borrowing is associated with an asset under construction and capitalized as a cost of that asset, the amounts in accumulated other comprehensive income related to the cash flow hedge of the variability of that interest shall be reclassified into earnings over the depreciable life of the constructed asset, because that depreciable life coincides with the amortization period for the capitalized interest cost of the debt.

When a swap is terminated early or the debt term extends beyond the construction period, reporting entities need to ensure proper attribution and accounting for the derivative gains and losses deferred in AOCI related to interest payments that were capitalized.

### 7.3.7 *Impairment of a hedged item/transaction*

ASC 815 requires immediate recognition of amounts deferred in AOCI if the combined impact of the hedging instrument and hedged item will lead to a loss in future periods.

#### **Excerpt from ASC 815-30-35-40**

If an entity expects at any time that continued reporting of a loss in accumulated other comprehensive income would lead to recognizing a net loss on the combination of the hedging instrument and the hedged transaction (and related asset acquired or liability incurred) in one or more future periods, a loss shall be reclassified immediately into earnings for the amount that is not expected to be recovered.

### **Question DH 7-13**

DH Corp periodically purchases inventory and designates its next forecasted purchase of that inventory as the hedged item in a cash flow hedge. At the date that the inventory is purchased, a loss on the hedging instrument of \$25 is in AOCI. In a subsequent period, the purchased inventory has a carrying amount of \$100 and a fair value of \$110. DH Corp expects to sell the inventory at a price equivalent to its fair value.

DH Corp determines that the combined value of the loss in AOCI and the carrying amount of the inventory (i.e., \$125) exceeds the inventory's fair value (i.e., \$110), such that a net loss on the forecasted sale of the inventory will be recognized in a future period.

How should DH Corp account for the loss exposure?

#### ***PwC response***

DH Corp would reclassify a \$15 loss ( $\$100 + \$25 - \$110$ ) from AOCI into earnings because it does not

expect to recover more than the inventory's fair value.

Further, in accordance with ASC 815-30-35-42, for assets and liabilities with variable cash flows and for which the variable cash flows have been designated as the hedged item in a cash flow hedge, a reporting entity must assess impairment under other GAAP applicable to those assets or liabilities. For example, a reporting entity needs to consider whether the net realizable value of inventory has declined to an amount below its cost in a cash flow hedge of a forecasted sale of inventory. A reporting entity should apply those requirements after hedge accounting is applied for the period and without regard to the expected cash flows of the hedging instrument (i.e., gains and losses that are deferred in AOCI may not be used to assess either impairment or the need for an increase in an obligation of a hedged item).

If an impairment loss is recognized on a hedged item under other applicable GAAP, ASC 815-30-35-43 provides further guidance on accounting for any amounts deferred in AOCI.

### **ASC 815-30-35-43**

If, under existing requirements in GAAP, an asset impairment loss or writeoff due to credit losses is recognized on an asset, or an additional obligation is recognized on a liability to which a hedged forecasted transaction relates, any offsetting net gain related to that transaction in accumulated other comprehensive income shall be reclassified immediately into earnings. Similarly, if a recovery is recognized on the asset or liability to which the hedged forecasted transaction relates, any offsetting net loss that has been accumulated in other comprehensive income shall be reclassified immediately into earnings.

In accordance with this guidance, if an impairment loss is recognized for an asset (to which a forecasted transaction relates), DH Corp should offset gains related to the forecasted transaction that were deferred in AOCI and reclassify them immediately to earnings. However, the amount of any gains reclassified to earnings should not be in excess of the impairment loss recognized.

### **Question DH 7-14**

DH Corp periodically purchases inventory and designates its next forecasted purchase of that inventory as the hedged item in a cash flow hedge. DH Corp purchases inventory for \$100. At the date that the inventory is purchased, there is a \$25 gain on the hedging instrument deferred in AOCI. In a subsequent period, the fair value of the purchased inventory (carrying amount of \$100) declines to \$80 and should be written down to the lower of cost or net realizable value.

Should DH Corp recognize any of the gain in AOCI at the time of the impairment?

### ***PwC response***

DH Corp should recognize an impairment loss of \$20 ( $\$100 - \$80$ ) on its inventory. In addition, in the period in which the impairment is recorded, DH Corp should recognize a portion of the deferred gain from the hedge of the purchase of the inventory by reclassifying a gain of \$20 (i.e., part of the total \$25 deferred gain) from AOCI into earnings. As a result, there is no net impact to current earnings.

The remaining \$5 gain in AOCI would continue to be deferred until the hedged forecasted transaction impacts earnings when the inventory is sold (or if a subsequent impairment is recognized).

## 7.4 *Fair value hedges of nonfinancial assets and liabilities*

For recognized assets or liabilities and firm commitments, a reporting entity may enter into a fair value hedge to economically convert the cash flows from future use or sale to a market rate.

### 7.4.1 *Risks eligible for fair value hedges of nonfinancial items*

In a fair value hedge of a nonfinancial item, ASC 815-20-25-12(e) limits the risks that may be hedged.

#### **ASC 815-20-25-12(e)**

If the hedged item is a nonfinancial asset or liability (other than a recognized loan servicing right or a nonfinancial firm commitment with financial components), the designated risk being hedged is the risk of changes in the fair value of the entire hedged asset or liability (reflecting its actual location if a physical asset). That is, the price risk of a similar asset in a different location or of a major ingredient may not be the hedged risk. Thus, in hedging the exposure to changes in the fair value of gasoline, an entity may not designate the risk of changes in the price of crude oil as the risk being hedged for purposes of determining effectiveness of the fair value hedge of gasoline.

Reporting entities are not permitted to designate the price risk of a similar asset in a different location or an ingredient or a component of a nonfinancial asset or liability as the hedged item. Hedges of nonfinancial assets and liabilities are limited to hedges of the risk of changes in the price of the entire hedged item (reflecting its actual location if a physical asset), except for nonfinancial firm commitments with financial components. A nonfinancial firm commitment with a financial component (e.g., the obligation to purchase inventory in a foreign currency) may be able to be designated as the hedged item in a fair value hedge if it meets one of the criteria in ASC 815-20-25-12(f), discussed in DH 7.2.1.

In contrast, as discussed in DH 7.3.3, in the forecasted purchase or sale of a nonfinancial asset, reporting entities are allowed to designate risk of variability of cash flows attributable to a contractually specified component of the price as the hedged risk. Therefore, a reporting entity may not use a rubber derivative as a fair value hedge of a component of the exposure to changes in the fair value of tires held in inventory, even though rubber is a component of tires. However, a reporting entity could use a rubber derivative as a cash flow hedge of changes in the market price of rubber as the hedged risk, if rubber is a contractually specified component in the price of the tires.

Further, the criterion in ASC 815-20-25-12(e) permits “cross” or “tandem” hedges. Therefore, the entity may be able to use the rubber derivative as a fair value hedge of the tire inventory if the price of rubber is highly correlated to the market price of tires. For it to do so, however, (1) the entire change in the fair value of the derivative must be expected to be highly effective at offsetting the entire change in the fair value or expected cash flows of the hedged item and (2) all of the remaining hedge criteria must be met. The reporting entity would need to consider all changes in the value of the tire inventory in its hedge effectiveness assessment.

### 7.4.2 *Eligible hedged items in a fair value hedge*

ASC 815 requires that the designated hedged item in a fair value hedge be a recognized asset or liability or an unrecognized firm commitment. An unrecognized asset or liability that does not embody a firm commitment is not eligible for fair value hedge accounting.

The hedged item in a fair value hedge must fulfill the general qualifying criteria discussed in DH 6.2 and the criteria specific to fair value hedges outlined in ASC 815-20-25-12. The types of hedged items that may qualify in fair value hedging relationships related to nonfinancial items are:

- A recognized asset or liability
- An unrecognized firm commitment
- A portfolio of similar assets and liabilities
- A specific portion of a recognized asset or liability

Specific considerations related to these requirements are further discussed in the following sections.

#### 7.4.2.1 *Recognized asset or liability*

A recognized asset or liability, such as inventory, can be the hedged transaction in a fair value hedge if the specified criteria are met.

##### *Fair value hedge of inventory*

Production companies and users of commodities may need to manage exposure to the price of purchasing inputs and to changes in the value of their inventories during a holding period. A fair value hedge can be used to protect against the risk of a change in the value of physical inventory during the hedging period.

The risk identified as being hedged in a hedging transaction involving recognized nonfinancial assets, such as inventory, or a firm commitment may only be for overall changes in fair value (i.e., price risk) at the location of the inventory or the location at which the reporting entity intends to purchase or sell the inventory.

In contrast, the hedged risk identified in a cash flow hedge of a forecasted purchase or sale of inventory may also be the changes in a contractually specified component of the price or functional currency cash flows.

In practice, reporting entities often hedge the price risk associated with forecasted inventory purchases when changes in those prices cannot be passed onto their customers (i.e., through the subsequent sale of their product) because either the reporting entity has a fixed-price sales commitment or the marketplace is too competitive to allow for the pass-through of material cost increases. Reporting entities often hedge the price risk associated with forecasted inventory sales if their raw material or production costs are fixed and/or the pricing for their product in the marketplace is volatile. Because there is an opportunity to hedge the variability in either forecasted purchases or sales of inventory, many reporting entities do not find a need to enter into fair value hedges of their existing inventories.

However, when a reporting entity has commodity inventories on hand, but cannot adequately forecast the timing of sales, it may be appropriate to consider entering into a fair value hedge.

Example DH 7-6 illustrates a fair value hedge of inventory using a collar.

### **EXAMPLE DH 7-6**

#### **Collar used to hedge inventory price risk**

DH Corp uses a purchased collar (i.e., a combination of a purchased and written option) that does not constitute a written option to hedge the price risk in the inventory it holds. It structures a collar consisting of (1) a purchased put with a strike price of \$80 and (2) a written call with a strike price of \$120.

DH Corp documents that its hedge strategy is to protect the inventory from fair value changes outside the specified range; it does not hedge changes in the fair value from \$80 to \$120.

How would DH Corp account for such a hedge?

#### *Analysis*

DH Corp would adjust the inventory to reflect only the changes in value caused by a drop in the price below \$80 or an increase in the price above \$120 (i.e., the collar would be effective in offsetting only losses that occur when the price is below \$80 or gains that occur when the price is above \$120). The inventory would *not* be adjusted for price fluctuations that fall within the range of \$80 to \$120. Accordingly, changes in the fair value of the collar that reflect price fluctuations within the range of \$80 to \$120 would be recorded in earnings, with no offsetting adjustments made to the carrying amount of the inventory.

In this hedging relationship, DH Corp may elect to exclude the time value of the option from its assessment of effectiveness and recognize the time value of the option using an amortization approach, as discussed in DH 7.2.1.3.

Example DH 7-7 illustrates a fair value hedge of commodity inventory using futures contracts.

### **EXAMPLE DH 7-7**

#### **Fair value hedge of commodity inventory using futures contracts**

On October 1, 20X1, DH Mining Corp (DH Mining), located in Colorado, has 10 million pounds of copper inventory in its warehouse located near Dinosaur, Colorado, at an average cost of \$3.065 per pound. DH Mining would like to protect the value of the inventory from a possible decline in copper prices until its planned sale in February 20X2. To hedge the value of the inventory, DH Mining sells 400 copper contracts (each for 25,000 pounds) through the Chicago Mercantile Exchange's COMEX Division at \$3.19 per pound for delivery in February 20X2 to coincide with its expected physical sale of its copper inventory. The spot price on October 1, 20X1 is \$3.13.

How should DH Mining Corp account for the hedging relationship?

*Analysis*

DH Mining would designate the hedging relationship as a fair value hedge of inventory. Assuming the hedge relationship is highly effective, if prices fall during the period prior to settlement, the gain from the short position in COMEX futures contracts would be expected to substantially offset the decline in the fair value of the copper inventory. The hedge relationship may not be perfectly effective due to locational differences between the inventory and the specific warehouses designated for goods delivery by the COMEX exchange contract, none of which is near the inventory's location. This difference creates basis risk. In addition, DH Mining would likely elect to assess effectiveness based on changes in spot prices and exclude the difference between the spot rate (\$3.13) and forward rate (\$3.19) from the hedging relationship. In this case, DH Mining may elect to recognize the excluded component using a mark-to-market approach or an amortization approach as discussed in DH 7.2.1.3.

As a highly effective fair value hedge of the copper inventory, the futures contracts would be recognized on the balance sheet as assets or liabilities, and gains or losses on the futures contracts would be recognized currently in earnings, offset by the basis adjustment on the copper inventory.

**7.4.2.2 Portfolio of similar assets and liabilities**

ASC 815-20-25-12(b)(1) describes the similar assets/liabilities test that is required for fair value hedges of groups (portfolios) of assets or liabilities. Reporting entities seeking to fair value hedge a portfolio of assets or liabilities generally must perform a rigorous quantitative assessment at inception of the hedging relationship to document that the portfolio of assets or liabilities is eligible for designation as the hedged item in a fair value hedging relationship.

**Excerpt from ASC 815-20-25-12(b)**

The hedged item is a single asset or liability (or a specific portion thereof) or is a portfolio of similar assets or a portfolio of similar liabilities (or a specific portion thereof), in which circumstance:

1. If similar assets or similar liabilities are aggregated and hedged as a portfolio, the individual assets or individual liabilities must share the risk exposure for which they are designated as being hedged. The change in fair value attributable to the hedged risk for each individual item in a hedged portfolio must be expected to respond in a generally proportionate manner to the overall change in fair value of the aggregate portfolio attributable to the hedged risk.

Consistent with the ASC 815 prohibition on macro hedging, the designation of a group of assets or liabilities in a single hedging relationship is limited to only those similar assets or liabilities that share the same risk exposure for which they are designated as being hedged. The concept of "similar" is interpreted very narrowly. The fair value of each individual item in the portfolio must be expected to change proportionate to the change in the entire portfolio. For example, when the changes in the fair value of the hedged portfolio attributable to the hedged risk alter that portfolio's fair value by 10% during a reporting period, the change in the fair value that is attributable to the hedged risk of each item in the portfolio should also be expected to be within a fairly narrow range of 10%.

**Excerpt from ASC 815-20-55-14**

The individual assets or individual liabilities shall share the risk exposure for which they are designated as being hedged. If the change in fair value of a hedged portfolio attributable to the hedged risk was 10 percent during a reporting period, the change in the fair values attributable to the hedged risk for each item constituting the portfolio should be expected to be within a fairly narrow range, such as 9 percent to 11 percent. In contrast, an expectation that the change in fair value attributable to the hedged risk for individual items in the portfolio would range from 7 percent to 13 percent would be inconsistent with the requirement in [ASC 815-20-25-12(b)(1)].

In certain limited circumstances when the terms of the individual hedged items in the portfolio are aligned, a qualitative similar assets test may be appropriate. The determination of whether a quantitative or qualitative analysis is sufficient is judgmental and will depend on the nature of the commodity being hedged.

When facts and circumstances regarding the portfolio change, we expect reporting entities to reconsider their similar assets test. When changes are significant such that the original conclusion is no longer valid without additional support, we would expect a new comprehensive analysis to be performed at that time.

**7.4.2.3 Proportion (percentage) of an asset or liability**

ASC 815 also permits reporting entities to designate a specific portion of a recognized asset or liability as the hedged item in a fair value hedge.

**ASC 815-20-25-12(b)(2)(i)**

If the hedged item is a specific portion of an asset or liability (or of a portfolio of similar assets or a portfolio of similar liabilities), the hedged item is one of the following:

- i. A percentage of the entire asset or liability (or of the entire portfolio). An entity shall not express the hedged item as multiple percentages of a recognized asset or liability and then retroactively determine the hedged item based on an independent matrix of those multiple percentages and the actual scenario that occurred during the period for which hedge effectiveness is being assessed.

In applying this guidance, the hedge documentation should specify how the percentage of the asset or liability will be determined. For example, if a reporting entity is hedging a portion of its inventory, it should specify the location, nature of the inventory, and the quantity of inventory being hedged.

This guidance refers to a percentage of an asset or liability. A partial-term hedge (in which only certain cash flows within an instrument are hedged) is not permitted for nonfinancial items.

**7.4.2.4 Firm commitment**

A firm commitment is a binding agreement with a third party for which all significant terms are specified (e.g., quantity, price, timing). The definition of a firm commitment requires that the fixed price be specified in terms of a currency (or an interest rate).

ASC 815 specifies that a firm commitment must include a disincentive for nonperformance that is sufficiently large to make performance probable. The determination of whether a sufficiently large



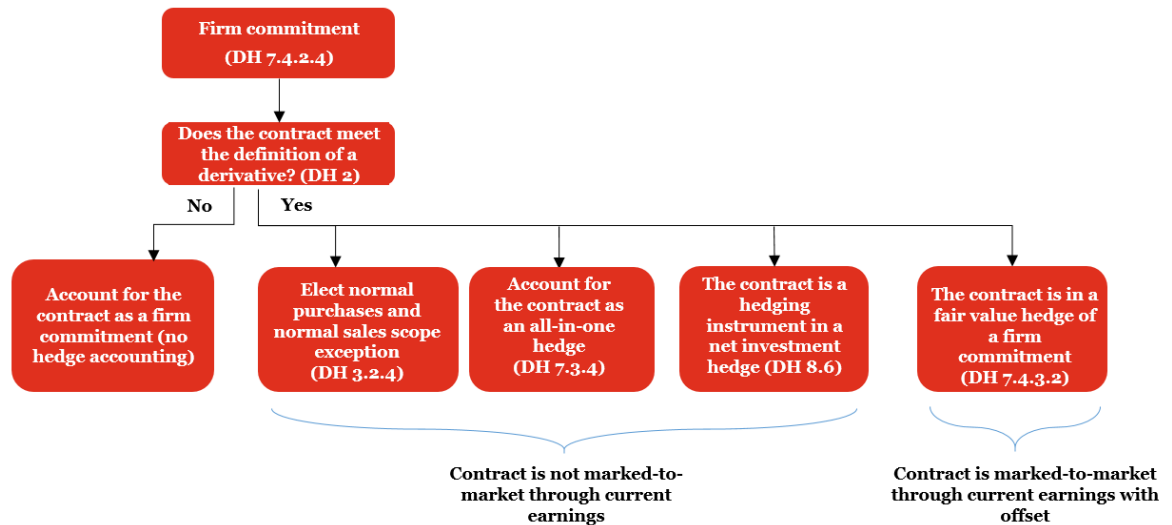
disincentive for nonperformance exists under each firm commitment is judgmental based upon the specifics and facts and circumstances. Example 13 in ASC 815-25-55-84 indicates that the disincentive for nonperformance need not be an explicit part of a contract. Rather, the disincentive may be present in the form of statutory rights (that exist in the legal jurisdiction governing the agreement) that allow a reporting entity to pursue compensation in the event of nonperformance (e.g., if the counterparty defaults) that is equivalent to the damages that the entity suffers as a result of the nonperformance.

As an example, a reporting entity may enter into contracts to deliver nonfinancial assets to customers under firm commitments as part of normal business activities, but does not want to be exposed to the risk of price variability. The reporting entity could enter into a derivative to offset the changes in fair value of the firm commitment to deliver nonfinancial assets to its customers. If the firm commitment is designated as the hedged item in an effective hedge, changes in its fair value will be recognized on the balance sheet with the offset recorded to earnings.

Additionally, as noted in ASC 815-20-25-21, a derivative that satisfies the definition of a firm commitment and that will involve a gross settlement may be designated as the hedging instrument in a cash flow hedge of the variability of the consideration to be paid or received in the forecasted transaction that will occur upon gross settlement of the derivative itself (sometimes known as an “all-in-one hedge,” discussed in DH 7.3.4).

Figure DH 7-4 illustrates the alternative ways to account for a firm commitment.

**Figure DH 7-4**  
Accounting for a firm commitment





**Question DH 7-15**

Can a reporting entity designate a contractually specified component of a firm commitment as the hedged risk in a fair value hedge?

***PwC response***

No. The designation of a contractually specified component only applies to cash flow hedges of eligible forecasted purchases and sales of nonfinancial assets and does not apply to firm commitments.

Firm commitments should be evaluated to determine if they are eligible for designation as the hedged item in a fair value hedge. However, ASC 815-20-25-12(e) requires that the designated risk being hedged in a fair value hedge of a nonfinancial asset or liability must involve the risk of changes in the fair value of the entire hedged asset or liability, reflecting the actual asset or liability and its physical location, or the related foreign currency risk.

**7.4.2.5 Other eligible hedged items**

ASC 815-20-25-12(b) also permits embedded puts and calls in a recognized asset or liability and the residual value in a lessor's net investment in a direct financing or sales-type lease to be the hedged item in a fair value hedging relationship.

Although the residual value in a lessor's net investment in a direct financing or sales-type lease may be designated as the hedged item, many contracts that are used as the hedging instrument in such a hedge may qualify for one of the scope exceptions in ASC 815-10-15-13, such as ASC 815-10-15-59(d), discussed in DH 3. A reporting entity should examine its hedging instruments to determine whether they meet the definition of a derivative or are scoped out. If a hedging instrument does not fall within the scope of ASC 815, the corresponding transaction does not qualify for hedge accounting because only derivatives may be designated as hedging instruments, with certain exceptions discussed in DH 8.

See DH 4.6.3 for a discussion of certain features of leases that may meet the definition of a derivative and thus need to be separated from the lease agreement and accounted for individually.

**7.4.3 Accounting for fair value hedges of nonfinancial items**

In accordance with ASC 815-10-30-1, all derivatives should be measured initially at fair value following the guidance of ASC 820, *Fair Value Measurement*. At each subsequent reporting period, all derivatives should be remeasured at fair value. Gains and losses on a qualifying fair value hedge should be accounted for in accordance with ASC 815-25-35-1.

**ASC 815-25-35-1**

Gains and losses on a qualifying fair value hedge shall be accounted for as follows:

- a. The gain or loss on the hedging instrument shall be recognized currently in earnings, except for amounts excluded from the assessment of effectiveness that are recognized in earnings through an amortization approach in accordance with paragraph 815-20-25-83A. All amounts recognized in earnings shall be presented in the same income statement line item as the earnings effect of the hedged item.

- b. The gain or loss (that is, the change in fair value) on the hedged item attributable to the hedged risk shall adjust the carrying amount of the hedged item and be recognized currently in earnings.

Unlike hedge accounting for cash flow hedges, which results in special accounting for the derivative designated in the cash flow hedging relationship, hedge accounting for fair value hedges results in special accounting for the designated hedged item.

The application of fair value hedge accounting requires both (1) the changes in value of the designated hedging instrument and (2) the changes in value (attributable to the risk being hedged) of the designated hedged item to be recognized currently in earnings. Accordingly, any mismatch between the hedged item and hedging instrument is recognized currently in earnings.

#### 7.4.3.1 *Adjusting the carrying amount of the hedged item*

In a fair value hedge of an asset, a liability, or a firm commitment, the hedging instrument should be reflected on the balance sheet at its fair value, but the hedged item may often be reflected on the balance sheet at a value that is different from both its historical cost and fair value, unless the total amount and all the risks were hedged when the item was acquired. This is because the hedged item is adjusted each period only for changes in the fair value that are attributable to the risk that has been hedged since the inception of the hedge.

The accounting for changes in the fair value of the hedged item is discussed in ASC 815-25-35-8.

#### **ASC 815-25-35-8**

The adjustment of the carrying amount of a hedged asset or liability required by ASC 815-25-35-1(b) shall be accounted for in the same manner as other components of the carrying amount of that asset or liability. For example, an adjustment of the carrying amount of a hedged asset held for sale (such as inventory) would remain part of the carrying amount of that asset until the asset is sold, at which point the entire carrying amount of the hedged asset would be recognized as the cost of the item sold in determining earnings.

When initially designating the hedging relationship and preparing the contemporaneous hedge documentation, a reporting entity must specify how hedge accounting adjustments will be subsequently recognized in income. The recognition of hedge accounting adjustments—also referred to as basis adjustments—will differ depending on how other adjustments of the hedged item's carrying amount will be reported in earnings. For example:

- Hedge accounting adjustments on a firm commitment to purchase inventory would be recognized in income when the purchased inventory is sold
- Hedge accounting adjustments for an operating lease with substantial cancellation penalties do not have an obvious pattern of accounting and would need to follow the substance of the agreement

Further, if the hedged item is a portfolio of similar assets or liabilities, a reporting entity must allocate the hedge accounting adjustments to individual items in the portfolio. Information about such allocations is required, for example, when (1) the assets are sold or liabilities are settled, (2) the

hedging relationship is discontinued, (3) the hedged item is assessed for impairment and (4) for the purposes of presentation and disclosures.

#### **7.4.3.2 Recognition and measurement of a hedged firm commitment**

If a firm commitment is designated as a hedged item, the change in fair value of the hedged commitment is recorded in a manner similar to how a reporting entity would account for any hedged asset or liability that it records. That is, changes in fair value that are attributable to the risk that is being hedged would be recognized in earnings and, on the balance sheet, recognized as an adjustment of the hedged item's carrying amount. Because firm commitments normally are not recorded, accounting for the change in the fair value of the firm commitment would result in the reporting entity recognizing the firm commitment on the balance sheet. The recognition of subsequent changes in fair value would adjust the carrying amount of the firm commitment.

#### **7.4.3.3 Fair value hedges related to discontinued operations**

Refer to FSP 27.4.2.7 for considerations when a hedged item included in a fair value hedge is part of a component that qualifies for discontinued operations.

#### **7.4.4 Impairment of a hedged item**

ASC 815-25-35-10 provides guidance on the accounting for impairment of a hedged item.

##### **Excerpt from ASC 815-25-35-10**

An asset or liability that has been designated as being hedged ... remains subject to the applicable requirements in generally accepted accounting principles (GAAP) for assessing impairment for that type of asset or for recognizing an increased obligation for that type of liability. Those impairment or credit loss requirements shall be applied after hedge accounting has been applied for the period and the carrying amount of the hedged asset or liability has been adjusted pursuant to 815-25-35-1(b). Because the hedging instrument is recognized separately as an asset or liability, its fair value or expected cash flows shall not be considered in applying those impairment or credit loss requirements to the hedged asset or liability.

In accordance with this guidance, nonfinancial assets that have been designated as hedged items in fair value hedging relationships remain subject to the normal requirements for impairment assessment. For example, reporting entities should continue to apply the valuation requirements of ASC 330, *Inventory*, and the impairment requirements of ASC 360, *Accounting for the Impairment or Disposal of Long-Lived Assets*.

A reporting entity must apply those impairment requirements *after* hedge accounting is applied for the period and the hedged item's carrying amount has been adjusted to reflect changes in fair value that are attributable to the risk that is being hedged.

#### **7.4.5 Capitalization of interest**

The interest cost recognized in earnings related to fair value hedges should be reflected in the amount of interest subject to capitalization, as addressed in ASC 815-25-35-14.

**ASC 815-25-35-14**

Amounts recorded in an entity's income statement as interest costs shall be reflected in the capitalization rate under Subtopic 835-20. Those amounts could include amortization of the adjustments of the carrying amount of the hedged liability, under paragraphs 815-25-35-9 through 35-9A, if an entity elects to begin amortization of those adjustments during the period in which interest is eligible for capitalization.

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***Chapter 8:***  
***Foreign currency hedges***

## 8.1 Foreign currency hedges overview

Reporting entities with foreign currency risk that results in earnings exposure may choose to hedge that risk under ASC 815, *Derivatives and Hedging*. ASC 815 permits foreign currency to be the designated hedged risk in cash flow hedges, fair value hedges, and hedges of net investments. The basic accounting model for hedging foreign currency risk using the cash flow and fair value hedge accounting models is largely the same as it is for hedges of other risks (e.g., interest rate risk, commodity price risk), but there are some additional requirements for foreign currency hedges.

This chapter focuses on the unique aspects and requirements of foreign currency hedge accounting, such as:

- The ability to apply either the cash flow or fair value hedge accounting model to hedges of foreign currency-denominated assets or liabilities and unrecognized firm commitments
- Use of a nonderivative instrument as the hedging instrument in a fair value hedge of an unrecognized firm commitment and hedge of a net investment in a foreign operation
- The ability to hedge intercompany foreign currency receivables and payables and forecasted intercompany transactions
- The ability to use intercompany derivatives as hedging instruments in the consolidated financial statements in certain circumstances
- Hedges of net investments in foreign operations

See DH 5 for an overview of hedge accounting, DH 6 for information on financial hedges, and DH 7 for information on nonfinancial hedges.

## 8.2 Introduction to foreign currency hedges

Figure DH 8-1 shows the hedged items eligible for foreign currency hedging relationships, the permitted hedging instruments, and the type of hedge accounting that can be applied. Whether hedge accounting is permitted for each hedging relationship depends on the specific terms of the hedged item and the hedging instrument.

**Figure DH 8-1**  
Types of foreign currency hedges

Hedged item	Hedging instrument	Type of hedge	Section reference
Unrecognized firm commitment	Derivative	Cash flow or	DH 8.4
		Fair value	DH 8.5
Unrecognized firm commitment	Nonderivative	Fair value	DH 8.5

<b>Hedged item</b>	<b>Hedging instrument</b>	<b>Type of hedge</b>	<b>Section reference</b>
Foreign currency-denominated asset or liability	Derivative	Cash flow or	DH 8.4
		Fair value	DH 8.5
Forecasted foreign currency-denominated transactions	Derivative	Cash flow	DH 8.4
Net investment in foreign operations	Derivative or nonderivative	Net investment	DH 8.6

### 8.2.1 *Hedged item*

The hedged item in a hedge of foreign currency risk can be a single unrecognized firm commitment, a recognized asset or liability, a forecasted transaction, or a portion of any of these items. In addition, a reporting entity can hedge its net investment in a foreign operation.

Although most intercompany transactions do not affect consolidated earnings (and are, therefore, not eligible for hedge accounting), ASC 815 allows a reporting entity to hedge the foreign currency risk of certain intercompany transactions because transactions denominated in a foreign currency (including intercompany transactions) result in foreign currency transaction gains and losses that are reported in consolidated earnings. See DH 8.7 for additional information on hedges of intercompany transactions.

Question DH 8-1 discusses whether a reporting entity can hedge the foreign currency risk associated with the forecasted purchases of a business or a firm commitment to acquire a business.

#### **Question DH 8-1**

Can a reporting entity hedge the foreign currency risk associated with the forecasted purchase of a business or firm commitment to acquire a business?

#### ***PwC response***

No. ASC 815-20-25-43 precludes the forecasted purchase of a business or a firm commitment to acquire a business from being the hedged item in an ASC 815 hedging relationship. It similarly prohibits the forecasted purchase of an equity method investment or a firm commitment to purchase an equity method investment from being the hedged item.

### 8.2.1.1 *Unrecognized firm commitments*

A firm commitment is a binding agreement that specifies all of the significant terms of the transaction and provides a sufficient disincentive for nonperformance to make performance probable. See DH 6.4.3.6 and DH 7.4.2.4 for information on firm commitments relating to financial instruments and nonfinancial instruments, respectively.

When a firm commitment relates to the purchase or sale of a foreign currency-denominated financial instrument, the contract containing the firm commitment should be analyzed to determine whether it

meets the definition of a derivative (i.e., a forward contract) under ASC 815. If so, it is not eligible for hedge accounting, but may be economically hedged by another derivative. It may also be designated as a hedging instrument in a qualifying hedging relationship. If the firm commitment is not a derivative (e.g., because the underlying financial instrument is not readily convertible to cash), it can be the hedged item in a fair value or cash flow hedging relationship.

Question DH 8-2 discusses whether a firm commitment can be designated as the hedged item in a cash flow hedging relationship when the amount to be received for paid is fixed in terms of a foreign currency.

### Question DH 8-2

Can a firm commitment be designated as the hedged item in a cash flow hedging relationship when the amount to be received or paid under the firm commitment is fixed in terms of a foreign currency?

#### ***PwC response***

Yes. As discussed in ASC 815-20-25-28, the foreign currency risk in a firm commitment can be hedged using either the cash flow or fair value hedging model. The cash flow hedging model can be applied to firm commitments when the amount that is to be received or paid under the firm commitment is fixed in terms of a foreign currency because the reporting entity is still subject to variability in functional currency cash flows. See Example 14 in ASC 815-20-55-136 through ASC 815-20-55-138 for an illustration of a cash flow hedge of the foreign currency risk in a firm commitment.

#### **8.2.1.2 Foreign currency-denominated assets and liabilities**

Foreign currency-denominated financial assets and liabilities are required to be remeasured based on spot exchange rates in accordance with ASC 830, *Foreign Currency Matters*; the resulting transaction gain or loss is ordinarily included in net income. As a result, foreign currency-denominated assets and liabilities present an earnings exposure that reporting entities may choose to hedge using either the cash flow or fair value hedging models.

Only a derivative can be designated as the hedging instrument in a hedge of a foreign currency-denominated asset or liability.

#### ***Available-for-sale securities***

ASC 320, *Investments-Debt Securities*, requires changes in the fair value of available-for-sale debt securities to be reported in other comprehensive income (OCI) until realized. The change in fair value of a foreign currency-denominated available-for-sale debt security, expressed in a reporting entity's functional currency, is the total of (1) the change in market price of the security, expressed in the local currency and (2) the change in the exchange rate between the local currency and the reporting entity's functional currency.

A foreign currency-denominated available-for-sale debt security (or a portion of one) can be hedged in either a cash flow or fair value hedging relationship; in practice, they are most often hedged using the fair value hedging model. When a derivative is designated as a hedge of changes in the fair value of a foreign currency-denominated available-for-sale debt security attributable to changes in foreign currency exchange rates, the change in fair value of the hedged security is initially recorded in OCI. The portion of the gain or loss attributable to changes in foreign currency rates is immediately



reclassified from OCI into earnings. This reclassification is partially offset by the change in the fair value of the hedging derivative, which is also reported in earnings. Changes in the fair value of the available-for-sale debt security due to unhedged risks remain in OCI, as required by ASC 320.

See DH 8.4 for information on foreign currency cash flow hedges and DH 8.5 for information on foreign currency fair value hedges. Example DH 8-7 illustrates a fair value hedge of an available-for-sale security.

### **Foreign currency-denominated borrowings**

Cash flow hedge accounting can only be applied to hedges of recognized foreign currency-denominated assets and liabilities if the hedge eliminates all of the variability in the functional currency-equivalent cash flows. A currency swap that economically changes floating-rate foreign currency debt into floating-rate functional currency debt does not qualify as a cash flow hedge because the variability in functional currency-equivalent cash flows is not eliminated (i.e., the functional currency-equivalent interest payments are still floating); however, this type of swap could qualify as a hedging instrument in a fair value hedge. A currency swap that economically changes floating-rate foreign currency debt to fixed-rate functional currency debt qualifies as a cash flow hedge if the relationship is highly effective. An interest rate swap that economically changes floating-rate foreign currency debt into fixed-rate foreign currency debt also qualifies for cash flow hedge accounting, but it is a hedge of interest rate risk, not a hedge of foreign currency risk as the functional currency cash flows are not fixed.

The following sections illustrate these principles assuming a US dollar-functional currency entity borrows funds in euro and converts the borrowing into a US dollar obligation by entering into a cross-currency swap that matches the terms of the debt issued.

See DH 8.4 for information on foreign currency cash flow hedges and DH 8.5 for information on foreign currency fair value hedges. See DH 6 for information on interest rate risk hedges.

### **Hedge of foreign currency risk on a variable-rate borrowing**

<b>Borrowing currency</b>	<b>Interest rate</b>	<b>Cross-currency swap</b>	<b>Are functional-currency cash flows fixed?</b>	<b>Treatment of hedging relationship</b>
Euro	Variable	Receive variable euro and pay variable dollars	No	Fair value hedge of foreign currency risk

Because the functional currency-equivalent cash flows are not fixed, the hedging relationship does not qualify for cash flow hedge accounting; fair value hedge accounting is the only type of hedge accounting that can be applied.

Applying fair value hedge accounting will produce the same overall accounting results as not applying hedge accounting at all; the derivative will be measured at fair value with changes recorded in earnings and the foreign currency-denominated debt will be remeasured at the current spot exchange rate, as required by ASC 830. However, the income statement presentation of a fair value hedging relationship may better reflect the reporting entity's objective (i.e., to hedge the currency risk of the debt) than not applying hedge accounting because the results of the derivative and the hedged item must be

presented in the same income statement line item. For economic hedges, presentation would depend on the reporting entity's election, as discussed in FSP 19.4.4. In addition, a reporting entity may elect to designate the swap as a fair value hedge if designation is consistent with its risk management strategy and/or the reporting entity would prefer to demonstrate to investors that the derivative met the requirements for hedge accounting in ASC 815.

*Hedge of foreign currency risk and interest rate risk on a fixed-rate borrowing*

<b>Borrowing currency</b>	<b>Interest rate</b>	<b>Cross-currency swap</b>	<b>Are functional currency cash flows fixed?</b>	<b>Treatment of hedging relationship</b>
Euro	Fixed	Receive fixed euro and pay variable dollars	No	Fair value hedge of interest rate and foreign currency risks

Because the functional currency-equivalent cash flows are not fixed, the hedging relationship does not qualify for cash flow hedge accounting; fair value hedge accounting is the only type of hedge accounting that can be applied.

In applying fair value hedge accounting of both interest rate and foreign currency risk, a reporting entity would adjust the value of the foreign currency-denominated debt to reflect changes in foreign interest rates and then remeasure the debt at the current spot exchange rate, as required by ASC 830.

*Hedge of foreign currency risk on a fixed-rate borrowing*

<b>Borrowing currency</b>	<b>Interest rate</b>	<b>Cross-currency swap</b>	<b>Are functional currency cash flows fixed?</b>	<b>Treatment of hedging relationship</b>
Euro	Fixed	Receive fixed euro and pay fixed dollars	Yes	Generally, cash flow hedge of interest rate and foreign currency risks

The functional currency-equivalent cash flows are fixed; therefore, this hedging relationship is eligible for either cash flow or fair value hedging. Cash flow hedge accounting is generally applied.

Example DH 8-5 in DH 8.4.4 illustrates a cash flow hedge of fixed-rate foreign currency-denominated debt.

*Hedge of foreign currency and interest rate risk on a variable-rate borrowing*

<b>Borrowing currency</b>	<b>Interest rate</b>	<b>Cross-currency swap</b>	<b>Are functional currency cash flows fixed?</b>	<b>Treatment of hedging relationship</b>
Euro	Variable	Receive variable euro and pay fixed dollars	Yes	Cash flow hedge of interest rate and foreign currency risk

Since the functional currency cash flows are fixed, this hedging relationship is a cash flow hedge of both interest rate and foreign currency risk.

**8.2.1.3** *Forecasted foreign currency-denominated transactions*

A forecasted foreign currency transaction, such as a forecasted sale denominated in a foreign currency, presents earnings exposure due to movements in foreign exchange rates and can be the hedged item in a cash flow hedging relationship. A derivative may be designated as hedging the foreign currency exposure due to variability in the functional currency-equivalent cash flows of a forecasted transaction if certain criteria are met. See DH 8.4 for additional information on applying cash flow hedge accounting.

**8.2.1.4** *Net investment in a foreign operation*

As discussed in ASC 830-30-45-3, the net assets of a foreign subsidiary are translated into the reporting currency using the current exchange rate at each balance sheet date; the change in net assets due to changes in exchange rates is recorded in the cumulative translation adjustment (CTA) account (a component of OCI). Applying net investment hedge accounting allows a reporting entity to record the gain or loss on the hedging instrument in CTA, thereby offsetting the impact of the translation process.

**8.2.2** *Hedging instrument*

A nonderivative instrument, such as foreign currency-denominated debt, can be designated as the hedging instrument in a fair value hedge of a firm commitment. It can also be designated as the hedging instrument in a net investment hedge. However, it cannot be designated as the hedging instrument in a cash flow hedging relationship or in a fair value hedge of a foreign currency-denominated asset or liability. Before the derivative guidance that now resides in ASC 815 was issued, the accounting literature permitted hedge accounting for nonderivative instruments designated in hedging relationships similar to ASC 815 fair value hedges of firm commitments and net investment hedging relationships. The FASB decided to carry forward that guidance but did not extend the ability to designate nonderivative instruments in cash flow hedging relationships.

When a foreign currency-denominated instrument is designated as a hedging instrument, it should be measured at the end of each reporting period using the exchange rate at that date, in accordance with the guidance in ASC 830. See FX 4 for information on measuring foreign currency transactions.

Question DH 8-3 discusses whether two swap contracts can be designated as a cash flow hedge of the foreign currency risk in a debt instrument.

### Question DH 8-3

A US dollar functional currency reporting entity issues fixed-rate debt denominated in Japanese yen. At the same time, it enters into two swap contracts to hedge the debt. Under the first swap, the reporting entity receives fixed Japanese yen (equal to the interest and principal obligations on the hedged debt) and pays US dollars based on LIBOR; under the second swap, the reporting entity receives variable US dollars based on LIBOR and pays fixed US dollars.

Can the two swaps be designated as a cash flow hedge of the foreign currency risk in the debt?

#### ***PwC response***

Yes. ASC 815-20-25-45 permits a reporting entity to designate two or more derivatives as hedging instruments in a single hedging relationship. Since the two swaps, designated together, eliminate the variability in the hedged item's functional currency-equivalent cash flows, they can be designated as the hedging instrument.

#### **8.2.2.1 Hedging instrument denominated in a tandem currency**

Tandem currencies are two currencies other than a reporting entity's functional currency that are expected to move in tandem with each other in relation to the reporting entity's functional currency. For example, when the exchange rates for (1) the US dollar and foreign currency A and (2) the US dollar and foreign currency B are expected to be highly correlated (i.e., expected to move in tandem), currency A and currency B are tandem currencies for a reporting entity with the US dollar as its functional currency.

A reporting entity is permitted to designate a hedging instrument denominated in a tandem currency to the hedged item if, based on historical experience, it has reason to expect that the hedging relationship between the exposure in one currency and the derivative in the tandem currency will be highly effective. This strategy would be useful when hedging instruments are readily available in currency A, but not in currency B.

## **8.3 General criteria for foreign currency hedging**

A reporting entity can hedge a single recognized asset or liability, a firm commitment, or a portion of one of these items, or hedge a forecasted transaction to reduce its exposure to changes in the fair value or cash flows resulting from changes in foreign currency exchange rates.

The item or transaction being hedged must present an earnings exposure and cannot be something that is already measured at fair value through earnings. Eligibility of a hedged item or hedged risk is also dependent on the type of hedge (cash flow, fair value, or net investment), as discussed in DH 8.4, DH 8.5, and DH 8.6, respectively.

The contemporaneous hedge documentation requirements for fair value or cash flow hedges of foreign currency risk are the same as for hedges of other risks. See DH 5.7 for information on hedge documentation.

ASC 815-20-25-30 specifies additional qualifying criteria for foreign currency hedges. The application of ASC 815-20-25-30(a)(2) is illustrated in ASC 815-20-55-130.

**ASC 815-20-25-30**

Both of the following conditions shall be met for foreign currency cash flow hedges, foreign currency fair value hedges, and hedges of the net investment in a foreign operation:

- a. For consolidated financial statements, either of the following conditions is met:
  1. The operating unit that has the foreign currency exposure is a party to the hedging instrument.
  2. Another member of the consolidated group that has the same functional currency as that operating unit is a party to the hedging instrument and there is no intervening subsidiary with a different functional currency. See guidance beginning in paragraph 815-20-25-52 for conditions under which an intra-entity foreign currency derivative can be the hedging instrument in a cash flow hedge of foreign exchange risk.
- b. The hedged transaction is denominated in a currency other than the hedging unit's functional currency.

**Excerpt from ASC 815-20-55-130**

If a dollar (US Dollar) functional, second-tier subsidiary has a euro (EUR) exposure, the US Dollar-functional consolidated parent company could designate its US Dollar-EUR derivative instrument as a hedge of the second-tier subsidiary's exposure provided that the functional currency of the intervening first-tier subsidiary (that is, the parent of the second-tier subsidiary) is also the US Dollar. In contrast, if the functional currency of the intervening first-tier subsidiary was the Japanese yen (JPY) (thus requiring the financial statements of the second-tier subsidiary to be translated into JPY before the JPY-denominated financial statements of the first-tier subsidiary are translated into US Dollar for consolidation), the consolidated parent company could not designate its US Dollar-EUR derivative as a hedge of the second-tier subsidiary's exposure.

Under the functional currency concept in ASC 830, each foreign entity (as defined in ASC 830) of a multinational corporation is treated as a separate entity.

The criterion in ASC 815-20-25-30(a) is included so that the hedging model is consistent with the functional currency concept in ASC 830 (i.e., only the entity with the foreign currency risk can be the hedging entity). In addition, when a parent company's functional currency differs from that of its subsidiary, the parent is not directly exposed to the foreign currency risk in the subsidiary's foreign currency transactions. Accordingly, a parent company that has a different functional currency may not directly hedge a subsidiary's foreign currency-denominated assets and liabilities, unrecognized firm commitments, or forecasted transactions.

Sometimes, one operating unit (such as a centralized treasury center) enters into a third-party hedging instrument on behalf of another operating unit within the consolidated entity. When the functional currencies of the units are not the same, ASC 815 requires an intercompany derivative contract to be created to apply hedge accounting. The unit with the foreign currency exposure would then designate the intercompany derivative as a hedge of its foreign currency exposure. See DH 8.8 for information on treasury center hedging.

### 8.3.1 *Assessing the effectiveness of foreign currency hedges*

The effectiveness assessment of foreign currency cash flow and fair value hedges is similar to that of all other cash flow and fair value hedges (discussed in DH 9); however, the currency basis spread in cross-currency swaps can be excluded from the effectiveness assessment of a foreign currency hedge.

#### 8.3.1.1 *Excluded components*

As discussed in DH 9, a reporting entity may elect to exclude certain components of the change in fair value of the hedging instrument from the assessment of hedge effectiveness. The components a reporting entity may choose to exclude are:

- Time value (or a portion) of options
- Difference between the spot rate and the forward rate in a forward contract (i.e., forward points in a foreign currency forward contract)
- Currency basis spreads in cross-currency interest rate swaps

If a reporting entity elects to exclude a component, ASC 815 provides two alternatives for recognition: an amortization approach or a mark-to-market approach.

- If the amortization approach is elected, the reporting entity should quantify and recognize the initial value attributable to the excluded component. It should be recognized in earnings using a systematic and rational amortization method over the life of the hedging instrument. Any difference between the change in fair value of the hedging instrument attributable to the excluded component and amounts recognized in earnings is recognized in other comprehensive income.
- If the mark-to-market approach is elected, all changes in fair value attributable to an excluded component are recognized currently in earnings.

The initial value attributable to an excluded component depends on the type of derivative. When the time value of an option contract is the excluded component, the time value generally is the option premium paid (provided the option is at or out of the money at inception). The value attributable to forward points in a forward contract is the undiscounted difference between the market forward rate and the spot rate. The fair values of the excluded components will change over time as markets change but must converge to zero by the maturity of the hedging instrument. Because of that, the FASB permits a systematic and rational amortization method.

#### *Currency basis spreads*

Theoretically, the difference between the spot and forward exchange rates for currency forward contracts should be equal to the difference between the risk-free nominal interest rates in each currency. Any differences (other than a minor dealer profit) should be eliminated through arbitrage. However, theory ignores certain market realities, such as transaction and hedging costs, dealer profit, and credit risk, and assumes ready access to funding and liquidity in currency money markets. For these reasons, the difference between the spot and forward exchange rates might not equal the difference in interest rates. The currency basis spread is essentially this excess spread over what is predicted by arbitrage pricing theory.

There are no observable spot-to-forward differences in cross-currency interest rate swaps. Therefore, the ability to specifically consider a currency basis spread as an excluded component and recognize it through an amortization approach is helpful in reducing earnings volatility.

For currency swaps involving the US dollar, the currency basis spread can be thought of as the difference between (1) the direct US dollar interest rate and (2) the synthetic US dollar interest rate earned by swapping a foreign currency investment into a US dollar investment. Theoretically, there should be no difference in the rates earned from this synthetic approach as compared to simply holding US dollars and earning US dollar interest rates. A difference in the actual US dollar yield and the yield earned from this synthetic approach means that a currency basis spread exists.

For example, a European bank can borrow in euro, paying three-month Euribor on the debt, and then execute a swap under which it initially receives US dollars and pays euro for the principal amount. Under the swap, it receives periodic payments of three-month Euribor and pays three-month US dollar LIBOR. At the end of the swap, the bank receives the same amount of euro it paid at the beginning of the swap and pays back the same US dollar principal amount it received at the beginning of the swap.

Typically, the principal exchanged at the beginning and end of the swap is exchanged at the same exchange rate: the spot rate at inception. This allows currency swaps to be quoted to participants as US dollar LIBOR rate versus the Euribor rate plus or minus a spread (e.g., three-month Euribor minus 20). If LIBOR and Euribor were equal, the expected swap spread would be zero, and thus the “minus 20” would represent the currency basis spread. If these base rates are not equal, the rate differential explains some of the swap pricing, but if the rate differential does not account for all of the difference, a currency basis spread is implied.

Thus, Euribor “minus” that is not explained by a difference in rates could occur when US dollar funding has been difficult for European banks to obtain (as has sometimes been the case since the financial crisis), leading them to borrow in euro and swap into US dollar. The European bank would be receiving less than Euribor on the swap contract, but still paying full US dollar LIBOR. Over the term of the swap, this excess currency swap spread effectively represents a cost to the European bank, and can be regarded as an excluded component. Although the whole swap spread has been locked in on the swap contract, the change in fair value of the swap attributable to the currency basis spread will fluctuate as market conditions change, and might be particularly volatile if there is a credit or liquidity scare.

## **8.4 Foreign currency cash flow hedges**

An unrecognized firm commitment, a forecasted transaction, or a recognized asset or liability (including intercompany receivables or payables) are all eligible exposures for a foreign currency cash flow hedge. Only a derivative can be designated as the hedging instrument in a cash flow hedge.

Common examples of foreign currency cash flow hedges include the hedge of the foreign currency risk:

- In a forecasted intercompany or third-party purchase or sale of a foreign currency-denominated financial asset
- In a forecasted intercompany or third-party purchase or sale of a nonfinancial asset (e.g., inventory or fixed asset)



- In a forecasted receipt or payment of service-related revenues denominated in a foreign currency (e.g., royalties or franchise fees)
- Related to a recognized asset or liability that is remeasured in income (e.g., receipt or payment of interest on a foreign-currency-denominated debt instrument)

The hedging of these risks is permitted only if all of the variability in functional currency-equivalent cash flows is eliminated, as required by ASC 815-20-25-39(d) and ASC 815-20-25-40.

#### **8.4.1 Qualifying criteria**

ASC 815-20-25-39 and ASC 815-20-25-40 specify qualifying criteria for foreign currency cash flow hedges in addition to the criteria applicable to all foreign currency hedges in ASC 815-20-25-30, discussed in DH 8.3.

##### **ASC 815-20-25-39**

A hedging relationship of the type described in the preceding paragraph qualifies for hedge accounting if all the following criteria are met:

- a. The criteria in paragraph 815-20-25-30(a) through (b) are met.
- b. All of the cash flow hedge criteria in this Section otherwise are met, except for the criterion in paragraph 815-20-25-15(c) that requires that the forecasted transaction be with a party external to the reporting entity.
- c. If the hedged transaction is a group of individual forecasted foreign-currency-denominated transactions, a forecasted inflow of a foreign currency and a forecasted outflow of the foreign currency cannot both be included in the same group.
- d. If the hedged item is a recognized foreign-currency-denominated asset or liability, all the variability in the hedged item's functional-currency-equivalent cash flows shall be eliminated by the effect of the hedge.

##### **ASC 815-20-25-40**

For purposes of item (d) in the preceding paragraph, an entity shall not specifically exclude a risk from the hedge that will affect the variability in cash flows. For example, a cash flow hedge cannot be used with a variable-rate foreign-currency-denominated asset or liability and a derivative instrument based solely on changes in exchange rates because the derivative instrument does not eliminate all the variability in the functional currency cash flows. As long as no element of risk that affects the variability in foreign-currency-equivalent cash flows has been specifically excluded from a foreign currency cash flow hedge and the hedging instrument is highly effective at providing the necessary offset in the variability of all cash flows, a less-than-perfect hedge would meet the requirement in (d) in the preceding paragraph. That criterion does not require that the derivative instrument used to hedge the foreign currency exposure of the forecasted foreign-currency-equivalent cash flows associated with a recognized asset or liability be perfectly effective, rather it is intended to ensure that the hedging relationship is highly effective at offsetting all risks that impact the variability of cash flows.



As stated in ASC 815-20-25-39(b), a foreign currency cash flow hedge must also meet the criteria applicable to all cash flow hedges, except that the forecasted transaction does not need to be with a third party (i.e., intercompany transactions can be the hedged transaction in a foreign currency cash flow hedge). These requirements are discussed in DH 6 for hedges of financial items and DH 7 for hedges of nonfinancial items.

Question DH 8.4 discusses whether the requirement that a cash flow hedge of foreign currency risk in an asset or liability must eliminate all of the variability in the functional currency-equivalent cash flows mean that the hedging relationship must be perfectly effective.

### Question DH 8-4

Does the requirement in ASC 815-20-25-39(d) that a cash flow hedge of the foreign currency risk in a recognized foreign currency-denominated asset or liability must eliminate all of the variability in the functional currency-equivalent cash flows mean that the hedging relationship must be perfectly effective?

#### ***PwC response***

No. A relationship qualifies for cash flow hedge accounting as long as it is designed to offset all relevant risks (e.g., interest rate, foreign currency) and is highly effective. This requirement is designed to prevent reporting entities from specifically excluding a risk that will affect the variability in cash flows from the hedging relationship. However, the hedging relationship does not have to be perfectly effective.

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Question DH 8-5 discusses whether the variability in functional currency-equivalent proceeds expected to be received from the forecasted issuance of foreign currency-denominated debt is eligible for designation as the hedged transaction in a cash flow hedge.

### Question DH 8-5

Is the variability in functional currency-equivalent proceeds expected to be received from the forecasted issuance of foreign currency-denominated debt eligible for designation as the hedged transaction in a cash flow hedge of foreign currency risk?

#### ***PwC response***

No. An anticipated foreign currency borrowing is not a transaction that qualifies for hedge accounting of foreign currency risk. The variation in functional currency-equivalent proceeds that a reporting entity will receive upon borrowing the funds at a future date does not present an earnings exposure because changes in exchange rates from hedge inception to the borrowing date will only impact the initial measurement of the liability. The repayment of this amount will not impact earnings.

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Question DH 8-6 asks if a reporting entity can hedge the foreign currency risk in the forecasted transactions of a foreign subsidiary.

### Question DH 8-6

Can a reporting entity hedge the foreign currency risk in the forecasted earnings of a foreign subsidiary?

***PwC response***

No. The forecasted earnings (or net income) of a foreign subsidiary is not permitted to be the hedged item; ASC 815 prohibits hedge accounting for hedges of future earnings. A reporting entity may designate (1) a net investment in a foreign operation or (2) royalty payments that are to be received from a subsidiary as the hedged item. See DH 8.6 for information on net investment hedges.

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Question DH 8-7 asks if a reporting entity can hedge the foreign currency risk associated with a forecasted intercompany dividend.

### Question DH 8-7

Can a reporting entity hedge the foreign currency risk associated with a forecasted intercompany dividend?

***PwC response***

No. The intercompany dividend does not present an earnings exposure so it is not eligible to be a hedged item.

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Question DH 8-8 discusses if a foreign subsidiary can hedge its forecasted foreign currency-denominated operating costs.

### Question DH 8-8

A parent company and foreign subsidiary both have a US dollar functional currency. The foreign subsidiary's sales and cost of sales are denominated in US dollars, while all other operating costs are denominated in the local foreign currency. Can the foreign subsidiary hedge its forecasted foreign currency-denominated operating costs?

***PwC response***

Yes. The local-currency operating costs are considered denominated in a foreign currency since the functional currency of the foreign subsidiary is the US dollar. The forecasted operating costs may need to be segregated into specific forecasted transactions (e.g., payments of rent, salaries, and similar specific costs) to meet the qualifying criteria for cash flow hedge accounting (e.g., specific identification, probability, high effectiveness), but these forecasted foreign currency-denominated transactions are eligible to be hedged.

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Question DH 8-9 asks if a specified amount of foreign currency-denominated sales can be hedged.

## Question DH 8-9

Can a reporting entity hedge a specified amount of foreign currency-denominated sales (e.g., 10 million euro in sales)?

### ***PwC response***

Yes. A reporting entity can designate a specified amount of foreign currency-denominated sales as the hedged item in a cash flow hedge of the foreign currency risk in foreign currency-denominated sales. This differs from cash flow hedges of nonfinancial risks, which require that the hedged item be a specified number of units sold rather than a specified currency amount.

### **8.4.2 Cash flow hedge of a forecasted purchase or sale on credit**

When a forecasted foreign currency purchase or sale will be made on credit (i.e., a payable or receivable will be created by the sale), a reporting entity can choose to hedge the foreign currency risk to the date the sale will occur or to the date the foreign currency payable or receivable will be settled.

Hedging to the settlement date of the payable or receivable allows a reporting entity to designate one overall cash flow hedging relationship rather than designating separate cash flow hedging relationships of (1) the forecasted purchase/sale and (2) payment of the payable/receivable (which would require dedesignating and redesignating the hedging instrument).

#### **8.4.2.1 Hedge to the sale date**

When a reporting entity chooses to hedge to the date the sale will occur, changes in the fair value of the hedging derivative should be recorded in OCI until the sales date; that amount should be reclassified into earnings as the hedged transaction impacts earnings (in the same income statement line item).

A reporting entity can decide to assess hedge effectiveness either (1) based on the forward price or (2) based on the spot price. If a reporting entity chooses the spot method, it would generally elect to amortize the spot-forward difference over the life of the hedge. See DH 8.3.1.1 for information on excluded components.

Example DH 8-1 in DH 8.4.4 illustrates the accounting for this type of a hedging relationship.

#### **8.4.2.2 Hedge to the settlement date of the payable or receivable**

A reporting entity may use a single forward contract to hedge the foreign currency risk associated with a forecasted foreign currency purchase or sale through to the settlement date of the payable or receivable. ASC 815-20-25-34 through ASC 815-20-25-36 permits a reporting entity to designate such a forward in a single cash flow hedging relationship of the variability attributable to foreign currency risk related to the settlement of a foreign currency-denominated receivable or payable resulting from a forecasted transaction on credit.

This type of hedging relationship may have been more beneficial before the issuance of the new hedging guidance because the longer hedge period together with a forward to forward hedge designation minimized earnings volatility when compared to recording the change in the spot-to-forward difference in earnings. It may not be applied as often now that a reporting entity can elect to

amortize the spot-to-forward difference when the forward points are excluded from the assessment of hedge effectiveness.

ASC 815-30-35-9 provides guidance with respect to this type of hedging relationship.

**Excerpt from ASC 815-30-35-9**

For a single cash flow hedge that encompasses the variability of functional-currency-equivalent cash flows attributable to foreign exchange risk related to the settlement of a foreign-currency-denominated receivable or payable resulting from a forecasted sale or purchase on credit, the guidance in paragraph 815-30-35-3 is applied as follows:

- a. The gain or loss on the derivative instrument that is included in the assessment of hedge effectiveness is reported in other comprehensive income during the period before the forecasted purchase or sale.
- b. The functional currency interest rate implicit in the hedging relationship as a result of entering into the forward contract is used to determine the amount of cost or income to be ascribed to each period of the hedging relationship....
- c. For forecasted sales on credit, the amount of cost or income ascribed to each forecasted period is reclassified from other comprehensive income to earnings on the date of the sale. For forecasted purchases on credit, the amount of cost or income ascribed to each forecasted period is reclassified from other comprehensive income to earnings in the same period or periods during which the asset acquired affects earnings. The reclassification from other comprehensive income to earnings of the amount of cost or income ascribed to each forecasted period is based on the guidance in paragraphs 815-30-35-38 through 35-41.
- d. The income or cost ascribed to each period encompassed within the periods of the recognized foreign-currency-denominated receivable or payable is reclassified from other comprehensive income to earnings at the end of each reporting period.

Example 18 (see paragraph 815-30-55-106) illustrates such a transaction.

See examples in DH 8.4.4. Example DH 8-2 illustrates this strategy when hedge effectiveness is assessed based on forward rates and Example DH 8-3 illustrates this strategy when hedge effectiveness is assessed based on spot rates.

### **8.4.3 Accounting for cash flow hedges**

Foreign currency cash flow hedges are accounted for in the same way as other cash flow hedges under ASC 815. The hedging derivative is recorded at fair value; changes in the fair value of the hedging derivative are recorded in OCI and reclassified into earnings as the hedged transaction impacts earnings (in the same income statement line item). If a reporting entity elects to exclude a component of the change in fair value of the hedging instrument (e.g., time value of an option) from the assessment of effectiveness, the fair value attributable to the excluded component may be recognized currently in earnings or included in OCI and amortized over the life of the hedging instrument. See DH 8.3.1.1 for information on excluding components.

### 8.4.3.1 *Accounting for a cash flow hedge of foreign currency items*

When the hedged item in a highly effective cash flow hedge is a recognized foreign-currency-denominated asset or liability, ASC 815 requires the following accounting at each reporting period:

- The hedged item is measured based on the current spot rate, as required by ASC 830, and the resulting transaction gain or loss is recorded in earnings
- The hedging instrument is measured at fair value and the entire gain or loss is initially recorded in OCI
- An amount equal to the transaction gain or loss on the hedged item is transferred from OCI to earnings to offset the transaction gain or loss recorded in earnings

When a forward contract is designated as the hedging instrument in a cash flow hedge of a foreign currency-denominated asset or liability, the different bases for measuring the forward contract (based on forward rates) and the asset or liability (based on spot rates) give rise to a mismatch.

When noninterest-bearing assets or liabilities, such as trade receivables and payables, are hedged with a forward contract, the spot-forward difference should be amortized; how it is amortized depends on whether it is excluded from the assessment of hedge effectiveness. If the spot-forward difference is excluded, the difference should be recognized in earnings using a systematic and rational amortization method over the life of the hedging instrument. When the spot-forward difference is not treated as an excluded component, the difference should be recognized using the interest method. See DH 8.3.1.1 for information on excluding components from the effectiveness assessment of a foreign currency hedge.

Some reporting entities decide to forgo hedge accounting and elect to simply “economically hedge” noninterest-bearing assets or liabilities, particularly short-term trade payables and receivables (i.e., not designate the derivative as a hedge). In those cases, the derivative is measured at fair value each reporting period, with all changes in fair value recorded in earnings. The receivable or payable is measured at the spot exchange rate (as required by ASC 830) and the resulting transaction gain or loss is recorded in earnings.

### 8.4.4 *Foreign currency cash flow hedging examples*

Example DH 8-1, Example DH 8-2, Example DH 8-3, Example DH 8-4 and Example DH 8-5 illustrate the accounting for foreign currency cash flow hedges.

#### **EXAMPLE DH 8-1**

##### *Cash flow hedge of foreign currency risk resulting from forecasted foreign currency sales*

USA Corp is a US dollar (USD) functional currency manufacturing company.

USA Corp forecasts that it will sell 12 million euro (EUR) of its primary product to European customers in six months. Payment will be made at the date of sale. The sales are not firmly committed, but historical experience and current sales forecasts indicate that the sales are probable.

On September 30, 20X1, USA Corp enters into a six-month foreign currency forward contract to deliver EUR and receive USD to hedge a portion of its exposure to euro sales. The foreign exchange forward contract has the following terms:

Contract amount: EUR 10 million  
 Maturity date: March 31, 20X2  
 Forward contract rate: USD 0.83 = EUR 1

On September 30, 20X1, USA Corp documents its designation of the forward contract as a cash flow hedge of foreign currency risk resulting from the forecasted euro sales.

USA Corp assesses the criteria in ASC 815-20-25-84 and concludes that the hedging relationship is expected to be perfectly effective under the critical terms match method of assessing effectiveness as follows:

- The forward is for the sale of the same quantity, the same currency, and at the same time as the hedged forecasted sale; the critical terms of the forward and the hedged item are identical
- The fair value of the forward contract at inception is zero
- Hedge effectiveness will be assessed based on changes in the forward price of the currency

The following table summarizes the exchange rates during the hedging relationship.

Date	Spot exchange rate	Forward exchange rate to March 31, 20X2
September 30, 20X1	USD 0.84 = EUR 1	USD 0.83 = EUR 1
December 31, 20X1	USD 0.81 = EUR 1	USD 0.805 = EUR 1
March 31, 20X2	USD 0.79 = EUR 1	—

The following table shows the fair values of the forward contract, which are based on the changes in forward rates (discounting to net present value has been ignored for simplicity).

Date	Fair value of forward contract	Gain (loss) on forward contract
September 30, 20X1	—	—
December 31, 20X1	USD 250,000	USD 250,000
March 31, 20X2	USD 400,000	USD 150,000

How should USA Corp account for this hedging relationship?

### *Analysis*

There is no entry required to record the forward contract at inception of the hedge because it is an at-market forward with a fair value of zero.

Since the hedging relationship meets the requirements for the critical terms match method of assessing effectiveness, and assuming USA Corp has monitored the hedging relationship each quarter and noted no changes, USA Corp can assume that the hedging relationship is perfectly effective.

USA Corp would record the following entry on December 31, 20X1 to record the change in fair value of the forward contract in OCI.

Dr. Forward contract receivable	USD 250,000	
Cr. Other comprehensive income		USD 250,000
To record the change in fair value of the forward contract		

USA Corp would record the following entries when the forecasted sales occur and forward contract matures on March 31, 20X2.

Dr. Forward contract receivable	USD 150,000	
Cr. Other comprehensive income		USD 150,000
To record the change in fair value of the forward contract		

Dr. Cash	USD 400,000	
Cr. Forward contract receivable		USD 400,000
To record the net settlement of the forward contract at its maturity		

Dr. Cash	USD 7,900,000	
Cr. Sales		USD 7,900,000

To record EUR 10 million in cash sales at the spot rate of USD 0.79 = EUR 1

Dr. Other comprehensive income	USD 400,000	
Cr. Sales		USD 400,000

To transfer the gain on the hedge activity from other comprehensive income to sales (the same line item as the hedged item) when the forecasted transaction impacts earnings

Even though there was an unfavorable change in exchange rates that reduced the functional currency-equivalent sales proceeds received, USA Corp's sales in US dollars were fixed at USD 8,300,000 (USD 7,900,000 sales + USD 400,000 gain on forward contract) equal to the EUR 10,000,000 converted to USD at the forward rate at inception through the hedge.

### EXAMPLE DH 8-2

**Cash flow hedge of foreign currency risk resulting from forecasted foreign currency sales on credit (hedge through payment of receivable, based on change in entire fair value)**

USA Corp is a US dollar (USD) functional currency manufacturing company.

USA Corp forecasts that it will sell 12 million euro (EUR) of its primary product to European customers in six months. Instead of receiving cash for the sales on March 31, 20X2 (the sales date), USA Corp will record an account receivable for the sale, which it expects the customers to pay on April 30, 20X2. The sales are not firmly committed, but historical experience and current sales forecasts indicate that the sales are probable.

On September 30, 20X1, USA Corp enters into a seven-month foreign currency forward contract to deliver EUR and receive USD to hedge its foreign currency exposure resulting from the forecasted sale and the cash flows from the euro-denominated account receivable. The foreign exchange forward contract has the following terms:

Contract amount: EUR 10 million  
 Maturity date: April 30, 20X2  
 Forward contract rate: USD 0.828 = EUR 1

On September 30, 20X1, USA Corp documents its designation of the forward contract as a cash flow hedge of foreign currency risk resulting from the forecasted euro sales that includes the variability of the functional currency-equivalent cash flow from collection of the euro-denominated account receivable. USA Corp decides to assess the effectiveness of the hedge based on changes in the entire fair value of the forward contract.

USA Corp elects to attribute the forward points to the forecasted sale portion and resulting receivable using the pro rata method described in ASC 815-30-35-9 and Example 18 in ASC 815-30-55-106 through ASC 815-30-55-112. To do this, USA Corp:

- Calculates the forward points as USD 120,000, which is the difference between the functional currency-equivalent amount at (1) the spot rate at inception and (2) the derivative's forward rate
- Determines the number of days (1) between the inception of the derivative and the invoice date (182 days) and (2) between the invoice date and the payment date (30 days), a total of 212 days
- Allocates the forward points to each period: (1) between the inception of the derivative and the invoice date ( $182 \text{ days} / 212 \text{ days} \times \text{USD } 120,000 = \text{USD } 103,019$ ) and (2) between the invoice date and the payment date ( $30 \text{ days} / 212 \text{ days} \times \text{USD } 120,000 = \text{USD } 16,981$ )

USA Corp assesses the criteria in ASC 815-20-25-84 and concludes that the hedging relationship is expected to be perfectly effective under the critical terms match method of assessing effectiveness as follows:

- The forward is for the purchase of the same quantity, the same currency, and at the same time as the hedged forecasted sale; the critical terms of the forward and the hedged item are identical
- The fair value of the forward contract at inception is zero
- Hedge effectiveness will be assessed based on changes in the forward price of the currency

The following table summarizes the exchange rates during the hedging relationship.

<b>Date</b>	<b>Spot exchange rate</b>	<b>Forward exchange rate to April 30, 20X2</b>
September 30, 20X1	USD 0.84 = EUR 1	USD 0.828 = 1 EUR
December 31, 20X1	USD 0.81 = EUR 1	USD 0.803 = 1 EUR
March 31, 20X2	USD 0.79 = EUR 1	USD 0.788 = 1 EUR
April 30, 20X2	USD 0.78 = EUR 1	—

The following table shows the fair values of the forward contract, which are based on the changes in forward rates (discounting to net present value has been ignored for simplicity).



Date	Fair value of forward contract	Gain (loss) on forward contract
September 30, 20X1	—	—
December 31, 20X1	USD 250,000	USD 250,000
March 31, 20X2	USD 400,000	USD 150,000
April 30, 20X2	USD 480,000	USD 80,000

How should USA Corp account for this hedging relationship?

### *Analysis*

There is no entry required to record the forward contract at inception of the hedge because it is an at-market forward with a fair value of zero.

Since the hedging relationship meets the requirements for the critical terms match method of assessing effectiveness, assuming USA Corp has monitored the hedging relationship each quarter and noted no changes, USA Corp can assume that the hedging relationship is perfectly effective.

USA Corp would record the following entry on December 31, 20X1 to record the change in fair value of the forward contract.

Dr. Forward contract receivable	USD 250,000	
Cr. Other comprehensive income		USD 250,000
To record the change in the fair value of the forward contract		

USA Corp would record the following entries when the forecasted sale occurs on March 31, 20X2.

Dr. Forward contract receivable	USD 150,000	
Cr. Other comprehensive income		USD 150,000
To record the change in the fair value of the forward contract		

Dr. Accounts receivable (EUR 10 million)	USD 7,900,000	
Cr. Sales		USD 7,900,000

To record EUR 10 million in cash sales at the spot rate of USD 0.79 = EUR 1

Dr. Accumulated other comprehensive income	USD 500,000	
Cr. Sales		USD 500,000

To reclassify the portion of the change in fair value of the forward contract due to changes in undiscounted spot rates attributable to the forecasted sale recognized at the invoice date from accumulated other comprehensive income

Dr. Sales	USD 103,019	
Cr. Accumulated other comprehensive income		USD 103,019

To reclassify the undiscounted allocable cost of the hedge from inception through the date of sale from accumulated comprehensive income into earnings

USD 8,400,000 sales (USD 7,900,000 sales + USD 500,000 gain on forward contract attributable to changes in the spot rate) equals the EUR 10,000,000 converted to USD at the spot rate at inception of the hedge. Further adjusting sales for USD 103,019 cost of the hedge results in sales of USD 8,296,981.

USA Corp would record the following entries on April 30, 20X2.

Dr. Forward contract receivable	USD 80,000	
Cr. Other comprehensive income		USD 80,000
To record the change in the fair value of the forward contract		
Dr. Foreign currency transaction loss	USD 100,000	
Cr. Accounts receivable (EUR 10 million)		USD 100,000
To record the transaction loss for the period based on the change in the spot rate (EUR 10,000,000 × USD 0.78 = EUR 1) – (EUR 10,000,000 × USD 0.79 = EUR 1)		
Dr. Accumulated other comprehensive income	USD 100,000	
Cr. Foreign currency transaction gain or loss		USD 100,000
To reclassify an amount from accumulated other comprehensive income to earnings to offset all of the foreign currency transaction loss recorded for the receivable during the period		
Dr. Foreign currency transaction gain or loss	USD 16,981	
Cr. Accumulated other comprehensive income		USD 16,981
To reclassify the allocable cost of the forward contract from the sale date to the April cash receipt date from accumulated other comprehensive income into earnings		
Dr. Cash	USD 7,800,000	
Cr. Accounts receivable (EUR 10,000,000)		USD 7,800,000
To record the cash receipt for the settlement of the receivable		
Dr. Cash	USD 480,000	
Cr. Forward contract receivable		USD 480,000
To record the net settlement of the forward contract at its maturity		

### EXAMPLE DH 8-3

Cash flow hedge of foreign currency risk resulting from forecasted foreign-currency sales (hedge through payment of receivable, forward points excluded from assessment of effectiveness)

USA Corp is a US dollar (USD) functional currency manufacturing company.

USA Corp forecasts that it will sell 12 million euro (EUR) of its primary product to European customers in six months. Instead of receiving cash for the sales on March 31, 20X2 (the sales date), USA Corp will record an account receivable for the sale, which it expects the customers to pay on April 30, 20X2. The sales are not firmly committed, but historical experience and current sales forecasts

indicate that the sales are probable. USA Corp excludes the forward points from the assessment of hedge effectiveness.

On September 30, 20X1, USA Corp documents its designation of the forward contract as a cash flow hedge of foreign currency risk resulting from the forecasted euro sales through the collection date of the account receivable. However, for this hedging relationship, USA Corp decides to assess the effectiveness of the hedge based on changes in the spot exchange rate. Therefore, the change in fair value of the forward contract attributable to changes in the spot exchange rate is recorded in OCI through the date of sale. USA Corp quantifies the amount of forward points attributable to the forward contract between September 30, 20X1 and April 30, 20X2 and amortizes that amount to earnings using a systematic and rational method over the hedge period.

USA Corp assess the criteria in ASC 815-20-25-84 and concludes that the hedging relationship is expected to be perfectly effective under the critical terms match method of assessing effectiveness as follows:

- The forward is for the purchase of the same quantity, the same currency, and at the same time as the hedged forecasted payment; the critical terms of the forward and the hedged item are identical
- The fair value of the forward contract at inception is zero
- Hedge effectiveness will be assessed based on changes in the spot price

The following table summarizes the exchange rates during the hedging relationship.

Date	Spot exchange rate	Forward exchange rate to April 30, 20X2
September 30, 20X1	USD 0.84 = EUR 1	USD 0.828 = EUR 1
December 31, 20X1	USD 0.81 = EUR 1	USD 0.803 = EUR 1
March 31, 20X2	USD 0.79 = EUR 1	USD 0.788 = EUR 1
April 30, 20X2	USD 0.78 = EUR 1	—

The following table shows the fair values of the forward contract, which are based on changes in forward rates (discounting to net present value has been ignored for simplicity).

Date	Fair value of forward contract	Change in spot value of the forward contract
September 30, 20X1	—	—
December 31, 20X1	USD 250,000	USD 300,000
March 31, 20X2	USD 400,000	USD 200,000
April 30, 20X2	USD 480,000	USD 100,000

How should USA Corp account for this hedging relationship?

*Analysis*

There is no entry required to record the forward contract at inception of the hedge because the forward contract is an at-market forward with a fair value of zero.

Since the hedging relationship meets the requirements for the critical terms match method of assessing effectiveness, and assuming USA Corp has monitored the hedging relationship each quarter and noted no changes, USA Corp can assume that the hedging relationship is perfectly effective.

USA Corp would record the following entries on December 31, 20X1 to record the change in fair value of the forward contract and amortization of the forward points.

Dr. Forward contract receivable	USD 250,000	
Cr. Other comprehensive income		USD 250,000
To record the change in fair value of the forward contract		
Dr. Sales	USD 52,075	
Cr. Accumulated other comprehensive income		USD 52,075
To record the amortization of the forward points (USD 120,000 × 92 days / 212 days)		

USA Corp would record the following entries when the forecasted sale occurs on March 31, 20X2.

Dr. Forward contract receivable	USD 150,000	
Cr. Other comprehensive income		USD 150,000
To record the change in fair value of the forward contract		
Dr. Sales	USD 50,943	
Cr. Accumulated other comprehensive income		USD 50,943
To record the amortization of the forward points (USD 120,000 × 90 days / 212 days)		
Dr. Accounts receivable	USD 7,900,000	
Cr. Sales		USD 7,900,000
To record EUR 10 million in cash sales at the spot rate of USD 0.79 = EUR 1		
Dr. Accumulated other comprehensive income	USD 500,000	
Cr. Sales		USD 500,000
To reclassify the change in fair value of the forward contract attributable to changes in spot rates through March 31, 20X2 from accumulated other comprehensive income into sales (the same line item as the hedged item)		

USD 8,400,000 sales (USD 7,900,000 sales + USD 500,000 gain on forward contract attributable to changes in the spot rate) equals the EUR 10,000,000 converted to USD at the spot rate at inception of the hedge.

USA Corp would record the following entries on April 30, 20X2.

Dr. Forward contract receivable	USD 80,000	
Cr. Other comprehensive income		USD 80,000
To record the change in the fair value of the forward contract		
Dr. Foreign currency transaction gain or loss	USD 16,981	
Cr. Accumulated other comprehensive income		USD 16,981
To record the amortization of the forward points		
Dr. Foreign currency transaction gain or loss	USD 100,000	
Cr. Accounts receivable		USD 100,000
To record the transaction loss for the period based on the change in the spot rate (EUR 10 million × USD 0.79 = EUR 1) – (EUR 10,000,000 × USD 0.78 = EUR 1)		
Dr. Accumulated other comprehensive income	USD 100,000	
Cr. Foreign currency transaction gain or loss		USD 100,000
To reclassify an amount from accumulated other comprehensive income to earnings to offset all of the foreign currency transaction loss recorded for the receivable during the period		
Dr. Cash	USD 7,800,000	
Cr. Accounts receivable (EUR 10 million)		USD 7,800,000
To record the cash receipt for the settlement of the receivable		
Dr. Cash	USD 480,000	
Cr. Forward contract receivable		USD 480,000
To record the net settlement of the forward contract at its maturity		

#### EXAMPLE DH 8-4

##### Use of foreign currency option to hedge forecasted foreign sales

USA Corp is a US dollar (USD) functional currency manufacturing company.

USA Corp forecasts that it will sell 12 million euro (EUR) of its primary product to European customers in six months, on March 31, 20X1. Payment will be made at the date of sale. The sale is not firmly committed, but historical experience and sales forecasts indicate that the sales are probable.

On September 30, 20X1, USA Corp enters into a six-month foreign currency put option on EUR to hedge a portion of its exposure to euro sales.

The foreign exchange put option has the following terms:

Contract amount:	EUR 10 million
Maturity date:	March 31, 20X2

Strike price: USD 0.84 = EUR 1  
 Option premium: USD 20,000

The option has a strike price that is at the money and the option premium reflects only the option's time value.

On September 30, 20X1, USA Corp documents its designation of the put option as a cash flow hedge of foreign currency risk in the forecasted euro sales below the strike price. It decides to exclude the time value of the option from the assessment of effectiveness; effectiveness will be assessed based on the option's intrinsic value. USA Corp assesses hedge effectiveness at inception of the hedging relationship and on an ongoing basis and determines that the hedging relationship is highly effective.

The USD 20,000 of option time value will be systematically amortized and included in earnings.

The following table summarizes the exchange rates, intrinsic values, and fair values of the put option during the hedging relationship.

Date	Spot exchange rate	Intrinsic value of put option	Fair value of the put option
September 30, 20X1	USD 0.84 = EUR 1	—	USD 20,000
December 31, 20X1	USD 0.81 = EUR 1	USD 300,000	USD 305,000
March 31, 20X2	USD 0.79 = EUR 1	USD 500,000	USD 500,000

Since the spot exchange rate on the date the option expires (March 31, 20X2) is below the option's strike price, USA Corp will exercise the put option.

How should USA Corp account for this hedging relationship?

### *Analysis*

USA Corp would record the following entry on September 30, 20X1.

Dr. Foreign currency option	USD 20,000	
Cr. Cash		USD 20,000

To record the premium paid to purchase the put option

USA Corp would record the following entries on December 31, 20X1.

Dr. Foreign currency option	USD 285,000	
Cr. Other comprehensive income		USD 285,000

To record the change in the fair value of the put option

Dr. Sales	USD 10,110	
Cr. Accumulated other comprehensive income		USD 10,110

To record the amortization of the put option's time value (USD 20,000 × 92 days / 182 days)

USA Corp would record the following entries when the forecasted sales occur and the put option expires on March 31, 20X2.

Dr. Foreign currency option	USD 195,000	
Cr. Other comprehensive income		USD 195,000
To record the change in the fair value of the put option		
Dr. Sales	USD 9,890	
Cr. Accumulated other comprehensive income		USD 9,890
To record the amortization of the put option's time value (USD 20,000 × 90 days / 182 days)		
Dr. Cash	USD 7,900,000	
Cr. Sales		USD 7,900,000
To record EUR 10 million in cash sales at the spot rate of USD 0.79 = EUR 1		
Dr. Accumulated other comprehensive income	USD 500,000	
Cr. Sales		USD 500,000
To reclassify the change in fair value of the put option for changes in undiscounted spot rate rates from accumulated other comprehensive income into earnings.		
Dr. Cash	USD 500,000	
Cr. Foreign currency option		USD 500,000
To record the net cash settlement of the option upon exercise		

USD 8,400,000 sales (USD 7,900,000 sales + USD 500,000 gain on put option attributable to changes in the spot rate) equals the EUR 10,000,000 converted to USD at the spot rate at inception of the hedge. Further adjusting sales for USD 20,000 cost of the hedge results in sales of USD 8,380,000 across all the reporting periods.

### EXAMPLE DH 8-5

#### Cash flow hedge of foreign-currency-denominated debt with a fixed-for-fixed cross-currency swap

USA Corp is a US dollar (USD) functional currency manufacturing company.

On January 1, 20X1, USA Corp issues 1,000,000 in euro (EUR) denominated debt. The debt matures on December 31, 20X1 and bears interest at a fixed rate of 8% per year. Concurrent with the debt issuance, USA Corp enters into a cross-currency swap to hedge the foreign currency risk associated with the debt. The swap has the following terms:

Maturity date:	December 31, 20X1
Initial exchange:	USA Corp pays EUR 1,000,000 and receives USD 860,000
USA Corp pays:	7% fixed rate on a notional of USD 860,000
USA Corp receives:	8% fixed rate on a notional of EUR 1,000,000
Final exchange:	USA Corp pays USD 860,000 and receives EUR 1,000,000

All terms of the swap match those of the foreign currency debt, including the notional amount and interest payment dates. By entering into the fixed-for-fixed cross-currency interest rate swap, USA Corp fixed the USD interest expense throughout the life of the debt and the amount due in USD at maturity.

On January 1, 20X1, USA Corp documents its designation of the fixed-for-fixed cross-currency swap as a cash flow hedge of the changes in the cash flows of the foreign currency-denominated debt (both interest and principal) resulting from foreign exchange risk.

USA Corp assesses the criteria in ASC 815-20-25-84 and concludes that the hedging relationship is expected to be perfectly effective under the critical terms match method of assessing effectiveness as follows:

- The critical terms of the debt and the cross-currency swap are identical (i.e., notional, interest rate, cash flow date)
- The fair value of the swap at inception is zero
- Hedge effectiveness will be assessed based on changes in the total fair value of the swap

The following table summarizes the spot exchange rate and the fair value of the fixed-for-fixed cross-currency swap (excluding the accrued swap interest).

Date	Spot exchange rate	Clean fair value of swap (i.e., excludes accrued interest)
January 1, 20X1	USD 0.86 = EUR 1	—
December 31, 20X1	USD 0.81 = EUR 1	(USD 50,000)

For purposes of this example, assume USA Corp only issues annual financial statements. In addition, for simplicity, interest expense (on the debt and swap) is recorded at the period-end spot rate rather than the average rate over the reporting period.

How should USA Corp account for this hedging relationship?

### *Analysis*

USA Corp would record the following entry upon the issuance of the debt on January 1, 20X1. There is no entry required to record the swap at inception of the hedge because it has a fair value of zero.

Since the hedging relationship meets the requirements for the critical terms match method of assessing effectiveness, and assuming USA Corp has monitored the hedging relationship each quarter and noted no changes, USA Corp can assume that the hedging relationship is perfectly effective.

Dr. Cash	USD 860,000	
Cr. Foreign-currency-denominated debt		USD 860,000

To record the issuance of the foreign-currency-denominated debt at the spot exchange rate at issuance of USD 0.86 = EUR 1



USA Corp would record the following entries on December 31, 20X1.

Dr. Foreign-currency-denominated debt	USD 50,000	
Cr. Foreign currency transaction gain or loss		USD 50,000
To record the transaction gain on remeasurement of the foreign currency-denominated debt (from spot exchange rate at issuance of USD 0.86 = EUR 1 to the spot exchange rate at December 31 of USD 0.81 = EUR 1)		
Dr. Interest expense	USD 64,800	
Cr. Cash		USD 64,800
To record 8% interest on foreign currency-denominated debt at the spot rate of USD 0.81 = EUR 1		
Dr. Cash	USD 4,600	
Cr. Interest expense		USD 4,600
To record the swap accrual (EUR 1,000,000 × 8% ÷ USD 0.081) - (USD 860,000 × 7%)		
Dr. Other comprehensive income	USD 50,000	
Cr. Currency-swap payable		USD 50,000
To record the change in the clean value of the currency swap		
Dr. Foreign currency transaction gain or loss	USD 50,000	
Cr. Other comprehensive income		USD 50,000
To reclassify an amount from accumulated other comprehensive income to earnings to offset the foreign currency transaction gain recorded on the debt during the period		
Dr. Foreign currency-denominated debt	USD 810,000	
Cr. Cash		USD 810,000
To record the repayment of the foreign-currency-denominated debt at the current spot rate of USD 0.81 = EUR 1		
Dr. Currency swap payable	USD 50,000	
Cr. Cash		USD 50,000
To record the principal net settlement on the currency swap at the spot rate on the settlement date		

The USD 50,000 loss on the swap offsets the USD 50,000 transaction gain on the foreign currency-denominated debt. In addition, the swap accrual reduced the total interest expense on the foreign currency-denominated debt to USD 60,200 (USD 64,800 interest expense – USD 4,600 swap accrual), which is synthetically equal to paying 7% on USD 860,000 of debt.

## 8.5 Foreign currency fair value hedges

An unrecognized firm commitment, available-for-sale debt security, or a foreign currency-denominated asset or liability (including intercompany receivables or payables) are all eligible exposures to be hedged using a foreign currency fair value hedge.

If the hedged item is an unrecognized firm commitment, the hedging instrument can be either a derivative or nonderivative instrument. For all other fair value hedges, the hedging instrument must be a derivative.

To qualify for fair value foreign currency hedge accounting, the qualifying criteria for all other fair value hedges must be met, in addition to those applicable to all foreign currency hedges (discussed in DH 8.3). The criteria applicable to all fair value hedges are discussed in DH 6.2 for financial items and DH 7.2 for nonfinancial items.

Common examples of foreign currency fair value hedges include the hedge of a foreign-currency-denominated asset or liability or unrecognized firm commitment with an unrelated party, including a firm commitment to purchase a nonfinancial asset. Question DH 8-10 illustrates this.

### Question DH 8-10

Can a reporting entity designate the change in fair value of a nonfinancial asset (e.g., inventory or fixed asset) due to changes in foreign currency rates as the hedged risk in a fair value hedge?

#### *PwC response*

No. ASC 815-20-25-12(e) requires the designated risk in a fair value hedge of a nonfinancial asset or liability to be the change in the fair value of the entire hedged asset or liability; the change in fair value due to foreign currency rates cannot be hedged separately.

#### **8.5.1 Accounting for foreign currency fair value hedges**

Foreign currency fair value hedges are accounted for in the same way as other fair value hedges under ASC 815. The hedging derivative is recorded at fair value with changes in the fair value of the derivative recorded in earnings. The change in the fair value of the hedged item due to changes in the hedged risk (or risks) is also recorded in earnings, assuming the hedging relationship is considered highly effective. If a reporting entity elects to exclude a component of the change in fair value of the hedging instrument (e.g., time value of an option) from the assessment of effectiveness, the fair value attributable to the excluded component may be recognized currently in earnings or included in OCI and amortized over the life of the hedging instrument. See DH 8.3.1.1 for information on excluding components.

When the hedged item is a foreign currency-denominated asset or liability, the reporting entity is required to remeasure it based on spot exchange rates in accordance with ASC 830. When a reporting entity hedges multiple risks, it should first adjust the carrying amount of the hedged item for changes attributable to hedged risks other than foreign currency, and then record any subsequent transaction gain or loss in accordance with ASC 830.

When a forward contract is used as the hedging instrument in a fair value hedge of a foreign currency-denominated asset or liability, there are different measurement criteria for the hedged item (based on spot rates) and the hedging derivative (based on forward rates). The gains or losses on the hedging instrument will not completely offset the losses or gains on the hedged item due to the spot-to-forward differences. This mismatch can be reduced if a reporting entity elects to exclude the spot-to-forward difference from its assessment of effectiveness and elects to recognize changes in fair value attributable to the excluded component in OCI.

When a nonderivative is used as the hedging instrument in a fair value hedge of an unrecognized firm commitment, the gain or loss recognized in earnings is the foreign currency transaction gain or loss recognized in accordance with ASC 830. This amount is calculated as the difference between (1) the spot rate at designation of the hedge (or the previous balance sheet date) and (2) the spot rate at the current reporting date. The hedging instrument itself may not be measured at fair value; other accounting literature would continue to be used to determine its carrying value.

### 8.5.2 *Foreign currency fair value hedge accounting examples*

Example DH 8-6 and Example DH 8-7 illustrate the accounting for foreign currency fair value hedges.

#### **EXAMPLE DH 8-6**

##### **Fair value hedge of a firm commitment to pay foreign currency using a nonderivative instrument as the hedging instrument**

USA Corp is a US dollar (USD) functional currency reporting entity.

In connection with the renovation of one of its plants, USA Corp enters into a firm commitment with a foreign supplier to purchase equipment for 10 million euro (EUR). The equipment is deliverable on March 31, 20X2; payment is due on June 30, 20X2.

USA Corp has a EUR 10 million receivable from a customer due June 30, 20X2.

On September 30, 20X1, USA Corp documents its designation of the receivable as the hedging instrument in a fair value hedge of foreign currency risk resulting from the firm commitment to purchase equipment in euro.

USA Corp assesses the criteria in ASC 815-20-25-84 and concludes that the hedging relationship is expected to be perfectly effective under the critical terms match method of assessing effectiveness because the critical terms of the hedging instrument (receivable) and the hedged transaction are identical (i.e., same notional, same date, same currency).

The following table summarizes the exchange rates during the hedging relationship.

<b>Date</b>	<b>Spot exchange rate</b>
September 30, 20X1	USD 0.84 = EUR 1
December 31, 20X1	USD 0.81 = EUR 1
March 31, 20X2	USD 0.79 = EUR 1
June 30, 20X2	USD 0.78 = EUR 1

The following table shows the change in the USD value of the receivable and the firm commitment.

<b>Date</b>	<b>Change in value of the receivable</b>	<b>Change in value of the firm commitment</b>
September 30, 20X1	—	—
December 31, 20X1	USD 300,000	USD 300,000
March 31, 20X2	USD 200,000	USD 200,000

June 30, 20X2

USD 100,000

USD 100,000

The equipment is placed in service on June 30, 20X2.

How should USA Corp account for this hedging relationship?

### *Analysis*

There is no entry required to record the change in fair value of the firm commitment during the period ended September 30, 20X1 because there was no change in spot rates from the time of designation.

Since the hedging relationship meets the requirements for the critical terms match method of assessing effectiveness, and assuming USA Corp has monitored the hedging relationship each quarter and noted no changes, USA Corp can assume that the hedging relationship is perfectly effective.

USA Corp would record the following entries on December 31, 20X1.

Dr. Foreign currency transaction gain or loss	USD 300,000	
Cr. Euro-denominated customer receivable		USD 300,000
To record the change in the value of the foreign currency-denominated customer receivable (hedging instrument)		
Dr. Firm commitment to buy equipment	USD 300,000	
Cr. Foreign currency transaction gain or loss		USD 300,000
To recognize the change in the firm commitment (hedged item) due to a change in the spot exchange rate		

USA Corp would record the following entries when the equipment is delivered on March 31, 20X2.

Dr. Foreign currency transaction gain or loss	USD 200,000	
Cr. Euro-denominated customer receivable		USD 200,000
To record the change in the value of the foreign currency-denominated customer receivable (hedging instrument) in the same line item as hedged item		
Dr. Firm commitment to buy equipment	USD 200,000	
Cr. Foreign currency transaction gain or loss		USD 200,000
To recognize the change in the firm commitment (hedged item) due to a change in the spot exchange rate		
Dr. Equipment	USD 8,400,000	
Cr. Firm commitment to buy equipment		USD 500,000
Cr. Account payable		USD 7,900,000
To record the receipt of the equipment on March 31, 20X2 and the related payable at the March 31, 20X2 spot rate		

USA Corp would record the following entries when the account payable is settled on June 30, 20X2.

Dr. Foreign currency transaction gain or loss	USD 100,000	
Cr. Euro-denominated customer receivable		USD 100,000
To record the change in the value of the foreign currency-denominated customer receivable in the same line item as the hedged item		
Dr. Accounts payable	USD 100,000	
Cr. Foreign currency transaction gain or loss		USD 100,000
To recognize the transaction loss on the foreign currency accounts payable		
Dr. Accounts payable	USD 7,800,000	
Dr. Cash	USD 7,800,000	
Cr. Cash		USD 7,800,000
Cr. Euro-denominated customer receivable		USD 7,800,000
To record the settlement of the account payable and customer receivable on June 30, 20X2		

### EXAMPLE DH 8-7

#### Fair value hedge of the foreign currency risk in an available-for-sale debt security

USA Corp is a US dollar (USD) functional currency reporting entity.

On September 30, 20X1, USA Corp purchases a British pound sterling (GBP)-denominated debt security for GBP 100,000 and classifies it as available for sale. On that same date, USA Corp enters into a forward contract to sell GBP 100,000 on December 31, 20X1, at the current exchange rate of USD 1.49 = GBP 1 to hedge the impact of currency fluctuations on the available-for-sale security over the next three months.

On September 30, 20X1, USA Corp designates the forward contract as a fair value hedge of the GBP-denominated debt security and decides to assess the effectiveness of the hedge based on changes in the spot exchange rate. Therefore, changes in the fair value of the available-for-sale debt security due to changes in the spot exchange rate will be recorded in earnings, along with the entire change in the fair value of the forward contract.

USA Corp assesses the criteria in ASC 815-20-25-84 and concludes that the hedging relationship is expected to be perfectly effective under the critical terms match method of assessing effectiveness as follows:

- The critical terms of the forward and the hedged transaction are identical (i.e., notional, date, currency)
- The fair value of the forward is zero at inception
- Hedge effectiveness will be assessed based on changes in the spot rate

USA Corp elects to exclude the changes in the difference between the forward rate and the spot rate from the effectiveness assessment and decides to record this change in earnings.

The following table summarizes the exchange rates and fair values of the forward contract at inception and conclusion of the hedging relationship.

Date	Spot exchange rate	Forward exchange rate to December 31, 20X1	Fair value of forward contract
September 30, 20X1	USD 1.50 = GBP 1	USD 1.49 = GBP 1	—
December 31, 20X1	USD 1.30 = GBP 1	USD 1.30 = GBP 1	USD 19,000*

\* GBP 100,000 × (USD 1.49 – USD 1.30)

The following table shows the change in the fair value of the available-for-sale debt security.

Date	Spot exchange rate	Fair value of the security (GBP)	Fair value of the security (USD)
September 30, 20X1	USD 1.50 = GBP 1	GBP 100,000	USD 150,000
December 31, 20X1	USD 1.30 = GBP 1	GBP 110,000	USD 143,000

USA Corp has a policy of segregating the impact of foreign currency risk by multiplying the opening fair value of the foreign currency-denominated security by the change in exchange rates. The purpose of this calculation is to determine what portion of any increase (or decrease) in the fair value of the security is related to change in the security price and what portion is related to changes in exchange rates. USA Corp performs this calculation as follows:

$$\text{GBP } 100,000 \times (\text{USD } 1.30 - \text{USD } 1.50) = \text{USD } 20,000 \text{ loss}$$

To calculate the change in the fair value of the available-for-sale security attributable to risks that are not hedged, USA Corp performs the following calculation:

$$(\text{GBP } 110,000 - \text{GBP } 100,000) \times \text{USD } 1.30 = \text{USD } 13,000 \text{ gain}$$

The total change in the fair value of the GBP-denominated security is USD (7,000), which comprises a USD 20,000 foreign currency loss and a USD 13,000 gain from other sources (e.g., interest rates and credit).

How should USA Corp account for this hedging relationship?

### *Analysis*

There is no entry to record the forward contract because it is an at-market forward with a fair value of zero.

Since the hedging relationship meets the requirements for the critical terms match method of assessing effectiveness, and assuming USA Corp has monitored the hedging relationship each quarter and noted no changes, USA Corp can assume that the hedging relationship is perfectly effective.

To record the purchase of the available-for-sale debt security on September 30, 20X1, USA Corp would record the following entry.

Dr. Investment in available-for-sale security	USD 150,000	
Cr. Cash		USD 150,000

To record the purchase of the available-for-sale security at the spot rate of USD 1.50 = GBP 1

USA Corp would record the following entries on December 31, 20X1.

Dr. Forward contract receivable	USD 19,000	
Cr. Gain or loss on available-for-sale securities		USD 19,000

To record the change in the fair value of the forward contract in the same line item as the hedged item

Dr. Gain or loss on available-for-sale securities	USD 20,000	
Cr. Investment in available-for-sale security		USD 20,000

To record the change in the fair value of the available-for-sale security attributable to the spot foreign currency risk being hedged

Dr. Investment in available-for-sale security	USD 13,000	
Cr. Other comprehensive income		USD 13,000

To record the change in the fair value of the available-for-sale security attributable to risks that are not hedged

Dr. Cash	USD 19,000	
Cr. Forward contract receivable		USD 19,000

To record the settlement of the forward contract at its maturity

If USA Corp had hedged the available-for-sale security for a longer period and used the critical terms match method of assessing hedge effectiveness, it would have to rebalance the hedge ratio given its policy of measuring the foreign currency gain/loss component based on the foreign currency fair value as of the beginning of each reporting period.

Some reporting entities choose to determine the gain or loss attributable to foreign currency risk based on the foreign currency cost basis. Under this approach, the foreign currency gain or loss attributable to the unrealized holding gain or loss would not be considered to be a part of the hedging relationship, which would allow the hedging relationship to be designated on a static basis.

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## 8.6 Hedges of net investments in foreign operations

The balance sheet of a foreign operation comprises dissimilar assets and liabilities with various maturities. ASC 815 provides an exception to the prohibition against hedging dissimilar assets and liabilities in a single portfolio and allows reporting entities to hedge their net investments in foreign operations. The maturity of the hedging instrument does not have to match the maturity of these

dissimilar assets and liabilities, since the investment is viewed as a single unit of account with no maturity.

### 8.6.1 *Qualifying criteria*

To qualify for net investment hedge accounting, the qualifying criteria for all other foreign currency hedges, discussed in DH 8.3, must be met. These criteria require that the party to the hedge be either (1) the operating unit that has the foreign currency exposure or (2) another member of the consolidated group that has the same functional currency as the operating unit (provided there are no intervening entities with a different functional currency).

Either a derivative or nonderivative can be the hedging instrument in a net investment hedge. Question DH 8-11, Question DH 8-12, and Question DH 8-13 illustrate this.

#### **Question DH 8-11**

USA Corp has two subsidiaries: Nikkei Corp (based in Japan) and Aussie Corp (based in Australia). The functional currency of each subsidiary is the local currency in its respective country. Aussie Corp has Japanese yen-denominated debt. Can USA Corp designate Aussie Corp's Japanese yen-denominated debt as a hedge of USA Corp's net investment in Nikkei Corp?

#### ***PwC response***

No. Since (1) USA Corp (the operating unit with the foreign currency exposure) is not a party to the hedging instrument (i.e., the Japanese yen-denominated debt) and (2) USA Corp and Aussie Corp do not have the same functional currency, the requirements in ASC 815-20-25-30 have not been met.

#### **Question DH 8-12**

Can a reporting entity designate a net investment hedge of its investment in a foreign equity method investee?

#### ***PwC response***

Yes. Although an equity method investment is not eligible to be a hedged item with respect to fair value hedges and cash flow hedges, a reporting entity may hedge the foreign currency risk of its equity method investments.

#### **Question DH 8-13**

Reporting entities that do not assert indefinite reinvestment of a net investment must recognize a deferred tax liability for any applicable foreign withholding taxes on historical earnings and profits. Since the withholding tax obligation is typically denominated in the currency of the foreign entity, does this deferred tax liability meet the definition of a financial instrument that is eligible to be designated as a hedge of a net investment in a foreign operation?

#### ***PwC response***

No. Only a nonderivative financial instrument can be designated as a hedging instrument in a net investment hedge (provided the qualifying criteria are met). A financial instrument is defined as cash,



evidence of an ownership interest in an entity, or a contract that imposes the contractual right/obligation either to (1) receive/deliver cash or another financial instrument or (2) exchange financial instruments on potentially favorable/unfavorable terms.

Because the withholding tax does not meet the definition of a financial instrument it would not qualify to be designated as a hedging instrument in a net investment hedge.

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As discussed in DH 9.9, there are two methods a reporting entity can use to assess the effectiveness of a net investment hedge: (1) based on spot rates and (2) based on forward rates. A reporting entity must document the method it chooses and consistently apply it. The forward method may not be used when the hedging instrument is a nonderivative.

Unlike fair value and cash flow hedges, ASC 815 does not prescribe specific documentation criteria for hedges of net investments in foreign operations. However, the hedge designation documentation of a net investment hedge should be prepared with the same detail as other types of hedges, which is discussed in DH 5.7. Additionally, a reporting entity should document the elections specific to net investment hedges, such as:

- Whether effectiveness will be assessed based on the beginning, ending or some other balance of the net investment
- How frequently any redesignation will be made pursuant to ASC 815-35-35-27 and Example 1 in ASC 815-35-55-1
- Whether hedge effectiveness will be assessed using the spot or forward method

#### **8.6.1.1 *Net investment hedge with a cross-currency interest rate swap***

ASC 815-20-25-71(d) clarifies that a reporting entity is not permitted to designate a cross-currency interest rate swap that has one fixed-rate leg and one floating-rate leg as the hedging instrument in a net investment hedge because such a swap includes interest rate risk and ASC 815 generally prohibits a compound derivative that involves an underlying other than foreign currency risk to be designated as the hedging instrument in a net investment hedge. However, fixed-for-fixed and floating-for-floating cross-currency interest rate swaps are permitted. A cross-currency interest rate swap that has either two floating legs or two fixed legs has a fair value that is driven primarily by changes in foreign exchange rates rather than by changes in interest rates. Therefore, foreign currency risk, rather than interest rate risk, is the dominant risk exposure in such a swap.

#### **8.6.2 *Accounting for net investment hedges***

ASC 815 requires changes in the fair value of a hedging derivative or the foreign currency transaction gain or loss on a nonderivative hedging instrument to be reported in the same manner as the related translation adjustments (i.e., recorded in CTA), except for any permitted excluded components.

As it pertains to excluded components (i.e., spot-to-forward difference) a reporting entity can elect to record the related cost in one of two ways:

- The initial value attributable to the excluded component is amortized to income over the life of the hedging instrument; any difference between the change in fair value of the hedging instrument

attributable to the excluded component and the amounts recognized in earnings is recorded in CTA.

- The change in fair value attributable to the excluded component is included in earnings over the life of the hedging instrument.

If the hedge is discontinued, the unamortized amount remains in CTA until the net investment is disposed of or substantially liquidated. See FX 8.4 for information on the disposition of a foreign entity.

### **8.6.3 Hedging gains and losses and impairment of net investment**

ASC 830-30-45-13 through ASC 830-30-45-15 provide guidance on when a reporting entity should include the CTA account balance attributable to a foreign entity in an impairment assessment. It requires a reporting entity to include the CTA balance related to any gain or loss from an effective hedge of the net investment as part of the carrying amount of the net investment when evaluating that investment for impairment. See FX 8.5 for additional information on impairment calculations that should consider CTA.

## **8.7 Hedging intercompany transactions**

Although intercompany transactions generally do not affect consolidated earnings, ASC 815 permits hedge accounting of intercompany receivables and payables denominated in a foreign currency because they create transaction gains and losses that are recognized in consolidated earnings. ASC 815 also permits hedges of forecasted intercompany foreign currency transactions. The impact of intercompany hedge accounting is not eliminated in consolidation.

Foreign currency transactions under ASC 830 result in transaction gains and losses that are recorded in earnings to reflect current exchange rates. A reporting entity may designate intercompany balances or the forecasted cash flows as the hedged item in foreign currency fair value or cash flow hedges, respectively, so long as the criteria in ASC 815 are fulfilled. Forecasted intercompany transactions (e.g., forecasted foreign currency-denominated sales to a foreign subsidiary) are also eligible for hedge accounting under ASC 815.

As with other highly effective foreign currency cash flow hedging relationships, when the hedged item is an intercompany foreign currency-denominated asset or liability, ASC 815 requires the following accounting at each reporting period:

- The hedged item is measured based on the current spot rate, as required by ASC 830, and the resulting transaction gain or loss is recorded in earnings
- The hedging instrument is measured at fair value and the entire gain or loss is initially recorded in OCI
- An amount equal to the transaction gain or loss on the hedged item is transferred from OCI to earnings to offset the transaction gain or loss recorded in earnings

Example 14 in ASC 815-30-55-86 through ASC 815-30-55-90 addresses when the amounts in accumulated other comprehensive income related to intercompany transactions should be reclassified in earnings. It concludes that for consolidated statements, the amounts in OCI should be reclassified

as earnings when the sale to an unrelated third party occurs; consolidated earnings are not affected until that time. For a hedge of the foreign currency cash flows of an intercompany purchase of inventory, the amounts accumulated in other comprehensive income would be released and included in cost of sales only when the related inventory is sold to third parties.

Question DH 8-14 and Question DH 8-15 discusses whether an intercompany hedging relationship would qualify for hedge accounting in the separate, standalone financial statements of a subsidiary and the consolidated statements of the parent.

### Question DH 8-14

USA Corp has a subsidiary, Deutsche AG, which is a euro-functional currency entity. Deutsche AG enters into a firm commitment with a third party, which results in cash inflows of British pound sterling. Deutsche AG also has an intercompany note payable to USA Corp denominated in British pound sterling. Deutsche AG designates the British pound sterling intercompany note payable as a fair value hedge of its firm commitment.

Would the hedging relationship qualify for hedge accounting in the separate, standalone financial statements of Deutsche AG?

#### *PwC response*

Yes. A nonderivative financial instrument that may give rise to a foreign currency transaction gain or loss can be designated as the hedging instrument in a fair value hedge of an unrecognized firm commitment attributable to foreign currency exchange rates. Additionally, intercompany transactions are considered external third-party transactions for the purposes of applying hedge accounting in the subsidiary's separate, standalone financial statements because those transactions are with a party external to the reporting entity in those standalone financial statements.

### Question DH 8-15

USA Corp has a subsidiary, Deutsche AG, which is a euro-functional currency entity. Deutsche AG enters into a firm commitment with a third party, which results in cash inflows of British pound sterling. Deutsche AG also has an intercompany note payable to USA Corp, denominated in British pound sterling. Deutsche AG designates the British pound sterling intercompany note payable as a fair value hedge of its firm commitment.

Would the hedging relationship qualify for hedge accounting in the consolidated financial statements of USA Corp?

No. In consolidation, the foreign currency risk has not been hedged, since the foreign currency risk relating to the transaction (i.e., the firm commitment denominated in British pound sterling) still remains within the consolidated group. Thus, hedge accounting would not be appropriate in the consolidated financial statements of USA Corp.

However, as discussed in ASC 815-20-25-60 and ASC 815-20-55-167 through ASC 815-20-55-170, the hedging relationship may qualify for hedge accounting in the consolidated financial statements if USA Corp enters into a third-party British pound sterling loan that offsets the foreign exchange exposure of the intercompany loan.

## 8.8 Treasury center hedging and intercompany derivatives

Many multinational reporting entities conduct their currency hedging from a central treasury unit to reduce the cost of risk management and improve controls over derivative execution. After entering into derivative transactions with external counterparties, the central treasury unit will enter into an intercompany derivative to transfer the hedge to the operating entity with the risk to be hedged. To allow reporting entities that use a treasury center to comply with the ASC 815-20-25-30(a) requirement that the operating entity with the foreign currency exposure be a party to the hedging instrument, ASC 815 permits intercompany derivatives to be designated as the hedging instrument in a hedge of foreign currency risk in the consolidated financial statements of the reporting entity. Because this is an exception to the overall model, an intercompany derivative cannot be designated as the hedging instrument for hedges of risk other than foreign currency risk in the consolidated financial statements.

As discussed in ASC 815-20-25-61, an intercompany derivative may be the hedging instrument in certain cash flow hedging relationships of foreign currency risk.

### ASC 815-20-25-61

An internal derivative can be a hedging instrument in a foreign currency cash flow hedge of a forecasted borrowing, purchase, or sale or an unrecognized firm commitment in the consolidated financial statements only if both of the following conditions are satisfied:

- a. From the perspective of the member of the consolidated group using the derivative instrument as a hedging instrument (the hedging affiliate), the criteria for foreign currency cash flow hedge accounting otherwise specified in this Section are satisfied.
- b. The member of the consolidated group not using the derivative instrument as a hedging instrument (the issuing affiliate) either:
  1. Enters into a derivative instrument with an unrelated third party to offset the exposure that results from that internal derivative
  2. If the conditions in paragraphs 815-20-25-62 through 25-63 are met, enters into derivative instruments with unrelated third parties that would offset, on a net basis for each foreign currency, the foreign exchange risk arising from multiple internal derivative instruments. In complying with this guidance the issuing affiliate could enter into a third-party position with neither leg of the third-party position being the issuing affiliate's functional currency to offset its exposure if the amount of the respective currencies of each leg are equivalent with respect to each other based on forward exchange rates.

Although the requirement that there be an intercompany derivative contract may seem a formality, it has important implications. For example, the gain or loss on the third-party hedging contract executed by the treasury center must be "pushed down" to the hedging unit (i.e., recorded in the foreign entity's financial statements). The intercompany derivative does not eliminate in consolidation. At the treasury center, a gain from the external derivative gets offset by the loss from the intercompany

derivative; at the hedging unit, the gain from the intercompany derivative is recorded and not eliminated in consolidation.

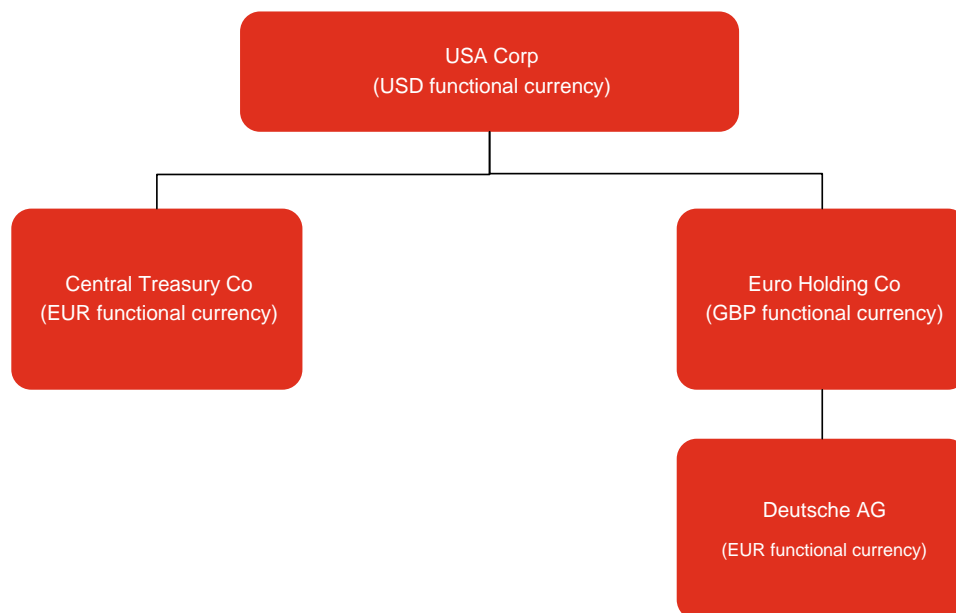
For purposes of separate, standalone company financial statements, an intercompany derivative between a subsidiary and a parent company (or another affiliated entity) would be sufficient to qualify for hedge accounting regardless of whether the parent company has entered into an offsetting contract with an outside party. An additional third-party contract is not needed in this circumstance, because a parent company is a party external to the reporting entity from the perspective of the subsidiary's standalone financial statements.

Example DH 8-8 addresses treasury center hedging of foreign currency sales of members of a consolidated group.

### EXAMPLE DH 8-8

#### Treasury center hedge of foreign-currency sales

USA Corp is a US dollar (USD) functional currency reporting entity. USA Corp has a first-tier subsidiary (Euro Holding Co) in the United Kingdom that is a British pound sterling (GBP) functional currency entity. Euro Holding Co has a second-tier subsidiary (Deutsche AG) in Germany that is a euro (EUR) functional entity. USA Corp has another first-tier subsidiary (Central Treasury Co), which is a euro functional entity. The following diagram shows the organizational structure of USA Corp.



Central Treasury Co functions as a centralized treasury center for the consolidated group.

Deutsche AG forecasts USD sales and would like to enter into a foreign currency forward contract to deliver USD and receive EUR to hedge its exposure to USD.

Can Central Treasury Co execute a forward contract with an external party to deliver USD and receive EUR and designate it as a hedge of the foreign currency risk in Deutsche AG's USD sales?

*Analysis*

Not without entering into an additional intercompany forward contract. Although Deutsche AG and Central Treasury Co are both euro-functional currency entities, Central Treasury Co cannot enter into a foreign currency hedging derivative on behalf of Deutsche AG because there is an intervening subsidiary that has a different functional currency (Euro Holding Co).

To qualify for hedge accounting, Central Treasury Co and Deutsche AG would have to enter into an intercompany forward contract under which Deutsche AG delivers USD and receives EUR and Central Treasury Co receives USD and delivers EUR. For Central Treasury Co, this intercompany forward will be offset by the forward contract that it enters into with the external party.

Deutsche AG would designate the intercompany derivative as the hedging instrument in a hedge of its USD sales. Central Treasury Co would carry both the intercompany derivative and the external forward contract at fair value through earnings (they should approximately offset each other). In the consolidated financial statements of USA Corp, the remaining hedging relationship would be Deutsche AG's hedge of its foreign currency-denominated sales.

**8.8.1 Netting of exposures on certain currency cash flow hedges**

A treasury center can aggregate intercompany derivatives executed in the same foreign currency and then enter into third-party contracts to offset the net exposure (rather than offset each intercompany derivative contract individually) by currency, provided the conditions in ASC 815-20-25-62 and ASC 815-20-25-63 are met. ASC 815 does not permit the netting of intercompany derivatives that are used in fair value hedges, net investment hedges, or cash flow hedges of recognized assets and liabilities.

**ASC 815-20-25-62**

If an issuing affiliate chooses to offset exposure arising from multiple internal derivatives on an aggregate or net basis, the derivative instruments issued to hedging affiliates shall qualify as cash flow hedges in the consolidated financial statements only if all of the following conditions are satisfied:

- a. The issuing affiliate enters into a derivative instrument with an unrelated third party to offset, on a net basis for each foreign currency, the foreign exchange risk arising from multiple internal derivatives.
- b. The derivative instrument with the unrelated third party generates equal or closely approximating gains and losses when compared with the aggregate or net losses and gains generated by the derivative instruments issued to affiliates.
- c. Internal derivatives that are not designated as hedging instruments are excluded from the determination of the foreign currency exposure on a net basis that is offset by the third-party derivative instrument. Nonderivative contracts shall not be used as hedging instruments to offset exposures arising from internal derivatives.
- d. Foreign currency exposure that is offset by a single net third-party contract arises from internal derivatives that mature within the same 31-day period and that involve the same currency exposure as the net third-party derivative instrument. The offsetting net third-party derivative instrument related to that group of contracts shall meet all of the following criteria:

1. It offsets the aggregate or net exposure to that currency.
  2. It matures within the same 31-day period.
  3. It is entered into within three business days after the designation of the internal derivatives as hedging instruments.
- e. The issuing affiliate meets both of the following conditions:
1. It tracks the exposure that it acquires from each hedging affiliate.
  2. It maintains documentation supporting linkage of each internal derivative and the offsetting aggregate or net derivative instrument with an unrelated third party.
- f. The issuing affiliate does not alter or terminate the offsetting derivative instrument with an unrelated third party unless the hedging affiliate initiates that action.

### **ASC 815-20-25-63**

If the issuing affiliate alters or terminates any offsetting third-party derivative (which should be rare), the hedging affiliate shall prospectively cease hedge accounting for the internal derivatives that are offset by that third-party derivative instrument.

For foreign currency cash flow hedges of recognized assets and liabilities, the treasury center cannot net its exposures. This prohibition raises the question of whether it is permissible to net exposures when a forecasted transaction results in the recognition of a resulting foreign currency-denominated receivable or payable (or the issuance of foreign currency debt) once the forecasted transaction has occurred. This is discussed in ASC 815-20-25-64.

### **ASC 815-20-25-64**

A member of a consolidated group cannot meet the offsetting criteria by offsetting exposures arising from multiple internal derivative contracts on a net basis for foreign currency cash flow exposures related to recognized foreign-currency-denominated assets or liabilities. That prohibition includes situations in which a recognized foreign-currency-denominated asset or liability in a fair value hedge or cash flow hedge results from the occurrence of a specifically identified forecasted transaction initially designated as a cash flow hedge.

Because of this prohibition, a reporting entity that is offsetting net exposures must stop applying hedge accounting for each intercompany derivative if and when the hedged forecasted transaction results in the acquisition of a foreign currency-denominated asset or the incurrence of a foreign currency-denominated liability. If, at that point, the hedging unit wishes to continue the cash flow hedge or initiate a fair value hedge by using an intercompany derivative, the treasury center must enter into an offsetting contract with a third party on a “one-for-one” or gross basis (i.e., without netting any other exposures).

## 8.9 *After-tax hedging of foreign currency risk*

ASC 815 permits hedging on an after-tax basis. This occurs most frequently for net investment hedges. The notional amount of the hedging instrument and designated hedged item are determined by considering the effect of taxes on the gain or loss recognized.

In net investment hedges, it is common for a US parent to hedge a foreign net investment on an after-tax basis when the parent has made a tax assertion that profits will be indefinitely reinvested and not remitted to the parent. In such a case, this tax assertion allowed the US parent to defer tax on the related CTA, and accordingly, the US parent would not provide for deferred taxes on the CTA.

For example, assume the notional amount of a hedged net investment in a foreign operation is \$1,000. Due to an assertion that the earnings of the foreign operation will be indefinitely reinvested in the foreign operation, there is no deferred tax provided on CTA. If the tax rate is 40% and the reporting entity wants to hedge on an after-tax basis, then the notional amount of the hedging instrument should be \$1,666.67 [ $\$1,000 / (1 - 40\%)$ ]. On an after-tax basis, the hedging instrument with \$1,666.67 in notional has a notional of \$1,000, matching the hedged item. In documenting the hedge, the documentation should indicate that the hedging instrument serves as a hedge on an after-tax basis.

When a net investment hedge is accounted for on an after-tax basis, gains and losses on the hedging instrument are recorded in CTA net of tax effects. This is accomplished by having the portion of the gain or loss on the hedging instrument that exceeds the loss or gain on the hedged item recorded as an offset of the related tax effects in the period that those tax effects are recognized.



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***Chapter 9:***  
***Effectiveness—updated July***  
***2022***

## **9.1 Effectiveness in hedging relationships overview**

This chapter describes the assessment of effectiveness in hedging relationships. It also discusses the methods of assessing whether a hedge was effective. It describes what assessments are required and how frequently they need to be performed. Finally, it discusses the impact of credit risk on the assessment of effectiveness.

## **9.2 Introduction to effectiveness**

To apply hedge accounting, the hedging instrument needs to be expected to be and actually shown to be highly effective in offsetting changes in fair value or cash flows of the hedged item related to the hedged risk during the period that the hedge is designated. If either is not met, hedge accounting is not permitted.

For public business entities and financial institutions, effectiveness assessments are required at hedge inception and periodically thereafter, with an assessment required whenever financial statements or earnings are reported, and at least every three months. This periodic assessment needs to be performed on both a prospective basis (to reconfirm forward-looking expectations) and a retrospective basis (to determine whether the hedging relationship was highly effective).

Hedging relationships do not have to be perfectly effective to qualify for hedge accounting. However, the extent of effectiveness in achieving the risk management objectives documented at inception of the hedging relationship must be assessed, both at inception and in each subsequent period. If the initial assessment of effectiveness demonstrates that the hedge relationship is expected to be highly effective and the other requirements to apply hedge accounting are met, a reporting entity is eligible to apply hedge accounting at inception.

In certain limited circumstances specified in ASC 815, some hedging relationships may be considered perfectly effective, and thus, reporting entities may avoid the need to assess effectiveness quantitatively, even at hedge inception. In these cases, the guidance specifically identifies criteria that will allow the derivative to be considered a perfect hedge of the hedged risk, in which case, a quantitative analysis is not required. See DH 9.3.1.

If the hedging relationship does not qualify for an assumption of perfect effectiveness, the initial assessment of effectiveness is required to be quantitative. See DH 9.11. However, if certain criteria are met, subsequent effectiveness assessments may be performed on a qualitative basis. See DH 9.12 for discussion of (ongoing) qualitative assessments of effectiveness.

### **9.2.1 Definition of highly effective**

ASC 815-20-25-75 requires an expectation that the relationship between a hedging instrument and the hedged item will be “highly effective” in achieving offsetting changes in fair value or cash flows attributable to the hedged risk during the period that the hedge is designated.

The more closely the terms of the hedged item and hedging instrument align, the more likely the hedging relationship will be considered highly effective.

Although having an expectation that the hedging relationship will be highly effective is fundamental to qualifying for hedge accounting, the term is not explicitly defined. When a quantitative effectiveness

assessment is required, the term highly effective has been interpreted in practice to mean that the change in fair value of the designated portion of the hedging instrument is within 80 to 125% of the change in the fair value of the designated portion of the hedged item attributable to the risk being hedged.

Even though qualifying hedging relationships might be highly effective, in many cases, the effectiveness will not be perfect (i.e., the gains and losses on the hedging instrument will not be perfectly offset by the losses and gains on the hedged item). High effectiveness does not guarantee that there will be no earnings volatility.

□ *Fair value hedges*

For a highly effective fair value hedge, any difference between the change in value of the derivative and the hedged item directly affects earnings since both (1) the entire change in fair value of the derivative hedging instrument and (2) the change in the fair value of the hedged item (attributable to the hedged risk) are reflected in earnings for each reporting period, and the two changes may not perfectly offset each other. For example, in a fair value hedge, if the derivative's fair value decreases by \$100, but the hedged item's fair value attributable to the hedged risk increases by \$90, a net loss of \$10 will result when gains and losses on both the derivative and the hedged item are recorded in the income statement.

□ *Cash flow hedges*

For a highly effective cash flow hedge, any difference between (1) the change in fair value of the derivative and (2) the change in fair value of the hedged cash flows attributable to the risk being hedged will not be recognized in current earnings. The entire change in fair value of the derivative is deferred in OCI and will be released to earnings when the hedged item/transaction impacts earnings. This amount may not exactly offset the earnings impact of the hedged item/transaction.

### **9.2.2 Required effectiveness assessments**

To qualify for hedge accounting, a cash flow or fair value hedging relationship must be highly effective both (1) at the inception of the hedging relationship and (2) on an ongoing basis throughout the life of the hedge. ASC 815-20-25-79 clarifies that effectiveness must be considered in two specific ways: (1) prospectively and (2) retrospectively.

The prospective assessment is forward-looking and should consider the reporting entity's expectation of whether the relationship will be highly effective over future periods in achieving offsetting changes in fair value or cash flows attributable to the hedged risk.

The retrospective assessment should consider whether the hedge was highly effective for the period ended.

Reporting entities may select a different method for performing the prospective and retrospective effectiveness assessments, as described in ASC 815-20-55-68. However, this flexibility is not often utilized in practice due to the unusual outcomes that can occur. For example, it is possible for the method used for the prospective assessment to indicate that the hedge is expected to be highly effective for future periods while the method used for the retrospective assessment demonstrates that the hedge has not been highly effective. In such a case, hedge accounting would not be allowed for the current period, but could be applied in future periods. The reverse scenario is also possible. In that

case, hedge accounting would be allowed for the current period, but could not be applied in future periods. To avoid such disparate results and to reduce the administrative burden of preparing two analyses, many reporting entities use the same method for both assessments.

### **9.2.3 *Timing of initial prospective effectiveness assessment***

Certain hedging relationships qualify for an assumption of perfect effectiveness under ASC 815-20-25-3(b)(2)(iv)(01). Under that guidance, a reporting entity's requirement to assess effectiveness at inception of the hedging relationship may be performed qualitatively; no initial quantitative assessment is required.

If the hedging relationship cannot be assumed to be perfectly effective, a reporting entity will need to perform an initial prospective effectiveness assessment quantitatively. ASC 815-20-25-3(b)(2)(iv)(02) indicates that the quantitative assessment needs to be performed by the earliest of the following:

- The first quarterly hedge effectiveness assessment date
- The date that financial statements that include the hedged transaction are available to be issued
- The date that the hedge no longer qualifies for hedge accounting
- The date of expiration, sale, termination, or exercise of the hedging instrument
- The date of dedesignation of the hedging relationship
- For a cash flow hedge of a forecasted transaction, the date that the forecasted transaction occurs

Private companies that are not financial institutions have more time to complete the initial quantitative assessment. See DH 11.3.

### **9.2.4 *Frequency of ongoing effectiveness assessments***

For public business entities and financial institutions, ongoing assessments of effectiveness are required whenever financial statements or earnings are reported, and at least as frequently as every three months. Requirements for private companies that are not financial institutions are addressed in DH 11.3.

Although an assessment of effectiveness is required at least every three months, a reporting entity may wish to, and in some cases is required to, perform this assessment more frequently (e.g., when using a dynamic hedging strategy). The designated hedge period should coincide with the rebalancing of the hedge. That requirement may be achieved through the performance of daily effectiveness assessments but, at a minimum, must support the daily or weekly frequency of rebalancing the portfolio. When initially designated, a reporting entity may not document a hedge period of monthly or quarterly if the hedge is being rebalanced on a daily or weekly basis.

### **9.2.5 *Consequence of not being highly effective in a given period***

Failing a prospective or retrospective assessment could result in unanticipated volatility to reported earnings. If a fair value hedging relationship fails to qualify for hedge accounting in a certain assessment period because it fails the retrospective assessment, the overall change in fair value of the

derivative for that period is recognized in earnings with no offset in the form of a basis adjustment to the hedged item. The same is true for the next period if the fair value hedging relationship fails the prospective assessment.

If a cash flow/net investment hedging relationship fails to qualify for hedge accounting in a certain assessment period, the change in fair value of the derivative would not be deferred through OCI/CTA for that period; instead, it would be recognized through current earnings. The same is true for the next period if the cash flow/net investment hedging relationship fails the prospective assessment.

### **9.3 *Methods of assessing effectiveness***

ASC 815-20-25 does not prescribe a specific method for assessing hedge effectiveness, but instead requires that a reasonable method based on the risk management objective and the nature of the hedging relationship be applied consistently to all similar hedges. Management should evaluate the manner in which it intends to assess hedge effectiveness because it could impact whether the hedging relationship is considered highly effective at inception and on an ongoing basis.

ASC 815-20-25-80 and ASC 815-20-25-81 require that assessments of effectiveness be reasonable and consistent with the originally documented risk management strategy. Management should also ensure that the method selected is adequately described in its hedge documentation. Failure to do so could result in the loss of hedge accounting from inception. The same effectiveness method documented at hedge inception should be used in subsequent periods, except as described in DH 9.3.5.

There may be advantages and disadvantages to different methods. Certain, more complex effectiveness methodologies may allow a hedging relationship to remain highly effective during the term of the hedge even when there are isolated periods of aberrant behavior in the underlying. As further discussed in section DH 9.11.4.1, one of the inherent disadvantages of the dollar-offset effectiveness method is that these isolated periods could result in the hedging relationship not being considered to be highly effective under this relatively straightforward approach. A more complex regression analysis, however, may not result in a similar outcome of losing hedge accounting. For example, the fact that there are multiple periods or data points included in a regression analysis would result in less weight being applied to any one particular data point, which may include the isolated period of aberrant behavior. That is, an isolated period may not have as significant an impact when it is only one of multiple data points used in a regression analysis.

To reduce the documentation burden of performing a quantitative assessment of effectiveness, ASC 815-20-25-3(b)(2)(iv)(01) permits a reporting entity to significantly reduce or eliminate its quantitative effectiveness assessments both at inception and on an ongoing basis when the hedging instrument and the hedged item are perfectly aligned as it relates to the hedged risk. In these cases, reporting entities are permitted to assume that the hedging relationship is perfectly effective.

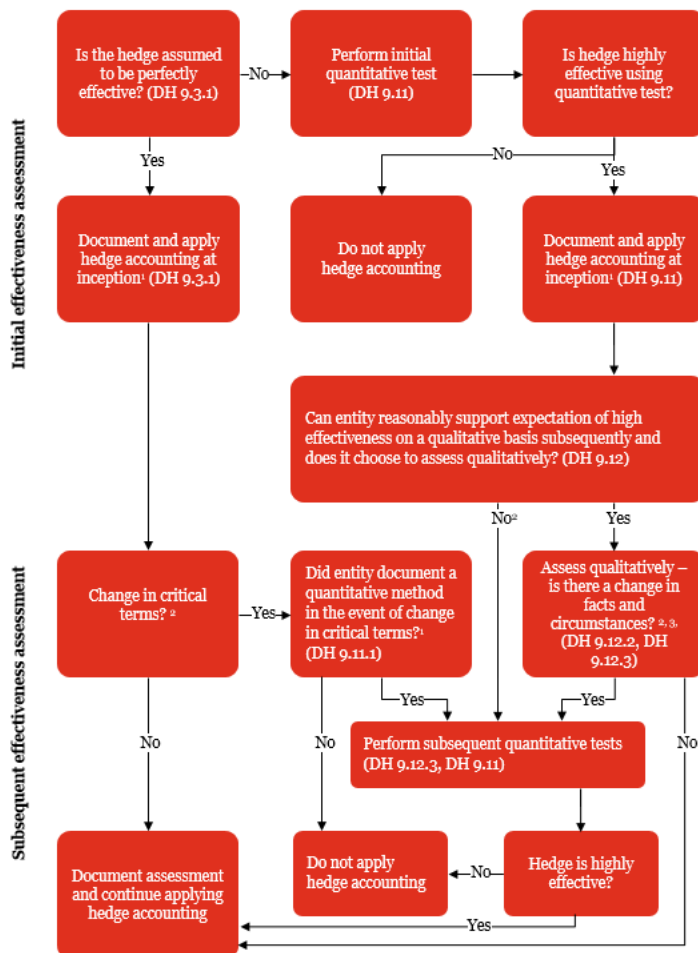
If none of the methods in ASC 815-20-25-3(b)(2)(iv)(01) are applicable, then a quantitative method (also referred to as a “long-haul” method) must be used to assess hedge effectiveness at inception of the hedging relationship and at least quarterly.

If a reporting entity performs an initial quantitative assessment, the subsequent prospective and retrospective assessments of effectiveness may be performed qualitatively if certain conditions are met. See DH 9.12.

Figure DH 9-1 summarizes the methods of assessing effectiveness both at inception and on an ongoing basis.

### Figure DH 9-1

#### Methods of assessing effectiveness – at inception and ongoing



<sup>1</sup> Assuming other qualifying criteria are met

<sup>2</sup> If there is an adverse change in the risk of default, consider the need to dedesignate the hedging relationship. Certain other changes in the critical terms may require dedesignation.

<sup>3</sup> A reporting entity may choose to perform a quantitative assessment at any time. It may then revert to a qualitative assessment subsequently if it can reasonably support an expectation of high effectiveness on a qualitative basis for subsequent periods.

#### 9.3.1 Assessing effectiveness with no initial quantitative assessment

When the critical terms of the hedging instrument and the hedged item are exactly the same as it relates to the hedged risk, ASC 815-20-25-3(b)(2)(iv)(01) provides a list of circumstances in which a reporting entity can avoid performing an initial quantitative assessment of effectiveness. In other words, the reporting entity may qualitatively assume the hedge is perfectly effective. Figure DH 9-2 describes the key information on each of these circumstances and where it is discussed in this chapter.

**Figure DH 9-2**

Instances when no initial quantitative effectiveness assessment is required if the critical terms of the hedging instrument and the hedged item are exactly the same

<b>Brief description</b>	<b>Hedged risk</b>	<b>Derivative type</b>	<b>Hedge type</b>	<b>ASC references</b>	<b>DH guide reference</b>
Shortcut method	Interest rate risk in recognized financial assets or liabilities	Interest rate swap	Fair value or cash flow	815-20-25-102 through ASC 815-20-25-117D 815-20-55-71 through ASC 815-20-55-79 815-20-55-199 through ASC 815-20-55-203	DH 9.4
Critical terms match method for forwards	Risks other than interest rate risk	Forward	Cash flow or fair value	815-20-25-84 through ASC 815-20-25-85 815-20-55-80A 815-20-35-9 through ASC 815-20-35-12 815-30-55-20 through ASC 815-30-55-23	DH 9.5
Terminal value method for options	Variability beyond or within a specified level(s)	Purchased option, net purchased option, or zero cost collar	Cash flow	815-20-25-126 through ASC 815-20-25-129A 815-20-55-208 through ASC 815-20-55-211	DH 9.6
Change in variable cash flows method	Interest rate risk	Interest rate swap	Cash flow	815-30-35-16 through ASC 815-30-35-24 815-30-55-91 through ASC 815-30-55-93A	DH 9.7
Hypothetical derivative method	All eligible risks	Any eligible type	Cash flow	815-30-35-25 through ASC 815-30-35-29 815-20-55-106 through ASC 815-20-55-110	DH 9.8 DH 9.11.3.1

<b>Brief description</b>	<b>Hedged risk</b>	<b>Derivative type</b>	<b>Hedge type</b>	<b>ASC references</b>	<b>DH guide reference</b>
Net investment hedge spot method	Foreign currency	Forwards, options, cross currency swaps	Net investment	815-35-35-5 through ASC 815-35-35-11	DH 9.9.1
				815-20-25-67 through ASC 815-20-25-71	
				815-35-35-12 through ASC 815-35-35-14 815-20-25-66	
Net investment hedge forward method	Foreign currency	Forwards, options, cross-currency swaps	Net investment	815-35-35-17 through ASC 815-35-35-26 815-20-25-67 through ASC 815-20-25-71	DH 9.9.2
Simplified hedge accounting approach (only for private companies that are not financial institutions)	Interest rate risk	Receive-variable, pay-fixed interest rate swap (including a forward-starting swap)	Cash flow	815-20-25-133 through ASC 815-20-25-138 815-20-55-79A and ASC 815-20-55-79B	DH 9.10 DH 11.2

In all cases in Figure DH 9-2, including the shortcut method, a reporting entity must assess the possibility of default by the reporting entity itself and the counterparty to the hedging instrument both at inception and on an ongoing basis, in accordance with ASC 815-20-35-10 and ASC 815-20-35-14 through ASC 815-20-35-18.

In addition, a reporting entity should perform an ongoing effectiveness assessment on at least a quarterly basis by verifying whether the critical terms of the hedging instrument or hedged item (including forecasted transactions) have changed in subsequent periods, as required by ASC 815-20-35-9 through ASC 815-20-35-13. With regard to monitoring the critical terms, a change in the counterparty in a derivative hedging instrument would not, in and of itself, be considered a change in a term that would require a dedesignation, as described in ASC 815-20-55-56A. See DH 10.2.2.2.

The reporting entity should document its assessment of the critical terms and credit risk as part of its ongoing documentation of effectiveness whenever financial statements or earnings are reported, and at least as frequently as every three months, as discussed in ASC 815-20-25-85 and ASC 815-20-35-9.



In addition, for a cash flow hedge of a forecasted transaction, the reporting entity should monitor whether the hedged cash flows remain probable of occurring and whether the timing of those expected cash flows varies from the original expected date(s).

### **9.3.2 Initial quantitative assessment of effectiveness**

If none of the methods of assuming perfect effectiveness in Figure DH 9-2 are applicable, a long-haul quantitative method must be used to assess hedge effectiveness of the hedging relationship at inception. However, even if an initial quantitative assessment is performed, the subsequent prospective and retrospective assessments of effectiveness may be performed qualitatively when certain conditions are met, as discussed in DH 9.12.

At inception of the hedging relationship, ASC 815-20-25-3(b)(2)(iv)(03) requires a reporting entity to document whether it elects to perform subsequent retrospective and prospective hedge effectiveness assessments on a qualitative basis and, if so, how it intends to carry out that qualitative assessment. That guidance also requires that the reporting entity document which quantitative method it will use if (1) facts and circumstances of the hedging relationship change and it must quantitatively assess hedge effectiveness, or (2) the entity elects to perform a quantitative assessment. The prospective quantitative method used at inception must be consistent with the prospective quantitative method used in ongoing assessments.

### **9.3.3 Excluded components**

A reporting entity may elect to exclude certain components of the change in value of the derivative from the assessment of effectiveness. This election may impact (1) the ability of a hedging relationship to qualify for an assumption of perfect effectiveness both at inception and on an ongoing basis and (2) whether a hedge will be considered highly effective.

ASC 815-20-25-82 provides guidance as to what may be excluded in a fair value or cash flow hedge.

- *For forwards and futures contracts (and swaps) when the spot method is used:*
  - The change in the fair value of the contract related to the changes in the difference between the spot price and the forward or futures price (the “forward points”)
 

Only the entire difference between the change in the total fair value of the derivative and the change in fair value due to changes in the spot rate may be excluded from the assessment of effectiveness.
- *For currency swaps:*
  - The portion of the change in fair value of a currency swap attributable to a cross-currency basis spread
- *For options (including eligible collars):*
  - Time value (the difference between the change in fair value and the change in undiscounted intrinsic value)

- Volatility value (the difference between the change in fair value and the change in discounted intrinsic or minimum value)
- Components of time value:
  - Passage of time (theta)
  - Volatility (vega)
  - Interest rates (rho)

ASC 815-20-25-83 prohibits the exclusion of any other components. For example, a reporting entity is not permitted to exclude only part of the spot-forward difference when using the spot method.

Whether a component of the gain or loss on a derivative is excluded and the mechanics of isolating the change in time value of an option when assessing effectiveness should be applied consistently for similar hedges. See DH 9.3.4.

If a reporting entity elects to exclude the spot-forward difference in a net investment hedge with a derivative as the hedging instrument in accordance with ASC 815-35-35-4, it must do so for all net investment hedges with a derivative as the hedging instrument.

Recognition of excluded components is discussed in DH 6.3.1.2 for hedges of financial instruments, DH 7.2.1.3 for hedges of nonfinancial items, and DH 8.3.1.1 for foreign currency hedges. Presentation and disclosure of excluded components is addressed in FSP 19.4.

#### **9.3.4 *Consistent use of a method of assessing effectiveness***

ASC 815-20-25-80 and ASC 815-20-25-81 require that the method(s) used to assess hedge effectiveness (including whether a component of the gain or loss on a derivative is excluded and the mechanics of isolating the change in time value of an option) be defined and documented at inception of the hedging relationship and that the method(s) be used consistently throughout the life of the hedge. The guidance also requires that a reporting entity assess hedge effectiveness for all similar hedges in a similar manner, unless a different method can be justified. If an entity chooses to record the change in excluded components currently in earnings for a fair value of cash flow hedge in accordance with ASC 815-20-25-83B, this election must be applied consistently to similar hedges.

#### **9.3.5 *Change in a method of assessing effectiveness***

A reporting entity may change the method of assessing effectiveness, but (1) it must be an improved method, and (2) it must change the method for all similar hedges.

Should a reporting entity identify and wish to apply an improved method for assessing hedge effectiveness, ASC 815-20-35-19 states that it must de-designate the existing hedging relationship and prospectively redesignate a new hedging relationship. However, as discussed in ASC 815-20-35-20 and ASC 815-20-55-55 through ASC 815-20-55-56, such a change is not considered a change in accounting principle and the wording “improved method” was not meant to imply that a change to a new method must be considered “preferable” under ASC 250-10-45-2.

The new method of assessing hedge effectiveness should be applied prospectively, and the same method should be applied to all similar hedges. A change in whether a component is excluded or the mechanics of isolating the change in time value of an option in assessing effectiveness each constitute a change in method, as indicated in ASC 815-20-25-81. Consequently, ASC 815-35-35-4 indicates that a change from the spot method to the forward method for a net investment hedge or vice versa (i.e., whether the spot-forward difference is excluded from the assessment of effectiveness) must follow the same guidance as any other change in method.

If a reporting entity chooses to change whether to exclude components from the assessment of effectiveness (e.g., changing from the spot method to the forward method), the new method must be an improved method.

## 9.4 *Shortcut method*

The shortcut method allows a reporting entity, for certain limited plain-vanilla hedging relationships, to assume that a hedge is perfectly effective without having to perform the quantitative effectiveness assessments otherwise required to apply hedge accounting either at inception or on an ongoing basis. In a fair value hedge, the shortcut method also absolves the entity from having to measure the change in value of the hedged item attributable to the hedged risk. Instead, the entire change in fair value of the derivative is considered a proxy for this amount and is used as the amount of the basis adjustment on the hedged item.

Accordingly, in this situation, a reporting entity's assessment of hedge effectiveness, as required by ASC 815-20-25-75, would involve documenting only the terms discussed in ASC 815-20-25-102 through ASC 815-20-25-117, as appropriate, for the hedging instrument and the hedged item.

Unlike the other methods described in Figure DH 9-2 that permit an assumption of perfect effectiveness, if the hedging relationship qualifies to use the shortcut method, no periodic evaluation of the critical terms is required over the life of the hedging relationship. However, if the critical terms of the hedging instrument or the hedged item change such that the hedging relationship no longer qualifies for use of the shortcut method, its application would no longer be permitted. See DH 9.4.5 regarding potential application of a quantitative effectiveness assessment method in this case.

Given the potential for recognizing a perfectly effective hedge without performing quantitative assessments of effectiveness, the application of the shortcut method is narrow in scope by design, and the qualification for use of the shortcut method should be assessed with particular rigor. Reporting entities should never analogize to the shortcut method for transactions that do not precisely meet its requirements. Even transactions that are economically perfect hedges may nevertheless fail to meet all of the requirements for use of the shortcut method.

### 9.4.1 *Fundamental considerations*

There are three fundamental criteria in ASC 815-20-25-102 to qualify for the shortcut method.

1. Interest rate risk is the only hedged risk (DH 9.4.1.1)
2. The hedging instrument is an interest rate swap (DH 9.4.1.2)
3. The hedged item is a recognized interest-bearing asset or liability (DH 9.4.1.3)

Other criteria in ASC 815-20-25-103 through ASC 815-20-25-117 are addressed in DH 9.4.2 through DH 9.4.4.4.

#### **9.4.1.1 Interest rate risk is the only hedged risk**

Interest rate risk (i.e., changes in fair value or cash flows attributable to changes in either the benchmark interest rate or the contractually specified rate) must be the only risk identified as the hedged risk. If the hedging relationship is a hedge of (1) foreign exchange and interest rate risk or (2) credit risk and interest rate risk, use of the shortcut method is not permitted.

For a fair value hedge of a fixed-rate instrument, ASC 815-20-55-71(b) requires that the designated interest rate be a benchmark interest rate, and ASC 815-20-25-105(f) requires that the index on the variable leg of the swap match the benchmark interest rate designated as the risk being hedged. For a cash flow hedge of a variable-rate instrument, ASC 815-20-55-71(bb) requires that the designated interest rate (1) be the contractually specified rate of the variable-rate financial asset or liability and (2) match the interest rate index of the variable leg of the interest rate swap.

### **Question DH 9-1**

Can the shortcut method be applied to a hedge of changes in fair value due to benchmark interest rate risk of an available-for-sale debt security with an interest rate swap?

#### ***PwC response***

Yes. Assuming that all of the relevant conditions in ASC 815-20-25-104 and ASC 815-20-25-105 are met, a reporting entity may apply the shortcut method to a fair value hedge of an available-for-sale debt security that uses an interest rate swap. This is true even though the actual change in the fair value of an available-for-sale debt security may differ from the gain or loss on the interest rate swap because the change in the fair value of the hedged item may be partly attributable to unhedged risks. For example, an available-for-sale debt security may change in value due to changes in credit risk or foreign-exchange risk, which are not the risks that are being hedged with an interest rate swap.

After applying the shortcut method in a hedge of an available-for-sale debt security, it is necessary to apply the measurement provisions of ASC 320, which require that the available-for-sale debt security be carried at its full fair value. The full fair value of the debt security is then compared to the carrying amount that resulted from applying the shortcut method (i.e., the carrying value of the available-for-sale debt security, as adjusted by the change in the fair value of the interest rate swap), and the difference between the change in the adjusted carrying value and the change in fair value is recorded through OCI. As a result, changes in fair value of the available-for-sale debt security that are attributable to risks other than interest rate risk should remain in AOCI, pursuant to ASC 320.

#### **9.4.1.2 Hedging instrument is an interest rate swap**

The shortcut method is available for hedging relationships only when the hedging instrument is an interest rate swap with a variable-rate leg indexed to either:

- a benchmark interest rate (for a fair value hedge of a fixed rate financial asset or liability), or
- the contractually specified interest rate that matches the contractually specified rate in a variable rate financial asset or liability (for a cash flow hedge).

In addition, a compound hedging instrument composed of such an interest rate swap and a mirror-image call or put option and/or, in the case of cash flow hedges, a floor or cap on the swap's variable interest rate that is comparable to the floor or cap on the variable-rate asset or liability, is also permitted in certain circumstances. However, the shortcut method cannot be used when the hedging instrument is a compound hedging instrument composed of an interest rate swap and any mirror-image features other than puts, calls, floors, or caps.

Forwards, futures, other types of swaps, options (including options to enter into a swap), forward starting swaps, and other instruments are not eligible for the shortcut method. For example, a partial-term hedge using a forward starting interest rate swap in which the term is either the middle or latter part of the contractual term of the hedged item is not eligible for the shortcut method. See further discussion on the use of the shortcut method in partial-term hedges in DH 9.4.3.1.

### **9.4.1.3 Hedging a recognized interest-bearing asset or liability**

The shortcut method is available only for fair value or cash flow hedges involving a recognized interest-bearing asset or liability (or portfolio of recognized interest-bearing assets or liabilities). The most common example of a recognized interest-bearing asset or liability is a debt security (i.e., a liability to the issuer and asset to the holder). The shortcut method is not available for forecasted or anticipated debt issuances, or other forecasted transactions, such as forecasted purchases or sales of inventory or commodities because they are not recognized interest-bearing assets or liabilities (and, in some cases, not interest rate hedges).

#### **Trade date/settlement date differences and the shortcut method**

Notwithstanding that the shortcut method is applicable only for recognized assets and liabilities, it may still be applied in certain cases when the hedged item may not be considered "recognized," i.e., when the hedging instrument is entered into on the pricing date (trade date) of the hedged item but the hedged item is not recognized until settlement date. Criteria for meeting the shortcut method requirement that the hedged item is a recognized asset or liability when it is entered into on the trade date but settles on the settlement date are as follows.

- There must be a firm commitment arising on the trade (pricing) date to purchase or issue an interest-bearing asset or liability between the reporting entity and the underwriter (i.e., the entity is obligated to borrow and the underwriters are obligated to fund the settlement of the borrowing) that contains terms with a fixed element that create a fair value exposure to interest rate risk.
- The period between the trade date and the settlement date of the debt is within the time generally established by regulations or conventions (i.e., it settles within the customary period for transactions in the marketplace or exchange in which the transaction is being executed - analogous to the "regular way" scope exception in ASC 815-10-15-15, see DH 3.2.3).
- If this issue is significant to the reporting entity because it frequently enters into fixed-rate debt instruments that are hedged using the shortcut method, appropriate disclosure is made of the policy of applying hedge accounting on the trade date, the accounting rationale, and the length of the market settlement convention.

### 9.4.2 **Detailed shortcut requirements**

In addition to the fundamental considerations in DH 9.4.1, all of the required conditions specified in ASC 815-20-25-104 through ASC 815-20-25-106 must be strictly met to qualify for use of the shortcut method.

In general, the terms of the hedged item and hedging instrument must match, including notional amounts, dates, calendar adjustments for business days for payments and fixing the variable rate, interest calculation periods, interest rate fixing and payment conventions (in arrears versus in advance), and day count convention. As it relates to the shortcut method, “match” means “match exactly.” There is no concept of “close enough” when it comes to applying the shortcut method.

In addition, as discussed in ASC 815-20-25-111 and ASC 815-20-25-122, comparable credit risk at inception is not a condition for assuming perfect effectiveness; however, implicit in the criteria for the shortcut method is the requirement that a basis exists for concluding that the hedging relationship is expected to be highly effective in achieving offsetting changes in fair values or cash flows throughout the life of the hedging relationship. Accordingly, reporting entities need to consider the likelihood of their own and the counterparty’s compliance with the contractual terms of the interest rate swap. If the likelihood that the counterparty (or the reporting entity) will not default ceases to be probable, a reporting entity would be unable to conclude that the hedging relationship in a cash flow hedge is expected to be highly effective in achieving offsetting cash flows. When using the shortcut method, a reporting entity is required to monitor hedges for adverse developments in credit risk.

#### ***SOFR considerations***

With the replacement of LIBOR, new reference rates such as the Secured Overnight Financing Rate (SOFR) are used in fixed income instruments and derivative instruments including interest rate swaps. SOFR can be computed in several different ways (in advance, in arrears, compounded, etc.) and, similar to LIBOR, term rates have developed that reference SOFR. Special consideration should be given to applying the shortcut method if entering into a hedge relationship involving a SOFR based asset or liability and/or a SOFR hedging instrument.

Qualifying for the shortcut method for cash flow hedges involving SOFR based instruments may be difficult in practice. We understand that different SOFR products may have varying calculation methodologies including calculation periods, settlement date, and reset periods. These differences in conventions may violate the criteria necessary for applying the shortcut method for cash flow hedges as discussed in this section. Consideration should also be given to the criteria in ASC 815-20-25-104(g)(2) for fair value hedges if the settlement terms on the fixed leg of a SOFR derivative do not match settlement terms of the fixed rate cash instrument being hedged.

#### 9.4.2.1 **Notional amount**

ASC 815-20-25-104(a) requires that the notional amount of the hedging instrument match the principal of the hedged item. However, the condition in ASC 815-20-25-104(a) need not be applied so literally that only a hedge of the entire debt instrument with a single interest rate swap would qualify. This criterion could be satisfied by:

- *A proportion of an interest-bearing asset or liability in a hedging relationship (in accordance with ASC 815-20-25-105(d) and ASC 815-20-25-106(e))*

- *A cash flow hedging relationship consisting of a group of forecasted transactions (interest payments) arising from a group of existing assets or liabilities in which the notional amount of the aggregated group matches the swap notional amount, in accordance with ASC 815-20-25-106(f)(1)*

ASC 815-20-25-106(f) permits the hedged item to be a group of forecasted interest payments on a group of existing interest-bearing assets or liabilities if both (1) the notional amount of the swap matches the notional amount of the aggregated group and (2) the remaining criteria to qualify for the shortcut method with respect to the interest rate swap and the individual transactions in the group are met (e.g., all the reset dates need to be identical to the interest rate swap).

- *A proportion of an interest rate swap (in accordance with ASC 815-20-25-45)*

In designating the hedging relationship, the notional amount derived from the designated proportion of the principal amount of the interest-bearing asset or liability must match the notional amount derived from the designated proportion of the notional amount of the interest rate swap.

In a fair value hedge, both the designated proportion of the swap and the designated proportion of the principal amount of the hedged item must be considered as a percentage of the total notional or principal amount, respectively, and not as a set dollar amount. For example, an interest rate swap with a notional of \$50 million could qualify for the shortcut method as a hedge of 50% of a \$100 million debt security.

However, if no proportion is specified, 100% is assumed.

Alternatively, two shortcut method hedging relationships could be created if one interest rate swap is used to hedge two items. For example, 40% of an interest rate swap with a notional amount of \$50 million could be designated against Loan A with \$20 million principal, and 60% of the interest rate swap could be designated against Loan B with \$30 million principal. In this instance, two separate hedging relationships must be documented and evaluated under the shortcut method requirements.

### Question DH 9-2

DH Corp issued fixed-rate debt with an amortizing notional amount. It executed a swap that has the same critical terms as the debt that pays LIBOR and has the same fixed interest rate and the same payment dates and maturity as the debt. Neither the swap nor the debt is prepayable. The notional amount of the swap exactly matches that of the debt, and the swap and the debt amortize on the exact same dates.

If all other requirements for the shortcut method are met, can DH Corp apply the shortcut method to this hedging relationship?

#### ***PwC response***

Yes, the shortcut method may be applied when the notional amount of the interest-bearing debt and the interest rate swap changes throughout the life of the hedge, provided that at all times the notional amount of the swap matches the principal amount of the debt (i.e., the swap has a specific amortization schedule that exactly matches that of the hedged debt).



We do not believe that ASC 815-20-25-104(a) requires that the notional amount not change. The requirement is simply that the notional amount of the swap match the principal amount of the debt at all times throughout the term of the hedging relationship.

We believe the amortization of the notional amount is a typical feature in both debt and swap agreements and does not invalidate the assumption of perfect effectiveness required by ASC 815-20-25-104(g) since the swap and the debt have the same notional amount at all times.

### Question DH 9-3

May the shortcut method be applied to a hedge of a zero-coupon bond or significantly discounted notes?

#### ***PwC response***

No. We do not believe that the shortcut method may be used for hedges of zero-coupon bonds or significantly discounted notes when the notional amount of the interest rate swap equals the proceeds received from the issuance of the zero-coupon bonds (or the deep discount notes). This is because the proceeds would be discounted relative to the principal amount. For example, an interest rate swap with a notional amount of \$80 million could not be used to match the \$80 million proceeds received from the discounted issuance of \$100 million principal zero-coupon bonds.

In addition to the notional amount of the fixed leg of the swap not matching the notional amount of the variable leg of the swap throughout the life of the hedging relationship, we believe that a hedge of a zero-coupon financial instrument would not qualify for the shortcut method because the interest rate swap contains a financing element (payments on the fixed leg of the swap are being financed).

#### **9.4.2.2 Portfolio of hedged items**

When applying the shortcut method to a portfolio of interest-bearing assets or liabilities:

- Each asset or liability in the portfolio needs to individually meet the shortcut criteria, as discussed in ASC 815-20-25-116 and ASC 815-20-25-117.
- The assets or liabilities in the portfolio should all be identical, except for the notional amounts, counterparties, the spread over the contractually specified interest rate for cash flow hedges, and the spread over the benchmark interest rate for fair value hedges of the benchmark rate component of the contractual coupon.
- The aggregate designated principal amounts of the hedged interest-bearing assets or liabilities must equal the designated notional amount of the swap.

For example, a loan with a principal amount of \$100 million and a loan with a principal amount of \$50 million could be included in the portfolio and they could be hedged by an interest rate swap with a notional amount of \$150 million.

#### **9.4.2.3 Fair value of zero**

Except as provided in ASC 815-20-25-104(b), the fair value of the interest rate swap designated in a hedging relationship under the shortcut method must always be zero at hedge inception.



**ASC 815-20-25-104(b)**

If the hedging instrument is solely an interest rate swap, the fair value of that interest rate swap at the inception of the hedging relationship must be zero, with one exception. The fair value of the swap may be other than zero at the inception of the hedging relationship only if the swap was entered into at the relationship's inception, the transaction price of the swap was zero in the entity's principal market (or most advantageous market), and the difference between 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. The guidance in the preceding sentence is applicable only to transactions considered at market (that is, transaction price is zero exclusive of commissions and other transaction costs, as discussed in 820-10-35-9B). If the hedging instrument is solely an interest rate swap that at the inception of the hedging relationship has a positive or negative fair value, but does not meet the one exception specified in this paragraph, the shortcut method shall not be used even if all other conditions are met.

Because of this requirement, it is highly unlikely that a hedging relationship could qualify for the shortcut method unless the designation is made at the inception (trade) date for the interest rate swap. Any designation after that point, even one day later, would likely result in the swap having a fair value other than zero because of market movements in interest rates and the passage of time.

ASC 820-10-35-9B indicates that an interest rate swap with a non-zero fair value at inception of the hedging relationship may still qualify for the shortcut method if the swap was entered into at the hedge's inception for a transaction price of zero and the non-zero fair value is due solely to the existence of a bid-ask spread in the reporting entity's primary market (or most advantageous market, as applicable).

A question arises as to how to apply this requirement when the swap counterparty agrees to pay brokerage or debt issuance costs on behalf of the issuer (or make any up-front payments) and includes such costs as a part of the swap agreement. This results in either (1) the fair value of the contract not being zero or (2) one or both legs of the swap being at a non-market rate. Reporting entities need to consider all such unstated rights and privileges that may have been considered in the pricing of the swap.

Reporting entities should also examine the terms of the individual instruments if they are entered into through a basket transaction. The simultaneous issuance or exchange of instruments when no cash changes hands is not a guarantee that an interest rate swap included in the transaction has a fair value of zero. The swap could be off-market in an equal and opposite amount to another instrument.

**9.4.2.4 Consistency in formula for calculating net settlements**

ASC 815-20-25-104(d) requires that the terms of the interest rate swap designated in a shortcut hedging relationship have a constant fixed interest rate component and use a consistent floating interest rate index throughout its term.

**ASC 815-20-25-104(d)**

The formula for computing net settlements under the interest rate swap is the same for each net settlement. That is, both of the following conditions are met:

1. The fixed rate is the same throughout the term.
2. The variable rate is based on the same index and includes the same constant adjustment or no adjustment. The existence of a stub period and stub rate is not a violation of the criterion in (d) that would preclude application of the shortcut method if the stub rate is the variable rate that corresponds to the length of the stub period.

There is a view that the words in ASC 815-20-25-104(d) could be interpreted as requiring that both the fixed and variable legs of the swap settle on the same dates. Under this view, any interest rate swap that had its fixed and variable legs settling on different dates, e.g., the floating leg settling quarterly and the fixed leg settling semi-annually, albeit using a constant fixed interest rate and a consistent index, would fail this condition and be ineligible for the shortcut method. We think such an approach is overly rigid. Even though cash settlements on the fixed and variable legs of the interest rate swap may not occur simultaneously, we believe that as long as the formulas for calculating both of the settlements on the fixed and variable legs do not change over the life of the swap, the criterion is met.

### ***Forward starting swaps***

A forward-starting swap will not meet the criterion in ASC 815-20-25-104(d) because the formula for computing net settlements during the forward period (when there are no settlements) will differ from the settlements that occur after the effective date of the swap (when settlements occur).

### ***Stub periods***

The existence of a shortened or stub period and stub rate (for a partial period) is not a violation of the criterion in ASC 815-20-25-104(d) if the stub rate is the variable rate that corresponds to the length of the stub period.

### ***Coupons and spreads***

While the formula for computing net settlements needs to be consistent, the coupon does not have to be identical between the fixed leg of a swap and the fixed-rate hedged item (for a fair value hedge), nor does the spread on the floating leg of the swap need to be the same as the spread on the floating-rate hedged item (for a cash flow hedge).

### **ASC 815-20-25-109**

The fixed interest rate on a hedged item need not exactly match the fixed interest rate on an interest rate swap designated as a fair value hedge. Nor does the variable interest rate on an interest-bearing asset or liability need to be the same as the variable interest rate on an interest rate swap designated as a cash flow hedge. An interest rate swap's fair value comes from its net settlements. The fixed and variable interest rates on an interest rate swap can be changed without affecting the net settlement if both are changed by the same amount. That is, an interest rate swap with a payment based on LIBOR and a receipt based on a fixed rate of 5 percent has the same net settlements and fair value as an interest rate swap with a payment based on LIBOR plus 1 percent and a receipt based on a fixed rate of 6 percent.

### ***Swap in arrears***

ASC 815-20-25-107 permits the shortcut method to be applied to a hedging relationship that involves the use of an interest rate swap in arrears, provided all of the applicable conditions are met.

In a cash flow hedge, a reporting entity would only be able to apply the shortcut method to a swap when the floating leg of the swap is reset in arrears if the interest rate on the hedged item is also calculated in arrears.

#### **9.4.2.5 Hedged item is not prepayable**

The presence of a prepayment option in an interest-bearing asset or liability would typically be expected to violate the assumption of perfect effectiveness necessary for applying the shortcut method unless a mirror-image call or put option is incorporated into the interest rate swap.

##### **Excerpt from ASC 815-20-25-104(e)**

The interest-bearing asset or liability is not prepayable, that is, able to be settled by either party before its scheduled maturity or the assumed maturity date if the hedged item is measured in accordance with paragraph 815-25-35-13B, with the following qualifications:

1. This criterion does not apply to an interest-bearing asset or liability that is prepayable solely due to an embedded call option (put option) if the hedging instrument is a compound derivative composed of an interest rate swap and a mirror-image call option (put option).

### ***Prepayment options that do not violate the criterion that the asset/liability is not prepayable***

Debt instruments may contain terms that permit either the debtor or creditor to cause the prepayment of the debt prior to maturity that would not violate the shortcut criterion that the asset/liability is not prepayable. ASC 815-20-25-113 through ASC 815-20-25-115 and ASC 815-20-55-74 through ASC 815-20-55-78 provide guidance on which provisions are considered prepayable for the purposes of applying the shortcut method. If a prepayment option will at all times be uneconomic for the party with the option to exercise, it is not considered to be prepayable when applying the shortcut method. Therefore, mirror-image prepayment options would not be required to be incorporated in the interest rate swap in this scenario to qualify for the shortcut method.

### ***Make-whole provisions***

A typical call option enables the issuer to benefit from the option's exercise by prepaying debt when a decline in market interest rates causes the fair value of the debt to rise above the option's settlement price. In contrast, a make-whole provision typically does not yield such a benefit, and, as a result, the hedge would not need a mirror-image prepayment option in the interest rate swap.

The settlement price in a make-whole provision is a variable amount that is generally determined by discounting the debt's remaining contractual cash flows at the current Treasury rate plus a small spread specified in the agreement. The specified spread is usually significantly lower than the issuer's credit spread over the Treasury rate, making the settlement amount greater than the debt's fair value.

In this way, the make-whole provision results in a premium settlement amount that penalizes the issuer.

Reporting entities should consider whether the specified spread in the make-whole provision is small enough to constitute a penalty relative to the issuer's credit spread. The greater the spread added to the discount rate to determine the settlement amount, the less cash will have to be paid, and therefore, the lower the penalty to the issuer. The lower the penalty, the more likely the option is to violate the criterion against the asset/liability being prepayable.

### ***Contingent acceleration clauses***

A contingent acceleration clause may permit the lender to accelerate the maturity of an outstanding liability only if a specified event relating to the debtor's credit risk occurs (e.g., a deterioration of credit or other change such as failure to make a timely payment, meet specific covenant ratios or a restructuring by the debtor). ASC 815-20-55-75(b) specifically states that a debt instrument that includes a contingent acceleration clause that permits acceleration of the maturity only upon the occurrence of a specified event related to the debtor's credit deterioration does not result in the debt being considered prepayable under ASC 815-20-25-104(e).

### ***Prepayment at fair value***

ASC 815-20-25-114 notes that a provision that allows either counterparty to settle an interest-bearing asset or liability at its fair value would not violate the assumption of perfect effectiveness. Therefore, even if the provisions of ASC 815-20-25-104(e) were extended to the hedging instrument, a swap prepayable at fair value would not be considered prepayable.

As a result, the existence of a fair value cancellation right in a long-term swap agreement should not, in and of itself, preclude the application of the shortcut method.

### ***Prepayment options in partial-term hedges***

When there is a prepayment (e.g., put or call) feature in a financial asset or liability that cannot be exercised until a certain point in the future, a reporting entity may choose to designate only the portion of the term of the financial asset or liability up until that prepayment date as being hedged (a partial-term hedge). In these cases, since the prepayment option only becomes exercisable at or after the end of the designated partial-term period, the reporting entity need not consider the hedged item to be prepayable during the life of the hedge.

### ***Considering only changes in the benchmark interest rate in evaluating a prepayment feature***

ASC 815-20-25-6B permits a reporting entity to only consider how changes in the benchmark interest rate affect the decision to settle the hedged item before its scheduled maturity. A reporting entity need not consider other factors (e.g., credit risk) that could affect an obligor's decision to call a debt instrument when it has the right to do so. However, this guidance does not apply when determining whether a hedged item is considered to be prepayable when applying the shortcut method. Thus, it is possible that certain prepayment features might preclude the application of the shortcut method but not have a significant impact on the assessment of effectiveness under a long-haul method.

### ***Mirror-image options***

For those interest-bearing assets and liabilities that contain an embedded put or call option or cap or floor that must be mirrored in the interest rate swap, *all* terms must match exactly, as stated in ASC 815-20-25-104(e)(2), except as discussed in DH 9.4.4.2 related to ASC 815-20-25-106(c)(2).

The terms that must match exactly include:

- Maturities
- Notification/election dates (the option notification date partially defines the term of the option, which is a key factor in determining its fair value)
- Strike prices (ASC 815-20-55-79 provides guidance on determining whether the strike price of the prepayment feature in the hedged item matches the strike price of the prepayment option in the swap)
- Notional amounts
- Timing and frequency of payments
- Dates on which the instruments may be exercised
- How premiums are paid
- Style of option (e.g., American, Bermudan, or European)

ASC 815-20-25-108 clarifies that the carrying amount of the debt has no direct impact on whether the swap contains a mirror-image option because it is economically unrelated to the amount that would be required to be paid to exercise the embedded option. Per ASC 815-20-25-108, any discount or premium, including any related deferred issuance costs, is irrelevant in determining whether the criterion in ASC 815-20-25-104(e) is met. Therefore, a swap is not permitted to contain a termination payment equal to the deferred debt issuance costs that remain unamortized on the date the option is exercised if the shortcut method is to be applied.

### **Question DH 9-4**

DH Corp issues variable-rate debt with an interest rate that resets quarterly based on three-month LIBOR plus a fixed spread. DH Corp can call the instrument at par on the quarterly interest rate reset dates.

If DH Corp hedges its exposure to changes in the benchmark interest rate with an interest rate swap that perfectly matches the debt in terms of notional amount, interest rate index, reset dates, payment dates, etc. and that may be terminated by the counterparty at fair value on the interest rate reset dates, does it qualify for the shortcut method?

### ***PwC response***

No. The debt is considered prepayable under the provisions of ASC 815-20-25-104(e) because the call provision permits the issuer to cause settlement of the debt at an amount that is potentially below the contract's fair value. Because the credit spread on the debt is not reset, the interest rate reset

provisions on the debt instrument are insufficient to ensure that the par amount would equal the fair value at the call dates.

Although the interest rate swap includes a termination option, this feature is not the mirror image of the debt's prepayment option as would be necessary to qualify for the shortcut method. Because the debt has an interest rate that resets to the index, plus a fixed spread, DH Corp will likely exercise the prepayment option only if it can refinance the borrowing at a lower credit spread. The termination option in the interest rate swap, however, is at fair value, and therefore, the swap counterparty should be indifferent as to exercising it based on movements in the issuer's credit spread. Thus, the termination option in the interest rate swap would not necessarily be exercised in a fashion that mirrors the issuer's exercise of the debt's prepayment option. Additionally, if it were exercised, DH Corp would incur the loss or receive the benefit associated with the forecasted movement in LIBOR relative to the fixed leg of the swap over its remaining term, because the swap was terminated at its fair value. However, DH Corp would not have any further exposure to interest payments for that period because the debt was extinguished at par.

Since many variable-rate financial instruments contain prepayment options, application of the shortcut method to cash flow hedging relationships is less common than fair value hedges of fixed-rate financial instruments.

While this hedging relationship may not qualify for the shortcut method, it might qualify for hedge accounting using a long-haul method, assuming that the hedged forecasted interest payments are probable of occurring. Because of the presence of the debt prepayment option, DH Corp would have to (1) assert that if it were to prepay the debt, it would immediately replace it with a similar variable-rate debt instrument, and (2) define the hedged item as the forecasted interest payments on its existing variable-rate debt or its subsequent variable-rate refinancing. Alternatively, DH Corp might decide to hedge only those interest payments from the existing debt deemed probable of occurring (i.e. before the ability to exercise the prepayment option begins).

#### **9.4.2.6 Match in the manner of payment of premium on compound instrument**

In most cases when reporting entities issue debt with embedded prepayment options (calls or puts), the premium for the options is paid as an adjustment to the interest rate on the debt. For example, if a reporting entity issues callable debt (e.g., prepayable by the issuer), the interest rate on that debt would be higher than if the reporting entity had issued non-callable debt. This is because the reporting entity purchased a call option from the investor, and is paying the premium for that option as an adjustment to the interest rate over time. In such instances, the hedging instrument in a qualifying shortcut hedging relationship may only be a compound derivative comprised of an interest rate swap and a mirror image put or call that is also paid over time (e.g., zero fair value at inception).

#### **ASC 815-20-25-104(c)**

If the hedging instrument is a compound derivative composed of an interest rate swap and mirror-image call or put option as discussed in [ASC 815-20-25-104](e), the premium for the mirror-image call or put option shall be paid or received in the same manner as the premium on the call or put option embedded in the hedged item based on the following:

1. If the implicit premium for the call or put option embedded in the hedged item is being paid principally over the life of the hedged item (through an adjustment of the interest rate), the fair

- value of the hedging instrument at the inception of the hedging relationship shall be zero (except as discussed previously in (b) regarding differing prices due to the existence of a bid-ask spread).
2. If the implicit premium for the call or put option embedded in the hedged item was principally paid at inception-acquisition (through an original issue discount or premium), the fair value of the hedging instrument at the inception of the hedging relationship shall be equal to the fair value of the mirror-image call or put option.

The only explicit exception to the ASC 815-20-25-104(b) requirement for zero fair value at inception is when the hedged interest-bearing asset or liability has an embedded put or call option. In such instances, the hedging instrument in a qualifying shortcut hedging relationship must be a compound derivative composed of an interest rate swap and a mirror-image put or call, and the premium for that option must be paid or received in the same manner as the premium for the call or put option embedded in the hedged item. Therefore, if the prepayable interest-bearing asset or liability in a shortcut method hedge is issued at a premium or discount equal to the fair value of the embedded call or put option, the interest rate swap must be issued at a rate that would result in its having an inception fair value equal to the value of its mirror-image put or call option. Consequently, in these cases, the fair value of the swap, including the mirror-image put or call, will not have a fair value of zero. While this amount may approximate the discount or premium on the hedged item, it would not be expected to be the same because of credit spread differences between the instruments. Because prepayable interest-bearing assets and liabilities are generally issued at or near their par values, the circumstances when the interest rate swap would be allowed to have a fair value other than zero are expected to be rare.

### Question DH 9-5

DH Corp issues fixed-rate debt that is callable at par at its option on specified dates.

On the date the debt is issued, DH Corp simultaneously enters into a receive-fixed, pay-variable interest rate swap that can be cancelled on the same dates that the debt is callable, at its discretion.

Can the reporting entity apply the shortcut method in this scenario?

#### ***PwC response***

No. ASC 815 indicates that the call option included in the interest rate swap is considered a mirror-image of the call option embedded in the hedged item if (1) the terms of the two call options match and (2) the reporting entity is the writer of one call option and the holder (or purchaser) of the other call option. Since DH Corp is the purchaser of both options, the transaction does not qualify for the shortcut method.

#### **9.4.2.7 Terms that do not invalidate perfect effectiveness**

The shortcut method criteria include a general requirement that no terms invalidate the assumption of perfect effectiveness.



**ASC 815-20-25-104(g)**

Any other terms in the interest-bearing financial instruments or interest rate swaps meet both of the following conditions:

1. The terms are typical of those instruments.
2. The terms do not invalidate the assumption of perfect effectiveness.

Under ASC 815-20-25-104(g), the only difference explicitly permitted in the shortcut method is a difference in counterparty credit spreads, as discussed in ASC 815-20-25-111. Any other differences in a hedging relationship should serve as an alarm that the application of the shortcut method is likely not appropriate.

The wording about terms “typical of those instruments [interest rate swaps]” suggests that any highly structured interest rate swap would violate this criterion. The challenge with this view is how to determine when a feature is non-standard, given the constant evolution in the marketplace. Such a determination requires judgment.

***Trust-preferred securities***

Trust-preferred securities often include features that allow the issuers (usually banks) to defer the payment of interest or dividends for one or more payment periods. A hedge of the interest rate risk in a trust-preferred or similar security does not qualify for the shortcut method regardless of whether (1) the swap contains a mirror-image interest or dividend deferral feature and (2) that feature affects one or both legs of the swap.

In executing a hedge, some reporting entities enter into swaps that permit the swap counterparty to defer interest payments on the fixed-rate receive leg of the swap if the issuer exercises its right to defer interest/dividend payments on its trust-preferred securities. In doing this, reporting entities believe that they have exactly matched the terms of the interest rate swap with the terms of the trust-preferred securities. However, most interest deferral features are options that would violate the provision in ASC 815-20-25-104(d) requiring the formula for computing net settlements to be the same each period (i.e., no payments in one period, a large payment the next, and so on).

Alternatively, a reporting entity may also enter into a plain-vanilla swap that does not include the mirror-image interest deferral feature. However, in a hedging relationship of trust-preferred securities with a plain-vanilla swap, the criterion in ASC 815-20-25-104(g), which requires that any other terms in the trust-preferred securities or interest rate swaps are typical of those instruments and do not invalidate the assumption of perfect effectiveness, is not met. If the issuer elects to defer interest, the trust-preferred securities will be valued like a zero-coupon bond, rather than as a current-pay, fixed-rate obligation. As a result, the duration of the bonds will differ from that of the plain-vanilla swap, thus invalidating the assumption of perfect effectiveness.

**9.4.2.8 *Late-term hedges***

Late-term hedging refers to the practice of establishing a hedging relationship after issuance of the hedged item.



When a hedging relationship satisfies all of the shortcut method criteria but the interest rate swap was executed after the acquisition or issuance of the designated recognized asset or liability, the hedging relationship can qualify for use of the shortcut method. To use the shortcut method (or hedge accounting in general) there is no explicit requirement that the swap be executed at the inception or acquisition date of the interest-bearing asset or liability that is being hedged.

### ***Measuring the hedged item using the full contractual coupon cash flows***

There is some question about whether a late hedge designated subsequent to issuance of the hedged item contains terms that invalidate the assumption of perfect effectiveness in ASC 815-20-25-104(g). Specifically, the primary concern is when measuring the hedged item using the full contractual coupon cash flows, the duration (interest rate sensitivity) of the hedged item and interest rate swap in a late hedge will differ from the duration of the hedged item and the interest rate swap that would have been executed at issuance of the hedged item. This duration difference could lead to decreased effectiveness in the late hedging relationship in comparison to the hedging relationship that would have qualified for the shortcut method at the issuance date. However, in other cases, a late hedge may not be significantly less effective (and could be more effective) than a hedging relationship that would have qualified for the shortcut method at the issuance date.

Consider, for example, a reporting entity that enters into an interest rate swap and designates it as a fair value hedge of a fixed-rate debt instrument that was issued a number of years ago. When the debt was issued (and the debt coupon was established), benchmark interest rates were 10%. In the current interest rate environment, benchmark rates are 1%. As a result, assuming the swap is transacted such that it has a fair value of zero at inception, the fair value of the swap will be more sensitive to interest rate movements than the debt.

We believe that if a reporting entity is going to utilize the shortcut method, it should ensure, at a minimum, that the hedging relationship is highly effective and would not invalidate the assumption of perfect effectiveness. One way this could be achieved is by performing a prospective effectiveness analysis on both the late hedging relationship and a hypothetical hedging relationship that would have met the requirements for the shortcut method at the issuance date of the instrument (i.e., one that is not a "late" hedge).

In this analysis, the terms of the interest rate swap in the hypothetical "at issuance" hedging relationship would mirror the terms of the interest rate swap executed in the late hedge, except that the coupon on the fixed rate leg of the interest rate swap would be adjusted so that it would have been at market at the issuance date of the instrument. The reporting entity would then compare the effectiveness of the late hedging relationship with the effectiveness of the hypothetical "at issuance" hedging relationship. If the analysis demonstrates that the late hedging relationship is as effective as the hypothetical hedging relationship (or less effective by only a de minimis amount), this would indicate that the late hedge does not invalidate the assumption of perfect effectiveness in ASC 815-20-25-104(g).

Another approach to demonstrating that the late hedge does not invalidate the assumption of perfect effectiveness is by reference to the fair value of the hedged item. If the fair value of the hedged item is at or near par, the entity may be able to conclude that the hedging relationship is as effective as it would have been at the issuance date. The reporting entity should ensure that there is robust contemporaneous documentation that includes how the shortcut criteria were met, including the quantitative evidence of "perfect effectiveness."

If the reporting entity's analysis demonstrates that the late hedge invalidates the assumption of perfect effectiveness, it should not use the shortcut method but instead should use the long-haul method.

### ***Measuring the hedged item using the benchmark component of the contractual coupon cash flows***

As an alternative to using the full contractual coupon cash flows, a reporting entity may choose to measure the hedged item based on the benchmark rate component of the contractual coupon cash flows, as discussed in DH 6.4.6.2. When hedging the benchmark rate component of the hedged item's contractual coupon in a late hedge, it will likely be easier for reporting entities to demonstrate that the hedging relationship meets the criterion in ASC 815-20-25-104(g).

Paragraph BC96 in the Basis for Conclusions of ASU 2017-12 states the Board's view on this.

#### **Excerpt from ASU 2017-12, BC96**

Given the ability to achieve perfect offset in a late-term hedge, the Board observes that its decision allows fair value hedging to be applied to late-term hedges under both the long-haul method and the shortcut method without raising a concern in paragraph 815-20-25-104(g)(2)...

### **9.4.3 *Shortcut requirements applicable to fair value hedges only***

The following are additional requirements beyond those in DH 9.4.2 for use of the shortcut method applicable to fair value hedges only.

#### **9.4.3.1 *Matched maturity dates***

The maturity of the hedged item and hedging instrument must match. ASC 815-20-25-105(a) permits application of the shortcut method to partial-term hedges if the maturity of the hedging instrument matches the assumed maturity of the hedged item in a partial-term hedge.

#### **ASC 815-20-25-105(a)**

The expiration date of the interest rate swap matches the maturity date of the interest-bearing asset or liability or the assumed maturity date if the hedged item is measured in accordance with paragraph 815-25-35-13B.

In evaluating this criterion, reporting entities should review the impact of weekend and holiday rules on this assessment. Generally, if a maturity/expiration date was scheduled to fall on a Saturday or Sunday, the terms in both instruments should provide for the same-business-day rule, such as on the subsequent business day (often referred to on trade confirmations as the "following" business day convention). Or the terms may provide for a subsequent business day unless that subsequent business day is in the next month, in which case it is the preceding business day (often referred to on the trade confirmations as the "modified following" business day convention).

#### **9.4.3.2 *Prohibition of caps and floors on the swap's floating leg***

ASC 815-20-25-105(b) requires that there be no floor or cap on the variable interest rate of the interest rate swap.

As noted in DH 9.4.2.6, ASC 815-20-25-104(c) allows the embedded puts and calls in the hedged interest-bearing asset or liability to be mirrored in the interest rate swap under the shortcut method. However, ASC 815-20-25-105(b) precludes floors, caps, and other embedded features from being included in an interest rate swap in a fair value hedge qualifying for the shortcut method because the introduction of such options would result in not all of the interest rate risk in the fixed-rate hedged item being eliminated through the hedge relationship.

#### **9.4.3.3 *Interval of resets of swap's floating leg***

Theoretically, an interest rate swap that resets continuously would be necessary to ensure that its variable leg always reflects a market rate. However, for practical reasons, ASC 815-20-25-105(c) allows the frequency of the reset to extend up to an interval of six months.

##### **ASC 815-20-25-105(c)**

The interval between repricings of the variable interest rate in the interest rate swap is frequent enough to justify an assumption that the variable payment or receipt is at a market rate (generally three to six months or less).

#### **9.4.3.4 *Swap's floating leg matches the benchmark interest rate***

The swap's floating leg must be based on a benchmark interest rate. Benchmark interest rates are discussed in DH 6.4.5.1.

#### **9.4.4 *Shortcut requirements applicable to cash flow hedges only***

Since many variable-rate financial instruments contain prepayment options, we have observed that application of the shortcut method to cash flow hedging relationships is less common than fair value hedges of fixed-rate financial instruments.

The following are additional requirements beyond those in DH 9.4.2 for use of the shortcut method applicable to cash flow hedges only. When the hedged forecasted transaction is a group of individual transactions, the criteria for applying the shortcut method must be met for each individual transaction that makes up the group, in accordance with ASC 815-20-25-106(f)(2).

##### **9.4.4.1 *The swap hedges all payments within the hedge term***

All interest receipts/payments during the term of the hedging relationship need to be designated as the hedged item, and no cash flows beyond the hedge term may be designated.

##### **ASC 815-20-25-106(a)**

All interest receipts or payments on the variable-rate asset or liability during the term of the interest rate swap are designated as hedged.

##### **ASC 815-20-25-106(b)**

No interest payments beyond the term of the interest rate swap are designated as hedged.

The inclusion of interest receipts or payments on the variable-rate asset or liability in the hedge designation that are beyond the term of the interest rate swap would result in a portion of the interest rate exposure not being hedged and thus violate the shortcut method's assumption of perfect effectiveness. An example of a cash flow hedging relationship that would violate this condition is a 24-month floating-rate debt instrument (in which all cash flows are designated as being hedged) that is hedged with a 12-month swap. Because the cash flows in the hedged item that are designated as being hedged extend beyond the cash flows on the interest rate swap, the condition in ASC 815-20-25-106(a) is not met. However, if only the first 12 months of interest payments were designated as being hedged, then the criterion in ASC 815-20-25-106(a) would be met because all interest payments on the hedged item during the term of the swap would be designated as hedged.

#### **9.4.4.2 Comparable floor or cap (or lack thereof)**

If the hedged item has a floor or cap, the interest rate swap must have a comparable floor or cap and vice versa.

##### **ASC 815-20-25-106(c)**

Either of the following conditions is met:

1. There is no floor or cap on the variable interest rate of the interest rate swap.
2. The variable-rate asset or liability has a floor or cap and the interest rate swap has a floor or cap on the variable interest rate that is comparable to the floor or cap on the variable-rate asset or liability. For the purpose of this paragraph, comparable does not necessarily mean equal. For example, if an interest rate swap's variable rate is based on LIBOR and an asset's variable rate is LIBOR plus 2 percent, a 10 percent cap on the interest rate swap would be comparable to a 12 percent cap on the asset.

It is important to understand how the interest rate terms are defined in the governing documents for the hedged item and the master agreement for the swap to determine what could happen if the underlying referenced interest rate were to become negative, even if not explicitly stated in term sheets and trade confirmations. If the hedged item or interest rate swap's terms prevent the rate from become negative, such a feature would be considered a floor.

To satisfy ASC 815-20-25-106(c), the floor or cap in the hedged interest-bearing asset or liability is not required to equal the floor or cap in the hedging instrument; rather, they must be comparable. If a swap's variable rate is LIBOR and an asset's variable rate is LIBOR plus 2%, a 10% cap on the swap would not be comparable to a 10% cap on the asset because the entity would be exposed to interest rate variability in the combination of the interest rate swap's variable-leg payments and the hedge item's cash flows when interest rates ranged from 10 to 12%. Reporting entities should also ensure that any differences between the floors or caps do not violate the assumption of perfect effectiveness in ASC 815-20-25-104(g).

#### **9.4.4.3 Matched reset and fixing dates and interest calculations**

The reset and fixing dates on the hedged item and hedging instrument must match.

**ASC 815-20-25-106(d)**

The repricing dates of the variable-rate asset or liability and the hedging instrument occur on the same dates and be calculated the same way (that is, both shall be either prospective or retrospective). If the repricing dates of the hedged item occur on the same dates as the repricing dates of the hedging instrument but the repricing calculation for the hedged item is prospective whereas the repricing calculation for hedging instrument is retrospective, those repricing dates do not match.

**ASC 815-20-25-106(f)(2)**

The remaining criteria for the shortcut method are met with respect to the interest rate swap and the individual transactions that make up the group. For example, the interest rate repricing dates for the variable-rate assets or liabilities whose interest payments are included in the group of forecasted transactions shall match (that is, be exactly the same as) the reset dates for the interest rate swap.

The interest rate and payment conventions (whether in advance or in arrears) for the floating leg of the interest rate swap and the hedged item must be the same. The day count convention, such as actual/360, must also match.

Calendar adjustments for business days for making payments, determining the interest calculation periods, and fixing the variable rate should match. Reporting entities should review the impact of weekend and holiday rules on this assessment. Generally, if a repricing date was scheduled to fall on a Saturday or Sunday, the terms in both instruments should provide for the same-business-day rule, such as on the subsequent business day (known typically as the “following” business day convention). Or the terms may provide for a subsequent business day unless that subsequent business day is in the next month, in which case it is the preceding business day (often referred to on trade confirmations as the “modified following” business day convention).

As noted in DH 9.4.2, this criterion may be difficult to achieve when entering into a hedge relationship using SOFR based derivatives and/or SOFR assets or liabilities.

**9.4.4.4 *Floating leg of swap equals contractually-specified rate***

A hedging relationship involving a financial asset or liability with a floating interest rate is eligible to be hedged with a swap with a variable leg based on the same contractually specified interest rate as the hedged item.

**ASC 815-20-25-106(g)**

The index on which the variable leg of the interest rate swap is based matches the contractually specified interest rate designated as the interest rate risk being hedged for that hedging relationship.

The contractually specified index must be an interest rate. It would not be appropriate to use an underlying that does not represent an interest rate.

**9.4.5 *Documenting a quantitative method at inception***

ASC 815-20-25-3(b)(2)(iv)(04) states that a reporting entity applying the shortcut method may elect to document at hedge inception a quantitative method to assess hedge effectiveness if the entity later

determines that the use of the shortcut method was not or no longer is appropriate.<sup>1</sup>

If a reporting entity documents a quantitative method at inception, it can apply that quantitative method at the time the entity determines that the use of the shortcut method was not or no longer is appropriate to determine (a) whether the hedging relationship was/is highly effective in the periods in which the requirements for the shortcut method were not met, and (b) the basis adjustment to the hedged item in a fair value hedge.

ASC 815-20-25-117A through ASC 815-20-25-117D describe how the quantitative method is to be used. In the period when a reporting entity determines that use of the shortcut method was not or no longer is appropriate, it can use a quantitative method without dedesignating the hedging relationship if it meets two criteria.

- It must have documented the quantitative method it would use at hedge inception.
- The hedging relationship must be highly effective under the quantitative method in all periods when the hedge did not qualify for the shortcut method. If the reporting entity is not able to identify when the hedge ceased to qualify for the shortcut method, it should perform the quantitative assessment for every period since initial designation.

In assessing effectiveness, the terms of the hedged item and hedging instrument as of the date the hedge no longer qualified for shortcut should be used. However, if the hypothetical derivative method is used in a cash flow hedge, the fair value of the hypothetical derivative should be set to zero as of the inception of the hedge.

The reporting entity should consider the error correction guidance in ASC 250, *Accounting Changes and Error Corrections*.

If the hedge would have been highly effective using the quantitative method in the periods in which the shortcut method could not be applied, the amount of the error would be the difference between the amounts recorded using the quantitative assessment and the shortcut method.

If the reporting entity documented the quantitative method, but the hedging relationship was not highly effective using that method, the hedging relationship would be considered invalid in the periods when the effectiveness assessment failed. The error would be the difference between the amount actually recorded and what would have been recorded if hedge accounting had not been applied.

#### **9.4.5.1 Failing to document a quantitative method at inception**

If a reporting entity does not document a quantitative method at hedge inception and subsequently realizes that application of the shortcut method was not appropriate, it is prohibited from retroactively identifying a quantitative method of hedge effectiveness assessment at a subsequent date. It must view the past application of hedge accounting as an error. This holds true even if the hedging relationship would have been deemed highly effective under another method of assessing effectiveness and even if it represented a perfect economic hedge. Accordingly, an incorrect application of the shortcut method results in an accounting error that must be evaluated for materiality and potential correction if the reporting entity did not document a quantitative method at inception.

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<sup>1</sup> This approach is only available for hedging relationships using the shortcut method. It is not available for other methods.

### 9.4.6 *Accounting under the shortcut method*

Under the shortcut method, the change in fair value or cash flow of the hedged interest-bearing asset or liability attributable to the hedged risk is assumed to equal the change in fair value of the interest rate swap.

ASC 815-25-55-43 and ASC 815-30-55-25 describe the specific steps that a reporting entity should take in applying the shortcut method for a fair value hedge of a fixed-rate interest-bearing liability and a cash flow hedge of a variable-rate interest-bearing asset. Reporting entities should follow comparable steps for a fair value hedge of a fixed-rate interest-bearing asset and a cash flow hedge of a variable-rate interest-bearing liability.

<b>Fair value hedge of a liability</b>	<b>Cash flow hedge of an asset</b>
a. Determine the difference between the fixed rate to be received on the interest rate swap and the fixed rate to be paid on the bonds.	Determine the difference between the variable rate to be paid on the interest rate swap and the variable rate to be received on the bonds.
b. Combine that difference with the variable rate to be paid on the interest rate swap.	Combine that difference with the fixed rate to be received on the interest rate swap.
c. Compute and recognize interest expense using that combined rate and the fixed-rate liability's principal amount. (Amortization of any purchase premium or discount on the liability also must be considered.)	Compute and recognize interest income using that combined rate and the variable-rate asset's principal amount. (Amortization of any purchase premium or discount on the asset must also be considered.)
d. Determine the fair value of the interest rate swap.	Determine the fair value of the interest rate swap.
e. Adjust the carrying amount of the interest rate swap to its fair value and adjust the carrying amount of the liability by an offsetting amount.	Adjust the carrying amount of the interest rate swap to its fair value and adjust other comprehensive income by an offsetting amount.

### 9.4.7 *Novations*

A reporting entity applying the shortcut method also needs to monitor whether the critical terms of the hedged item or interest rate swap have been amended. Per ASC 815-20-55-56, such a change in the terms of the hedged item or the interest rate swap would require a dedesignation, and thus, loss of the shortcut method.

However, per ASC 815-20-55-56A, a change in the counterparty to a derivative instrument (a novation) would not, in and of itself, be considered a change in a critical term of the hedging relationship that would warrant a dedesignation. Novations are further discussed in DH 10.2.2.2.



### 9.4.8 *Legal nature of collateral*

Collateral that is considered a legal settlement of a derivative (i.e., in a settled-to-maturity (STM) contract) would not disqualify a swap from being designated in a shortcut hedging arrangement provided that there are no other criteria for use of the shortcut method that are not met. This is true notwithstanding the fact that there may be additional payments in an STM contract not contemplated in the guidance.

See DH 1.3.2.1 for additional discussion of the legal nature of collateral.

## 9.5 *Critical terms match method for forwards*

The critical terms match method in ASC 815-20-25-84 is only available for forwards or futures contracts in hedges of commodity risk or foreign exchange risk, not interest rate risk. Hedges of interest rate risk should apply the shortcut method in DH 9.4 or one of the other methods for interest rate risk. Although there may be certain situations when a cash flow hedge of interest rate risk using an interest rate swap will be perfectly effective, a reporting entity should not apply the critical terms match method in ASC 815-20-25-84 to a cash flow hedge of interest rate exposures.

### **ASC 815-20-25-84**

If the critical terms of the hedging instrument and of the hedged item or hedged forecasted transaction are the same, the entity could conclude that changes in fair value or cash flows attributable to the risk being hedged are expected to completely offset at inception and on an ongoing basis. For example, an entity may assume that a hedge of a forecasted purchase of a commodity with a forward contract will be perfectly effective if all of the following criteria are met:

- a. The forward contract is for the purchase of the same quantity of the same commodity at the same time and location as the hedged forecasted purchase. Location differences do not need to be considered if an entity designates the variability in cash flows attributable to changes in a contractually specified component as the hedge risk and the requirements in paragraphs 815-20-25-22A through 25-22B are met.
- b. The fair value of the forward contract at inception is zero.
- c. Either of the following criteria is met:
  1. The change in the discount or premium on the forward contract is excluded from the assessment of effectiveness pursuant to paragraphs 815-20-25-81 through 25-83.
  2. The change in expected cash flows on the forecasted transaction is based on the forward price for the commodity.

ASC 815-20-25-84 points out that a hedge may be assumed to be perfectly effective when the conditions are satisfied. ASC 815-20-25-84 does not mean that a reporting entity (1) does not need to perform any assessments of effectiveness, or (2) may disregard known factors that would cause a hedge to not be perfectly effective.



However, if at inception, the critical terms of the hedging instrument and the hedged forecasted transaction are the same, a reporting entity can conclude that changes in cash flows attributable to the risk being hedged are expected to be completely offset by the hedging derivative. Therefore, the reporting entity may forego performing a quantitative effectiveness assessment in each period and instead document at the inception of the hedging relationship and on an ongoing basis throughout the hedging period that (1) the critical terms of the hedging instrument and the hedged item match (or have not changed since inception) and (2) it is probable that the counterparties to the hedging instrument and the hedged item will not default. If these two requirements are met, the entity may conclude that the hedge is perfectly effective. In that case, the change in the fair value of the components of the derivative included in the assessment of effectiveness can be viewed as a proxy for the present value of the change in cash flows attributable to the risk being hedged.

A reporting entity should document the quantitative method it will use to assess hedge effectiveness if circumstances change over the course of the hedging relationship, as discussed in ASC 815-20-35-12. Should the critical terms subsequently change and thus invalidate the assumption of perfect effectiveness, a full quantitative effectiveness assessment would be required (i.e., the long-haul method should be applied). The assessment of effectiveness to be used should the critical terms of the hedged item and hedging instrument no longer match has to be consistent with the method selected in the reporting entity's original contemporaneous hedge documentation and completely documented at hedge inception to avoid the need to dedesignate when migrating to the quantitative effectiveness assessment.

Hedge accounting would need to be discontinued if there is any change in the critical terms and the entity does not document the quantitative method to assess effectiveness in these cases. Further, should it no longer be probable that the reporting entity or the counterparty to the hedging instrument or the hedged item will not default, hedge accounting should be discontinued.

### 9.5.1 *Timing mismatches in a hedge using forwards*

While the critical terms match method requires the critical terms to match between the derivative and the hedged item or hedged forecasted transaction, ASC 815-20-25-84A permits limited differences between the maturity of the derivative and the timing of occurrence of a group of hedged forecasted transactions.

#### **ASC 815-20-25-84A**

In a cash flow hedge of a group of forecasted transactions in accordance with paragraph 815-20-25-15(a)(2), an entity may assume that the timing in which the hedged transactions are expected to occur and the maturity date of the hedging instrument match in accordance with paragraph 815-20-25-84(a) if those forecasted transactions occur and the derivative matures within the same 31-day period or fiscal month.

Based on paragraphs BC196 and BC197 in the Basis for Conclusions of ASU 2017-12, we believe the Board intended for this accommodation to only apply when the window of time specified for the hedged transactions is either 31 days or the fiscal month. For example, a reporting entity cannot apply the critical terms match method to a hedge that specifies a period extending from 31 days before the maturity of the derivative to 31 days after the maturity of the derivative as the window of time in which the group of forecasted transactions could occur (i.e., it cannot use a 62-day window).

If at inception of the hedging relationship or in any subsequent period the maturity of the derivative and the timing of occurrence of the hedged group of forecasted transactions is not or is no longer within the same 31-day period or fiscal month, the critical terms match method cannot be applied and a long-haul method must be used.

Example DH 9-1 discusses the use of critical terms match method to a hedge of a group of forecasted transactions.

### **EXAMPLE DH 9-1**

#### **Use of critical terms match method to a hedge of a group of forecasted transactions**

In November of 20X1, DH Corp, a USD functional entity, decides to hedge the first 1 million euro (EUR) of its probable euro-denominated sales transactions expected to occur during the month of March 20X2 with a forward contract to receive 1.3 million USD and pay 1 million EUR maturing on March 15, 20X2. The derivative has a fair value of zero at inception. DH Corp uses the calendar month as its fiscal month and documents March 20X2 as the 31-day period to use for purposes of comparing the maturity of the derivative and the group of hedged forecasted transactions.

Can DH Corp use the critical terms match method for the hedge?

#### *Analysis*

Yes. For purposes of assessing whether the qualifying criteria for the critical terms match method are met for a group of forecasted transactions, DH Corp may assume that the hedging derivative matures at the same time as the occurrence of the forecasted transactions since both the derivative maturity and the forecasted transactions occur within the specified 31-day period. That is, if all of the other criteria to apply hedge accounting and the critical terms match method are met, DH Corp may ignore the timing difference between the dates of expected occurrence of the hedged forecasted transactions (throughout the month of March 20X2) and the maturity date of the derivative (March 15, 20X2) since they occur within the documented 31-day period.

If in a subsequent period, DH Corp determines that the hedged forecasted transactions will not occur within the documented 31-day period (e.g., they will occur on April 1, 20X2), DH Corp could no longer apply the critical terms match method. This is because DH Corp specified the month of March 20X2 as the 31-day period (March 1 through March 31) to use to compare the maturity of the derivative to the group of hedged forecasted transactions. DH Corp should also consider whether the hedged forecasted transaction remains probable of occurring within the time period originally specified, as discussed in DH 10.4.8.1.

#### **9.5.1.1 Critical terms match method for all-in-one hedges**

The critical terms match method may be used to assess effectiveness in all-in-one hedges. As discussed in DH 7.3.4, in an all-in-one hedge, a derivative that will be gross settled is the hedging instrument in a cash flow hedge of the variability of the consideration to be paid or received in the forecasted transaction that will occur upon gross settlement of the derivative itself. In effect, the hedged item and hedging instrument are the same.

### Question DH 9-6

DH Gas Company executes an all-in-one hedge of the future purchase of natural gas because it has a firm commitment for the daily purchase of 10,000 MMBtus at a fixed price per day of \$3/MMBtus in the month of July 20x4. Can DH Gas use the critical terms match method to assess effectiveness of the all-in-one hedge?

#### *PwC response*

Yes. The hedged item (the forecasted purchase of 10,000 MMBtus per day in July 20x4) and the hedging instrument (the firm commitment) are the same transaction; therefore, the critical terms match and the criteria in ASC 815-20-25-84 are met.

## 9.6 Terminal value method for options

ASC 815-20-25-126 through ASC 815-20-25-129A discuss the assessment of effectiveness for certain cash flow hedges involving options as hedging instruments. Unlike the critical terms match method for forwards, the guidance for options can be applied to hedges of interest rate risk (and other risks, such as foreign currency and commodity price risk).

For these hedging relationships to be considered perfectly effective, all of the conditions in ASC 815-20-25-126 and ASC 815-20-25-129 must be met. If the reporting entity concludes that the hedging relationship may be considered to be perfectly effective because all of the conditions are met, it (1) does not have to assess effectiveness quantitatively and (2) should record all changes in the hedging option's fair value (including changes in the option's time value) through OCI (until the hedged item impacts earnings).

#### **Excerpt from ASC 815-20-25-126**

- a. The hedging instrument is a purchased option or a combination of only options that comprise either a net purchased option or a zero-cost collar
- b. The exposure being hedged is the variability in expected future cash flows attributed to a particular rate or price beyond (or within) a specified level (or levels)
- c. The assessment of effectiveness is documented as being based on total changes in the option's cash flows (that is, the assessment will include the hedging instrument's entire change in fair value, not just changes in intrinsic value)

#### **Excerpt from ASC 815-20-25-129**

- a. The critical terms of the hedging instrument (such as its notional amount, underlying, maturity date, and so forth) completely match the related terms of the hedged forecasted transaction (such as, the notional amount, the variable that determines the variability in cash flows, and the expected date of the hedged transaction, and so forth)
- b. The strike price (or prices) of the hedging option (or combination of options) matches the specified level (or levels) beyond (or within) which the entity's exposure is being hedged

- c. The hedging instrument's inflows (outflows) at its maturity date completely offset the present value of the change in the hedged transaction's cash flows for the risk being hedged, and
- d. The hedging instrument can be exercised only on a single date—its contractual maturity date.

If all of the conditions in ASC 815-20-25-126 are met, but any of the conditions in ASC 815-20-25-129 are not met in that not all of the critical terms match, the reporting entity would look to ASC 815-20-25-129 to determine the terms of the “perfect hypothetical derivative.” In other words, it would assess effectiveness by comparing the change in fair value of the actual hedging instrument and the change in fair value of a hypothetical hedging instrument that meets all of the criteria in ASC 815-20-25-129.

As an alternative to using the option's entire terminal value to assess effectiveness, ASC 815-20-25-83A permits a reporting entity to exclude the initial value of an excluded component from the assessment of effectiveness and to recognize the amount in earnings using a systematic and rational method over the life of the hedging instrument. For example, if a hedge does not meet the criteria to be considered perfectly effective, the reporting entity may be able to recognize the initial value of an excluded component, like the time value, using a systematic and rational method over the life of the hedging instrument. See DH 9.3.3 for discussion of excluded components.

#### **9.6.1 *Timing mismatches in a hedge using options***

While the criterion in ASC 815-20-25-129(a) is that the critical terms match between the derivative and the hedged item or hedged forecasted transaction, ASC 815-20-25-129A permits limited differences between the maturity date of the hedging instrument and the timing in which a group of hedged forecasted transactions are expected to occur.

##### **ASC 815-20-25-129A**

In a hedge of a group of forecasted transactions in accordance with paragraph 815-20-25-15(a)(2), an entity may assume that the timing in which the hedged transactions are expected to occur and the maturity date of the hedging instrument match in accordance with paragraph 815-20-25-129(a) if those forecasted transactions occur and the derivative matures within the same 31-day period or fiscal month.

Based on paragraphs BC196 and BC197 in the Basis for Conclusions of ASU 2017-12, we believe the Board intended for this accommodation to only apply when the window of time specified for the hedged transactions is either 31 days or the fiscal month. For example, a reporting entity cannot apply the critical terms match method to a hedge that specifies a period that extends from 31 days before the maturity of the derivative to 31 days after the maturity of the derivative as the window of time in which the group of forecasted transactions could occur (i.e., it cannot use a 62-day window).

If at inception of the hedging relationship, or in any subsequent period, the maturity of the derivative and the timing of occurrence of the hedged group of forecasted transactions is not or is no longer within the same 31-day period or fiscal month, a reporting entity would not be able to assume perfect effectiveness under the terminal value method for options, and a long-haul method must be used.

## 9.7 *Change-in-variable-cash-flows method*

The change-in-variable-cash-flows method under ASC 815-30-35-16 through ASC 815-30-35-24 and ASC 815-30-55-91 may be used to assess the effectiveness of a cash flow hedge that does not meet the requirements for use of the shortcut method that involves either (1) a receive-floating, pay-fixed interest rate swap designated as a hedge of the variable interest payments on an existing floating-rate liability or (2) a receive-fixed, pay-floating interest rate swap designated as a hedge of the variable interest receipts on an existing floating-rate asset.

ASC 815-30-35-14 states that the change-in-variable-cash-flows method cannot be used if the swap has a fair value that is not zero (or “somewhat near zero”) at the inception of the hedging relationship, not at the inception of the swap. Thus, if a swap with a fair value of zero at the inception of the swap was designated in a hedging relationship at any point after the inception of the swap, use of the change-in-variable-cash-flows method to that hedging relationship would be precluded because the swap’s fair value would likely have changed enough to no longer be considered somewhat near zero.

As described in ASC 815-30-35-18 through ASC 815-30-35-20, the change-in-variable-cash-flows method is applied by comparing the present value of the cumulative change in the expected future cash flows on the variable leg of the interest rate swap with the expected future interest cash flows on the variable-rate asset or liability.

### **ASC 815-30-35-18**

The change-in-variable-cash-flows method is consistent with the cash flow hedge objective of effectively offsetting the changes in the hedged cash flows attributable to the hedged risk. The method is based on the premise that only the floating-rate component of the interest rate swap provides the cash flow hedge, and any change in the interest rate swap’s fair value attributable to the fixed-rate leg is not relevant to the variability of the hedged interest payments (receipts) on the floating-rate liability (asset).

### **ASC 815-30-35-19**

An entity shall assess hedge effectiveness under this method by comparing the following amounts:

- a. The present value of the cumulative change in the expected future cash flows on the variable leg of the interest rate swap
- b. The present value of the cumulative change in the expected future interest cash flows on the variable-rate asset or liability.

### **ASC 815-30-35-20**

Because the focus of a cash flow hedge is on whether the hedging relationship achieves offsetting changes in cash flows, if the variability of the hedged cash flows of the variable-rate asset or liability is based solely on changes in a variable-rate index, the present value of the cumulative changes in expected future cash flows on both the variable-rate leg of the interest rate swap and the variable-rate asset or liability shall be calculated using the discount rates applicable to determining the fair value of the interest rate swap.

If the four conditions in ASC 815-30-35-22 are met, a reporting entity can qualitatively assess that the hedge results in perfect effectiveness and is therefore not required to quantitatively assess hedge effectiveness.

**ASC 815-30-35-22**

The change-in-variable-cash-flows method will result in a perfectly effective hedge if all of the following conditions are met:

- a. The variable-rate leg of the interest rate swap and the hedged variable cash flows of the asset or liability are based on the same interest rate index (for example, three-month London Interbank Offered Rate (LIBOR) swap rate).
- b. The interest rate reset dates applicable to the variable-rate leg of the interest rate swap and to the hedged variable cash flows of the asset or liability are the same.
- c. The hedging relationship does not contain any other basis differences (for example, if the variable leg of the interest rate swap contains a cap and the variable-rate asset or liability does not).
- d. The likelihood of the obligor not defaulting is assessed as being probable.

If any of the four criteria are not met, a quantitative assessment is needed to determine if the hedge is highly effective. See DH 9.11.

An assumption of perfect effectiveness would not be appropriate under the change-in-variable-cash-flows method for hedging relationships involving variable-rate debt and an interest rate swap that meet the four conditions if the interest payment dates on the debt and swap do not match. It would be unlikely that a mismatch of a few days related to the date cash is exchanged could cause a hedging relationship to fail to be highly effective; however, reporting entities should nevertheless acknowledge this difference in their hedge documentation and assess its potential impact on the overall effectiveness of the hedging relationship by applying a long-haul quantitative effectiveness test at inception of the hedging relationship.

As also discussed in DH 9.4.2 in the context of using the shortcut method, special consideration should be given to applying a qualitative assessment under the variable cash flow method when entering into a hedge relationship involving a SOFR based asset or liability and a SOFR hedging instrument. Qualifying for the ability to use a qualitative assessment with SOFR based instruments (without an initial quantitative assessment – see DH 9.12) may be difficult in practice. We understand that different SOFR products may have varying calculation methodologies including calculation periods, settlement dates, and reset periods. These differences in conventions may violate the criteria necessary for applying a qualitative assessment under the variable cash flow method.

Use of the change-in-variable-cash-flows method is limited to certain circumstances, such as when the fair value of the swap is zero (or “somewhat near zero”) at inception of the hedging relationship and only to hedges of interest rate risk.

## 9.8 Hypothetical derivative method

The hypothetical derivative method under ASC 815-30-35-25 through ASC 815-30-35-29 may be used to assess effectiveness for a cash flow hedge of any eligible risk (e.g. interest rate, commodity price, or foreign currency). The hypothetical derivative method can be used in the same scenarios as the change-in-variable-cash-flows method plus others. In addition, many systems are able to accommodate the hypothetical derivative method. Consequently, the hypothetical derivative method is more commonly used in practice than the change-in-variable-cash-flows method.

The hypothetical derivative method may be used for a hedging relationship of interest rate risk that does not meet the requirements for use of the shortcut method and that involves (1) a receive-floating, pay-fixed interest rate swap designated as a hedge of the variable interest payments on an existing floating-rate liability, (2) a receive-fixed, pay-floating interest rate swap designated as a hedge of the variable interest receipts on an existing floating-rate asset, or (3) cash flow hedges of the variability of future interest payments on interest bearing assets to be acquired or interest-bearing liabilities to be incurred. The interest rate swap is permitted to have embedded options (caps and floors).

If a reporting entity uses the hypothetical derivative method to assess hedge effectiveness involving an interest rate swap and determines that the terms of the hypothetical derivative exactly match the terms of the actual hedging instrument, ASC 815-20-25-3(b)(2)(iv)(01)(F) states that it does not need to perform an initial prospective quantitative effectiveness test. Instead, it may qualitatively assume the hedging relationship is perfectly effective. The perfect hypothetical derivative is a derivative that has terms that identically match the critical terms of the hedged item and has a fair value of zero at inception of the hedging relationship. However, if the terms do not exactly match, an initial quantitative assessment is needed to determine if the hedge is highly effective. See DH 9.11.

As also discussed in DH 9.4.2 in the context of using the shortcut method, special consideration should be given to applying a qualitative assessment under the hypothetical derivative method if entering into a hedge relationship using a SOFR based asset or liability and a SOFR hedging instrument. Qualifying for the qualitative assessment with SOFR based instruments (without an initial quantitative assessment – see DH 9.12) may be difficult in practice. We understand that different SOFR products may have varying calculation methodologies including calculation periods, settlement dates, and reset periods. These differences in conventions may violate the criteria necessary for applying a qualitative assessment since the terms of the hypothetical derivative may not match the actual derivative exactly.

While the hypothetical derivative method was written in the context of a cash flow hedge of forecasted interest payments with an interest rate swap, it is commonly used as a proxy for the change in the hedged cash flows attributable to the hedged risk when assessing effectiveness of other hedging strategies, such as commodity hedges or certain foreign currency hedging strategies. In these cases, the hedging relationship will not explicitly fall within the guidance that permits an assumption of perfect effectiveness under the hypothetical derivative method (see Figure DH 9-2). However, it is possible that in some cases the actual derivative will exactly match the hypothetical derivative, in which case we believe an initial quantitative assessment is not required, as indicated by ASC 815-20-25-3(b)(2)(iv)(01)(F).

Under the hypothetical derivative method, the assessment of hedge effectiveness is based on a comparison of (1) the change in fair value of the actual swap designated as the hedging instrument and (2) the change in fair value of a hypothetical swap. The hypothetical swap must have a fair value of



zero at the inception of the hedging relationship and terms that exactly match the critical terms of the floating-rate asset or liability, including the same:

- notional amount,
- repricing dates,
- index on which the variable rate is based, and
- mirror image caps and floors.

ASC 815-30-35-26 states that the hypothetical derivative would need to satisfy all of the applicable conditions in ASC 815-20-25-104 and ASC 815-20-25-106 necessary to qualify for use of the shortcut method, as described in DH 9.4, except the criterion in ASC 815-20-25-104(e), which requires that the asset or liability not be prepayable. Thus, the hypothetical interest rate swap would be expected to perfectly offset the hedged cash flows.

ASC 815-20-55-106 through ASC 815-20-55-110 provides guidance on how to determine the appropriate hypothetical derivative for variable-rate debt that is prepayable at par at each reset date. The prepayment provisions of a debt instrument should not be considered in determining the appropriate hypothetical derivative as long as (1) the debt is probable of not being prepaid or (2) it is probable that the replacement debt that would be issued has interest payments with the same relevant critical terms as the existing debt. If a reporting entity can not demonstrate that cash flows are probable of occurring, those cash flows would not be eligible to be included in a cash flow hedge.

If the actual derivative and perfectly-effective hypothetical derivative have identical terms, a reporting entity is not required to perform a quantitative assessment of effectiveness. However, if a reporting entity is hedging forecasted transactions (e.g., forecasted interest payments on the forecasted issuance/purchase of debt, or forecasted interest payments on prepayable variable-rate debt [including a future replacement if the original debt is prepaid]), we recommend that the reporting entity specify and document at the inception of the hedging relationship a long-haul approach using the hypothetical derivative method. If done properly, this will help ensure that if the terms of the hedged forecasted transactions differ from the hedging instrument subsequent to hedge inception, the reporting entity will not automatically have to dedesignate the hedging relationship because the terms of the actual and hypothetical derivatives differ.

The determination of the fair value of both the perfect hypothetical swap and the actual swap should use discount rates based on the relevant interest-rate swap curves and consider credit risk.

## **9.9 *Assessing effectiveness in net investment hedges***

In accordance with ASC 815-35-35-4, a reporting entity must make an election to use either the spot method or the forward method to assess effectiveness for derivatives that are designated as net investment hedges.

- Spot method (applies to forwards, options, cross currency swaps, and foreign-denominated nonderivatives): The change in fair value attributable to changes in the undiscounted spot rate is recorded in CTA. All other changes in fair value are treated as excluded components. See DH 8.3.1.1 for recognition guidance and DH 9.3.3 for additional information on excluded components.



The entire spot forward difference must be excluded from the assessment of effectiveness. See ASC 815-35-35-5 through ASC 815-35-35-11.

- Forward/full fair value method (applies to forwards, options, and cross-currency swaps): All changes in fair value of the derivative are recorded in CTA. No components are permitted to be excluded from the assessment of effectiveness. See ASC 815-35-35-17 through ASC 815-35-35-26.

Some reporting entities may wish to use the spot method because they believe it provides a better offset to the foreign currency translation impact in CTA from the hedged net investment (which under ASC 830 is performed using spot FX rates). However, under the spot method, the excluded component will be recognized in earnings over the life of the hedging instrument. Others may choose to use the forward method to avoid recognizing any part of the change in fair value of the derivative through earnings until the hedged net investment is sold or substantially liquidated.

As discussed in DH 9.3.3, DH 9.3.4 and ASC 815-35-35-4, a reporting entity must use the same method for all its net investment hedges in which the hedging instrument is a derivative. Use of the spot method for some derivatives designated as net investment hedges and the forward method for others is not permitted.

As discussed in DH 9.3.5 and ASC 815-35-35-4, a reporting entity that wishes to change from the spot method to the forward method of assessing effectiveness (or vice versa), must apply the same considerations regarding a method change for net investment hedges as for method changes for fair value and cash flow hedges: the new method needs to be an improved method but it need not be considered “preferable” under ASC 250.

For a nonderivative that is designated as the hedging instrument in a net investment hedge, the spot method must be used to assess effectiveness.

### **9.9.1 Net investment hedge under the spot method**

The spot method refers to excluding from the assessment of effectiveness (a) the difference between the spot price and the forward price (sometimes referred to as forward points) from a forward contract (or an eligible cross currency swap), or (b) the time value of an option that is designated as a hedging instrument in a net investment hedge, in accordance with ASC 815-20-25-82.

When the hedging derivative instrument is a cross-currency interest rate swap, it must be eligible for designation in a net investment hedge in accordance with paragraph 815-20-25-67. That is, the cross-currency interest rate swap must either be (1) a fixed-for-fixed cross-currency swap, or (2) a float-for-float cross-currency swap with the interest rates based on the same currencies in the swap and both legs resetting at the same intervals and dates. This would mean that a float-for-float cross-currency swap indexed to SOFR that resets daily and 1-month EURIBOR that resets monthly would not be eligible as a hedging instrument in a net investment hedge.

ASC 815-20-25-3(b)(2)(iv)(01)(G) states that if a reporting entity uses the spot method to assess effectiveness, it does not have to perform an initial quantitative effectiveness assessment if certain criteria are met.

For derivative hedging instruments designated as net investment hedges under the spot method, the hedge will be perfectly effective and no initial quantitative effectiveness assessment is required if the following criteria (from ASC 815-35-35-5 and ASC 815-35-35-9) are met:

- The notional amount of the derivative instrument designated as a hedge of a net investment in a foreign operation equals the portion of the net investment designated as being hedged.
- The derivative instrument's underlying exchange rate is the exchange rate between the functional currency of the hedged net investment and the investor's functional currency.
- For a float-for-float cross-currency swap, both legs must be based on comparable interest rate curves (e.g., a swap that pays foreign currency based on three-month LIBOR, and receives functional currency based on three-month commercial paper rates would not be considered perfectly effective).

For nonderivative hedging instruments (e.g., foreign-denominated debt), the net investment hedge will be perfectly effective and no initial quantitative effectiveness assessment is required if the following criteria in ASC 815-35-35-12 are met:

- The notional amount of the nonderivative instrument matches the portion of the net investment designated as being hedged.
- The nonderivative instrument is denominated in the functional currency of the hedged net investment.

For cross-currency swaps, the net gain or loss on the periodic payments are part of the excluded component.

If the reporting entity employs an after-tax hedging methodology, the reporting entity should consider the tax effects in the assessment of effectiveness, as discussed in ASC 815-35-35-26. Hedge effectiveness will need to be reconsidered in after-tax hedging strategies when tax rates change.

If the actual hedging instrument does not meet the criteria for assuming perfect effectiveness, the hedging relationship is required to be assessed using a long-haul method and the hedge item should be modelled with a hypothetical instrument that meets the criteria for the assumption of perfect effectiveness.

### **9.9.2 *Net investment hedge under the forward method***

ASC 815-35-35-4 permits reporting entities to assess effectiveness of derivatives designated in a net investment hedge using a method based on changes in forward exchange rates (the entire change in fair value). This applies to forwards, options, and cross-currency swaps. Use of the forward method is not permitted for nonderivative hedging instruments (such as foreign-denominated debt).

When the hedging derivative instrument is a cross-currency interest rate swap, it must be eligible for designation in a net investment hedge in accordance with ASC 815-20-25-67. That is, the cross-currency interest rate swap must either be (1) a fixed-for-fixed cross-currency swap, or (2) a float-for-float cross-currency swap with the interest rates based on the same currencies in the swap and the both legs resetting at the same intervals and dates. This would mean that a float for float cross currency swap indexed to SOFR that resets daily and 1 month EURIBOR that resets monthly would not be eligible to be a hedging instrument in a net investment hedge.

ASC 815-20-25-3(b)(2)(iv)(01)(H) states that that if a reporting entity uses the forward exchange rate method to assess effectiveness, it does not have to perform an initial quantitative effectiveness assessment if certain requirements are met.

For derivative hedging instruments designated as net investment hedges under the forward method, the hedge will be perfectly effective and no initial quantitative effectiveness assessment is required if the following criteria are met:

- The notional amount of the derivative instrument designated as a hedge of a net investment in a foreign operation equals the portion of the net investment designated as being hedged
- The derivative's underlying relates only to the foreign exchange rate between the functional currency of the hedged net investment and the investor's functional currency
- For a float-to-float cross currency swap, both legs must be based on comparable interest rate curves (e.g., a swap that pays foreign currency based on the three-month LIBOR, and receives functional currency based on three-month commercial paper rates would not be considered perfectly effective)

For cross currency swaps, the net gain or loss on the periodic payments is also included in CTA.

If the reporting entity employs an after-tax hedging methodology, the reporting entity should appropriately consider the tax affects in the assessment of effectiveness, as discussed in ASC 815-35-35-26. Hedge effectiveness will need to be reconsidered in after tax hedging strategies when tax rates change.

If the actual hedging instrument does not meet the criteria for the assumption of perfect effectiveness, the hedging relationship is required to be assessed using a long-haul method and the hedged item should be modelled with a hypothetical instrument that meets the criteria for perfect effectiveness.

### **9.9.3 Ongoing assessments for net investment hedges**

Reporting entities should monitor their net investment hedging relationships to ensure the hedged net investment balance is greater than the notional of the hedging instruments (adjusted for taxes if hedging after tax), the functional currency of the entity with the hedging instrument and the entity being hedged has not changed (and any intervening subsidiaries as appropriate), and that tax rates have not changed (if hedging after tax).

#### **ASC 815-35-35-27**

If an entity documents that the effectiveness of its hedge of the net investment in a foreign operation will be assessed based on the beginning balance of its net investment and the entity's net investment changes during the year, the entity shall consider the need to redesignate the hedging relationship (to indicate what the hedging instrument is and what numerical portion of the current net investment is the hedged portion) whenever financial statements or earnings are reported, and at least every three months. An entity is not required to redesignate the hedging relationship more frequently even when a significant transaction (for example, a dividend) occurs during the interim period. Example 1 (see paragraph 815-35-55-1) illustrates the application of this guidance.

A reporting entity is not required to dedesignate and redesignate the hedging relationship if (1) the only thing that has changed is the amount of equity in the hedged subsidiary, (2) that amount is still greater than the notional of the hedging instruments (adjusted for taxes if hedging after tax), and (3) the entity has specified this approach in its hedging relationship.

## **9.10 Private company simplified approach**

Certain private companies that are not financial institutions may apply a simplified hedge accounting approach to specific hedging strategies. See DH 11.2 for additional information.

## **9.11 Quantitative long-haul methods of assessing effectiveness**

When perfect effectiveness cannot be assumed, the assessment of hedge effectiveness will be more complex – an initial quantitative “long-haul” analysis of hedge effectiveness will be required.

### **9.11.1 Reasons an initial quantitative test would be needed**

There are many reasons why a hedge might not be perfectly effective, and therefore, an initial quantitative test might be required and an entity would recognize some volatility in net income during the life of the hedge (for a fair value hedge) or when the hedged item and derivative impact earnings (for a cash flow or net investment hedge).

Circumstances that may preclude a reporting entity from assuming perfect effectiveness at inception of the hedging relationship include:

- A difference between the basis of the hedging instrument and the hedged item or transaction, such as:
  - A LIBOR-based derivative versus a financial instrument with a contractually specified interest rate based on the prime rate
  - Differences in SOFR calculation methodologies between the hedged item and the derivative
  - An Australian dollar-denominated hedging instrument and a New Zealand dollar-denominated hedged item

Cross-currency hedging is broadly permissible under ASC 815-25-55-3; however, practically, it may be difficult to prove that the hedge is highly effective<sup>2</sup>.

- An aluminum-based derivative and a manufactured product whose principal raw material is aluminum, but the aluminum price component is either (1) not contractually specified or (2) is contractually specified based on a different index than the derivative

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<sup>2</sup> ASC 815-25-55-3 indicates that the use of a hedging instrument with a different underlying basis than the item or transaction being hedged is referred to as a cross hedge. The principles for assessing the effectiveness of cross-hedges illustrated in the guidance also apply to hedges involving other risks. For example, the effectiveness of a hedge of interest rate risk in which one interest rate is used as a surrogate for another would be evaluated in the same way as it is for the cross-hedge.

- Differences in the critical terms of the hedging instrument and hedged item or transaction, such as differences in the principal and notional amounts, rate reset dates, the term or maturity, or cash receipt or payment dates (beyond the 31 days or same fiscal month permitted for certain hedges per ASC 815-20-25-84A)
- Location differences between the commodity on which the derivative's underlying is based and the location of the commodity actually being purchased or sold (when hedging the total cash flows or total change in fair value)
- Hedging relationships using purchased options when the provisions of ASC 815-20-25-128 have not been utilized and time value is not excluded from the assessment of effectiveness
- Forward premiums or discounts that represent the cost of the derivative that are not excluded from the assessment of effectiveness (e.g., a foreign currency spot transaction hedged with a forward foreign exchange contract)
- When the payment dates of the hedged assets differ in a portfolio layer method hedge

Although the guidance in ASC 815-20-55-14A permits a qualitative similar assets test in a last-of-layer hedge, the assessment of effectiveness may not be able to be performed qualitatively. See DH 6.5.

- Use of different discount rates in a fair value hedge of benchmark interest rate risk when the shortcut method is not applied

For example, when designating a fair value hedge of a fixed-rate financial instrument for changes in fair value due to changes in the benchmark interest rate using an interest rate swap, the change in value of the hedged item (or benchmark component of the hedged item) attributable to changes in the benchmark interest rate must be discounted using the benchmark interest rate. However, the fair value of the swap could be impacted by other valuation adjustments (e.g., own and counterparty credit risk, using overnight index swap (OIS) or OIS-based discount rates for collateralized positions).

As a general rule, these or other mismatches in a hedging relationship should be identified in the hedge documentation and assessed as to their potential impact on effectiveness at inception and in subsequent assessments of effectiveness.

However, if an initial quantitative assessment is performed, the subsequent prospective and retrospective assessments of effectiveness may be performed qualitatively if certain conditions are met. A reporting entity may make the election either to perform subsequent effectiveness assessments qualitatively or quantitatively on a hedge-by-hedge basis.

At inception of the hedging relationship, a reporting entity is required by ASC 815-20-25-3(b)(2)(iv)(03) to document whether it elects to perform subsequent retrospective and prospective hedge effectiveness assessments on a qualitative basis and how it intends to carry out the qualitative assessment. The guidance also requires that the entity document which quantitative method it will use if the facts and circumstances of the hedging relationship change and the entity must quantitatively assess hedge effectiveness. The subsequent ongoing prospective quantitative effectiveness assessment method must be the same as the prospective quantitative effectiveness assessment method used at hedge inception.

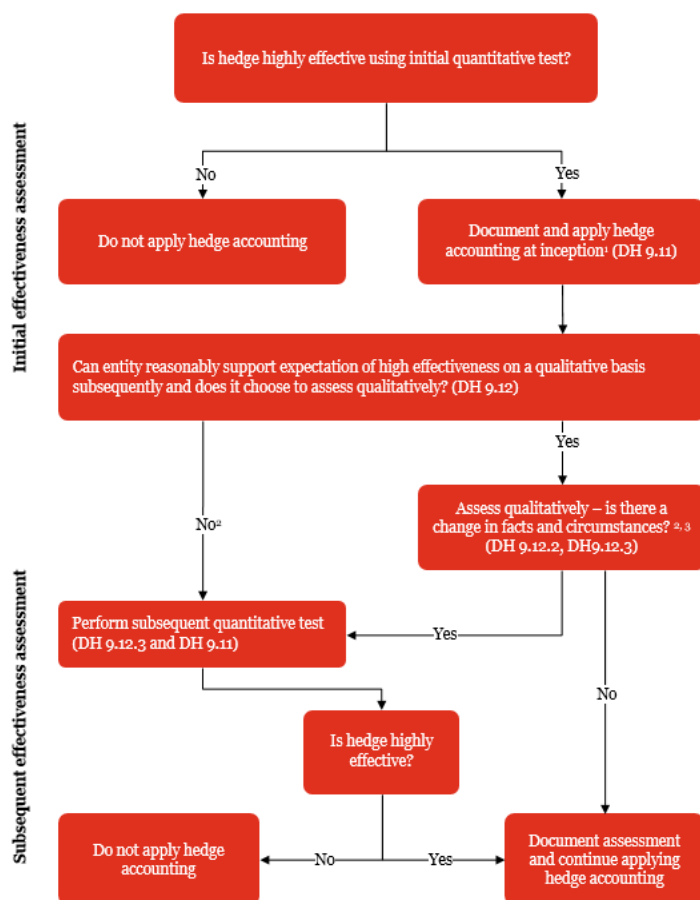
As specified in ASC 815-20-35-2A, a reporting entity may qualitatively assess hedge effectiveness after hedge inception only if it:

- performs an initial quantitative test of hedge effectiveness on a prospective basis that demonstrates that the hedging relationship is highly effective, and
- can reasonably support at hedge inception an expectation of high effectiveness on a qualitative basis in subsequent periods.

Figure DH 9-3 summarizes effectiveness requirements when the hedging relationship is not assumed to be perfectly effective (i.e., an initial quantitative test is required). It is the same as Figure DH 9-1 without the decision tree relating to an assumption of perfect effectiveness.

### Figure DH 9-3

Effectiveness requirements when hedge is not assumed to be perfectly effective



<sup>1</sup> Assuming other qualifying criteria are met

<sup>2</sup> If there is an adverse change in the risk of default, reporting entities should consider the need to dedesignate the hedging relationship.

<sup>3</sup> A reporting entity may choose to perform a quantitative assessment at any time. It may then revert to a qualitative assessment subsequently if it can reasonably support an expectation of high effectiveness on a qualitative basis for subsequent periods.

Long-haul quantitative methods commonly accepted under ASC 815-20-25-3 include dollar-offset or a statistical method, such as regression analysis. While ASC 815-20-25-79 provides for choice of method, we have observed that the general practice has been to elect a regression approach for both the required prospective testing (at inception and on an ongoing basis, as applicable) and retrospective testing (on an ongoing basis, as applicable), discussed in DH 9.2.2.

Long-haul methods are also generally available for purposes of assessing hedge effectiveness when one of the methods detailed in Figure DH 9-2 in which perfect effectiveness can be assumed (such as the shortcut method or critical terms match approach) is allowed. Because of some of the nuances in eligibility of these approaches and the consequences of incorrect application, reporting entities might want to consider application of one of the long-haul methods if they are uncertain as to whether they qualify and will continue to qualify for an assumption of perfect effectiveness.

ASC 815-25-55 and ASC 815-30-55 describe several (but not all) acceptable and unacceptable methods of assessing effectiveness for specific fair value and cash flow hedges.

In determining how effectiveness should be assessed, reporting entities should consider how they have defined the hedged risk and any excluded components (discussed in DH 9.3.3). Both the hedged risk and excluded components may have a significant impact on how the hedged item or transaction is modeled in quantitative assessments of effectiveness and the ability to qualify for qualitative subsequent testing.

### **9.11.2 Portfolio layer method hedges**

Given how the portfolio layer method (discussed in DH 6.5) works, many aspects of the effectiveness assessment will be simplified when the portfolio layer method is used.

- If the hedged item is designated using the partial-term guidance (i.e., the hedge period is for some portion of the term of the asset), the remaining term of all assets in the portfolio may be the same (as each other) for hedge accounting purposes.
- Prepayments do not need to be considered in measuring the hedged item in a portfolio layer method hedge because what is being hedged is a portion of the portfolio that will remain throughout the assumed maturity of the portfolio.

Although prepayments do not need to be considered in measuring the hedged item, differences in payment dates among the assets in the closed portfolio and the derivative hedging instrument need to be considered in the assessment of effectiveness and may invalidate the assumption of perfect effectiveness since the benchmark component of the coupon cash flows on the closed portfolio (the hedged item) and hedging instrument will differ, creating a difference in the measurement of the derivative and the hedged item in earnings. The guidance in ASC 815-20-55-14A contemplates a qualitative similar assets test but that does not mean that the assessment of effectiveness can be performed qualitatively. Additionally, if a reporting entity chooses not to use the benchmark component of the contractual cash flows, the different contractual coupon rates (if any) among the assets in the closed portfolio would need to be incorporated into the similar asset analysis and the effectiveness assessment.

### **9.11.3 Modelling hedged cash flows**

In certain situations, it may be difficult for a reporting entity to calculate the change in fair value (or



present value of cash flows) of the hedged portion of the hedged item. ASC 815 permits several methods to model the hedged cash flows.

### **9.11.3.1 Hypothetical derivative method**

When applying a quantitative method to assess effectiveness in a cash flow hedging relationship, many reporting entities determine the change in fair value of the hedged cash flows by using a perfectly effective hypothetical derivative, i.e., a derivative with terms that match those of the hedged item and would therefore represent the “perfect” derivative for the hedged risk. The reporting entity compares the change in fair value of the hypothetical derivative to the change in fair value of the hedging instrument in assessing whether the hedge is highly effective.

The term “hypothetical derivative” is used within ASC 815-30-35-25 through ASC 815-30-35-29, which provides guidance on assessing effectiveness for hedges using interest rate swaps. However, the concept of a hypothetical derivative is used more broadly in practice for cash flow hedges because it provides a basis for comparison when determining whether a hedging instrument is highly effective. A hypothetical derivative may be used for options, forwards, swaps, or other derivatives and for other exposures in addition to interest rate risk (e.g., foreign currency or commodity price risk).

The perfect hypothetical derivative is a derivative that has terms that are identical to the critical terms of the hedged item and has a fair value of zero at inception of the hedging relationship. As indicated in ASC 815-20-55-108 through ASC 815-20-55-109, if an entity uses the hypothetical derivative method and determines that the terms of the hypothetical derivative exactly match the terms of the actual hedging instrument, the actual swap would be expected to perfectly offset the hedged cash flows. In these cases, we do not believe an initial quantitative assessment test is required, based on the guidance in ASC 815-20-25-3(b)(2)(iv)(01)(F).

We recommend that the reporting entity still specify and document at inception of the hedging relationship a long-haul approach using the hypothetical derivative method to ensure that if the terms of the forecasted transaction change, the reporting entity will not automatically have to dedesignate the hedging relationship because the terms of the actual and hypothetical derivatives differ. Under this approach, the reporting entity could document that an initial quantitative test was not required since the actual derivative was equal to the hypothetical derivative. However, if the terms do not exactly match, a quantitative assessment is needed to determine if the hedge is effective.

The determination of the fair value of both the perfect hypothetical derivative and the actual derivative should use discount rates based on the relevant swap curves.

In some cases, use of the hypothetical derivative method to assess effectiveness is required, including:

- Cash flow hedges with options when effectiveness is based on terminal value (see ASC 815-30-35-33 and ASC 815-30-35-34)
- Net investment hedges using the spot method (see ASC 815-35-35-10 and ASC 815-35-35-11)
- Net investment hedges using nonderivatives (see ASC 815-35-35-14)
- Net investment hedges using the forward method (see ASC 815-35-35-19 through ASC 815-35-35-21)



For net investment hedges, ASC 815-35-35-11, ASC 815-35-35-14, ASC 815-35-35-19, and ASC 815-35-35-20 specify that the hypothetical instrument used to assess hedge effectiveness should have a maturity and repricing and payment frequencies for any interim payments that match those in the actual designated hedging instrument in the net investment hedge.

### **9.11.3.2 *Change-in-variable-cash-flows method***

A reporting entity may also use the change-in-variable-cash-flows method to assess effectiveness of a cash flow hedge in certain circumstances. See DH 9.7 for more information.

### **9.11.3.3 *Change-in-fair-value method***

When applying a quantitative method to assess effectiveness in a cash flow hedging relationship, reporting entities may also determine the change in fair value of the hedged cash flows by using the change-in-fair-value method, discussed in ASC 815-30-35-31.

Under the change-in-fair-value method, the assessment of hedge effectiveness is based on a calculation that compares the present value of (1) the cumulative change in expected variable future cash flows that are designated as the hedged transactions and (2) the cumulative change in the fair value of the derivative hedging instrument. The present values of the cumulative changes in the hedged cash flows should be discounted by the rate used to determine the fair value of the swap.

An entity must also assess the risk of counterparty default as required by ASC 815-20-25-122. If the likelihood of the obligor defaulting is assessed as being probable, the hedging relationship would not qualify for hedge accounting.

### **9.11.4 *Quantitative methods of assessing effectiveness***

The most common quantitative methods for assessing hedge effectiveness are dollar-offset and regression analysis, but other methods may also be appropriate.

#### **9.11.4.1 *Dollar-offset analysis***

The dollar-offset method compares the change in fair value or present value of cash flows of the hedging instrument to the changes in the fair value or present value of cash flows of the hedged item. The dollar-offset method can be used in performing the prospective and/or the retrospective assessments of effectiveness. This is supported by ASC 815-20-35-12.

#### **Excerpt from ASC 815-20-35-12**

... the entity must assess whether the hedging relationship is expected to continue to be highly effective using a quantitative assessment method (either a dollar-offset test or a statistical method such as regression analysis).

As discussed in ASC 815-20-35-5, there are two permissible methods for retrospective assessments of effectiveness under a dollar-offset approach: (1) the discrete (or period-by-period) approach and (2) the cumulative approach. As their names imply, the discrete method computes an effectiveness ratio based on the changes occurring in the period being assessed, while the cumulative method computes an effectiveness ratio based on the cumulative change since inception of the hedge.

Figure DH 9-4 illustrates the discrete and cumulative approaches.

**Figure DH 9-4**  
Dollar offset: discrete and cumulative approaches

<b>Dollar-offset analysis</b>						
End of	Derivative	Change <sup>1</sup>	Hedged item	Change <sup>2</sup>	Discrete	Cumulative
Inception	\$0	\$0	\$0	\$0		
Quarter 1	50	50	(50)	(50)	100%	100%
Quarter 2	105	55	(107)	(57)	96%	98%
Quarter 3	129	24	(120)	(13)	185%	108%
Quarter 4	115	(14)	(116)	4	350%	99%

<sup>1</sup> Represents the change in fair value of the derivative.

<sup>2</sup> Represents either the change in (1) fair value or (2) present value of the expected future cash flows of the hedged item.

As Figure DH 9-4 demonstrates, using the discrete period method of assessing effectiveness results in disqualification of the hedge in quarters 3 and 4 (when the hedge effectiveness ratio is outside of the 80%-125% threshold), and thus, the inability to apply hedge accounting in those quarters.

If the cumulative method had been used, all periods would have been considered highly effective (within the 80%-125% threshold) and the hedging relationship would have qualified for hedge accounting.

When using the dollar-offset method, a reporting entity is free to select either the cumulative or the discrete method when assessing hedge effectiveness; but once selected, it must abide by the results regardless of the outcome, as discussed in ASC 815-20-35-6. A different method of assessing hedge effectiveness may never be selected in hindsight.

### ***Advantages/disadvantages to dollar-offset***

While the dollar-offset method is simple to understand and easy to implement, its use might result in difficulties demonstrating high effectiveness for the hedging relationship, particularly when there are isolated periods of aberration in the behavior of the underlying. Generally, hedging relationships that contain basis differences have an elevated risk of not qualifying for hedge accounting under a retrospective test because such an aberration could weigh heavily in the assessment results.

An example of aberrant behavior is when there is a period of low price volatility in the principal underlying reflected in the hedging instrument such that the changes in the fair value or present value of cash flows of the hedging instrument and the hedged item are small. While many hedging relationships will pass a dollar-offset test for high effectiveness when there are reasonably sized movements in the price of the principal underlying, it is not uncommon for them to fail when there is a small movement. This is because the difference will potentially represent a far greater portion of the overall change in the hedged item. For example, assume a fair value hedge in which the notional amount of the hedged item and the derivative are each \$100 million. If the fair value of the hedged item changes by \$500,000 over the assessment period and the change in the fair value of the hedging

instrument is within plus or minus 10% of the change in the fair value of the hedged item, the dollar-offset ratio would be 1.1 (i.e., \$550,000 divided by \$500,000). However, if in a period of low volatility for the underlying, the change in fair value of the hedging instrument was \$65,000, and the change in fair value of the hedged item is \$50,000, the dollar-offset ratio would be 1.3 and the hedging relationship would fail the effectiveness assessment.

Because of the risk of losing hedge effectiveness in periods of low volatility, many reporting entities use regression analysis instead of the dollar-offset approach. Regression analysis evaluates the relationship between the hedging instrument and the hedged item over a number of periods, and thus, isolated periods of low volatility in the underlying will generally not cause the hedge to fail the effectiveness test.

#### **9.11.4.2 Regression analysis**

Regression analysis is a statistical technique used to analyze the relationship between one variable (the dependent variable) and one or more other variables (independent variables) using a set of data points. A regression model is a formal means of expressing a tendency of the dependent variable to vary with the independent variable in a systematic fashion.

In the context of a hedge effectiveness assessment, the primary objective of regression analysis is to determine if changes to the hedged item and derivative are highly correlated and, thus, supportive of the assertion that there will be a high degree of offset in fair values or cash flows achieved by the hedge. For example, if a \$10 change in the dependent variable (i.e., the derivative) was accompanied by an offsetting \$10.01 change in the independent variable (i.e., the hedged item) and if further changes in the dependent variable were accompanied by similar magnitude changes in the independent variable, there would be a strong correlation because approximately 100% of the change in the dependent variable can be “explained” by the change in the independent variable.

The use of regression analysis is more likely than the dollar-offset method to enable a reporting entity to continue with hedge accounting despite unusual aberrations that may occur in a particular period. The application of regression analysis allows isolated aberrations to be minimized by more normal changes in fair value that occur over the remainder of the periods included in the regression. However, the use of regression analysis is complex; it requires considerable effort to develop the models, and interpreting the results requires judgment.

#### **Model inputs**

The following are key considerations regarding inputs in the regression analysis.

##### *Dependent and independent variables*

In the regression model, the change in fair value of the derivative will likely be the dependent variable (Y) and the change in fair value of the hedged item will likely be the independent variable (X).

##### *Data points*

The objective of the regression analysis is to estimate a linear equation that best captures the relationship between the hedged item and the derivative. The inputs are a series of matched-pair observations for the hedged item and derivative. For example, the inputs could be the change in fair value of the hedged item and derivative observed weekly between January 1, 20X1 and October 31,

20X1. Thus, the first observation would be as of January 8, 20X1 and would include only the changes in the fair value of the derivative and the hedged item from January 1, 20X1 to January 8, 20X1. Subsequent observations would include only the changes in the fair value of the derivative and hedged item that occur during the weekly periods under observation (i.e., not on a cumulative basis). Use of cumulative changes has a propensity to create autocorrelation in the regression analysis, which may invalidate it. See the *Other considerations* section later in this section.

In calculating the data points to be used in the regression model, reporting entities should also decide whether to use a declining maturity approach (i.e., the remaining term of the hedged item and hedging instrument will vary at each data point because the maturity date is held constant) or a constant maturity approach (i.e., the remaining term of the hedged item and hedging instrument will stay constant at each data point).

- In a declining maturity approach, the reporting entity uses some previously-calculated data points by removing the oldest and adding more recent data points (keeping the number of data points the same each period).
- In a constant maturity approach, all of the data points are recalculated in each successive analysis as the remaining tenor or life of the derivative changes over time.

### *Time horizon*

For prospective considerations throughout the life of a hedging relationship, the analysis should use observations selected on a consistent basis over a consistent period of time. The time horizon (period over which data points are gathered) should be relevant for the hedging period and statistically significant.

### *Number of data points*

It is important to use a sufficient number of data points to ensure a statistically valid regression analysis. Generally speaking, as sample size increases, interpretation of the model and conclusions that can be drawn improve. We expect most regression analyses conducted to assess hedge effectiveness will be based on 30 or more observations, but fewer may be acceptable in certain circumstances.

ASC 815-20-35-3 permits a reporting entity to use the same regression analysis for both prospective and retrospective tests. The regression calculations should use the same number of data points, and the reporting entity must periodically update the data points used in its regression analysis.

### **Results**

The following are the key metrics in a statistically-significant regression analysis.

- The R<sup>2</sup> statistic should be 80% (.8) or greater.
- The slope coefficient should be between -0.8 and -1.25.
- The F-statistic or t-statistic associated with the slope coefficient should be significant at a 95% or greater confidence level.

In addition:

- Unexpectedly large residuals, especially recent ones, may indicate an unusual period in the relationship.
- The possibility of autocorrelation should be considered.

### *R<sup>2</sup>*

The degree of explanatory power or correlation between the dependent and independent variables is measured by the coefficient of determination, or  $R^2$ .  $R^2$  is one of the key statistical considerations when a regression analysis is used to support hedge accounting. The  $R^2$  indicates the portion of variability in the dependent variable that can be explained by variation in the independent variable. Therefore, the higher the  $R^2$  for a hedging strategy, the more effective the relationship is likely to be.

Although ASC 815 does not provide a specific threshold for  $R^2$ , practice generally requires an  $R^2$  of 0.80 or higher for a hedging relationship to be considered highly effective.

While the  $R^2$  is a key metric, it is not the only consideration when using regression analysis to evaluate the effectiveness of a hedging relationship. Reporting entities should also evaluate the slope coefficient and the F-statistic or t-statistic, the statistical significance of the relationship between the variables.

### *Slope coefficient*

The slope is an important component of a highly effective hedging relationship. The slope coefficient is the slope of the straight line that the regression analysis determines "best fits" the data.

Many regression analyses use the "least squares" method to fit a line through the set of observations (ordinary least squares regression). This method determines the intercept and slope that minimize the size of the squared differences between the actual Y observations and the predicted Y values (i.e., the vertical differences between plotted observations and the regression line).

The slope coefficient should be interpreted as the change in the derivative associated with a change in the hedged item. If the model is developed using the change in fair value of the derivative as the dependent variable (Y) and the change in fair value of the hedged item the independent variable (X), the slope equals the change in Y divided by the change in X, or "rise" over "run." In effective 1 for 1 hedging relationships, the slope coefficient will approximate a value of -1. In practice, many reporting entities apply a range of -0.80 to -1.25, as described in DH 9.2.1.

The slope coefficient should be negative (except when the hedged item is represented by a hypothetical derivative in a cash flow hedge) because the derivative is expected to offset changes in the hedged item. In other words, to be an effective hedging relationship, the derivative and the hedged item must move in an inverse manner. If the analysis yields a positive slope coefficient, it means that when the hedged item goes up in value, the derivative goes up in value, which is not a hedge. If the hypothetical derivative method is used in a regression as a proxy for the hedged item, the slope of a regression line would be positive, since the actual derivative is compared to a hypothetical derivative, rather than to the hedged item itself.

*F-statistic or t-statistic*

An F-statistic or t-statistic associated with the slope coefficient is useful in determining whether there is a statistically significant relationship between the dependent and independent variables. In ordinary least squares regression analyses, the F-statistic is equal to the squared t-statistic for the slope coefficient. Generally, the result should be significant at a 95% confidence level.

*Other considerations*

Unexpectedly large residuals (relative to the predicted value or to other residuals) may indicate an unusual period in the relationship between the dependent and independent variables. In many cases when the regression analysis yields acceptable results, the residuals will not be important. However, residuals may signal declining effectiveness if the largest residuals come primarily from the most recent observations. Judgment should be used when interpreting declining effectiveness over time. The decline could be temporary, or it could call into question the effectiveness of the hedging relationship in future periods if the trend persists.

One of the assumptions underlying ordinary least squares regression is that the errors are uncorrelated. Correlated errors are referred to as “autocorrelation.” Autocorrelation may indicate that the regression model is not statistically valid because it can cause the R<sup>2</sup>, F-statistic (or t-statistic), and slope coefficient to be misstated. In time series data, autocorrelation can be caused by the prolonged influence of shocks in the economy (e.g., the effects of war or strikes can affect several periods). Autocorrelation can also be artificially induced through the use of overlapping observations. For example, overlapping inputs would result if the first observation in a regression analysis is the change in value from January 1, 20X1 to March 31, 20X1 and the second observation is the change in value from February 1, 20X1 to April 30, 20X1. The use of overlapping inputs creates a dependency in the input variables because some months of each observation are the same, and should be avoided.

Reporting entities should consider use of statistical procedures that are available to detect, and attempt to correct for, autocorrelation, such as the Durbin-Watson Test.

## **9.12 Qualitative assessments of effectiveness**

If (1) a reporting entity performs an initial quantitative effectiveness assessment that demonstrates that the hedging relationship is highly effective and (2) can reasonably support at hedge inception an expectation of high effectiveness on a qualitative basis in subsequent periods, it may choose to perform its subsequent hedge effectiveness assessments qualitatively.

The election to perform subsequent assessments of effectiveness qualitatively may be made on a hedge-by-hedge basis, per ASC 815-20-35-2B. However, the initial quantitative method needs to be the same as the quantitative method that a reporting entity will document and use should it not be able to support an expectation of high effectiveness on a qualitative basis during the term of the hedge. See DH 9.12.3.

### **9.12.1 Qualitatively supporting high effectiveness in subsequent periods**

To determine whether the reporting entity can reasonably support performing assessments of effectiveness after hedge inception on a qualitative basis, ASC 815-20-55-79G through ASC 815-20-55-79N states that the entity should consider the following:

- The results of the quantitative assessment of effectiveness performed at inception of the hedging relationship

Generally, the closer the initial quantitative assessment is to achieving perfect offset, the more support there is for using a qualitative assessment subsequently. When a hedge is close to failing the effectiveness test, it is less likely that a reporting entity will be able to support performing its subsequent effectiveness assessments qualitatively.

- Alignment of the critical terms of the hedging instrument and the hedged item

If the terms are not aligned, a reporting entity should consider:

- Which market conditions may cause the changes in fair values or cash flows attributable to the hedged risk to diverge as a result of the misalignment
- The extent and consistency of the correlation between the hedged item and hedging instrument

For example, if the only critical term that does not match is the underlying and past observations of changes in the underlyings of the hedged item and hedging instrument consistently exhibited high correlation, then performing subsequent assessments qualitatively is more likely to be supportable than if changes have not been consistently highly correlated.

- Whether changes in market conditions could cause a divergence and whether there is a reasonable expectation that the hedging relationship is expected to remain stable or whether that divergence is expected to continue or recur

The implementation guidance in ASC 815-20-55-79N makes it clear that a reporting entity should consider the interaction of these factors in determining whether it can reasonably support performing subsequent assessments of effectiveness qualitatively. For example, if a hedging relationship was not close to failing the quantitative assessment of effectiveness nor was it close to being perfectly effective, a lack of consistent high correlation exhibited over time between the past changes in the underlyings of the hedged item and the hedging instrument would prevent the entity from reasonably supporting the subsequent use of qualitative assessments. However, if the example were changed such that the past changes had been highly correlated, then the entity might conclude it could reasonably support performing subsequent assessments of effectiveness on a qualitative basis.

### **9.12.2 Ongoing qualitative assessments**

Reporting entities are required to perform an assessment at least quarterly. Using a qualitative assessment does not impact the required frequency.

#### **ASC 815-20-35-2C**

When an entity performs qualitative assessments of hedge effectiveness, it shall verify and document whenever financial statements or earnings are reported and at least every three months that the facts and circumstances related to the hedging relationship have not changed such that it can assert qualitatively that the hedging relationship was and continues to be highly effective. While not all-inclusive, the following is a list of indicators that may, individually or in the aggregate, allow an entity



to continue to assert qualitatively that the hedging relationship is highly effective:

- a. An assessment of the factors that enabled the entity to reasonably support an expectation of high effectiveness on a qualitative basis has not changed such that the entity can continue to assert qualitatively that the hedging relationship was and continues to be highly effective. This shall include an assessment of the guidance in paragraph 815-20-25-100 when applicable.
- b. There have been no adverse developments regarding the risk of counterparty default.

In the ongoing qualitative assessment, reporting entities should consider all sources of ineffectiveness, both in terms of probability and magnitude. The factors to consider may vary depending on the type of hedging relationship, but the analysis should consider all reasonably possible scenarios and should not be limited only to likely or expected ones, as specified in ASC 815-20-25-79(a). Reporting entities should also consider the existence of caps and floors that limit exposure in the hedged item when the hedging instrument does not have an offsetting cap or floor.

A reporting entity should implement a process to monitor whether facts and circumstances in the factors considered at hedge inception have changed during the period and since inception (both periodic and cumulative) that would cause it to no longer be able to use a qualitative assessment of hedge effectiveness.

For example, significant weather events could have an impact on certain agricultural commodities such that two indices that were highly correlated previously would diverge (see ASC 815-20-55-79R). Alternatively, a significant increase in the credit risk of the counterparty to the hedging instrument in a fair value hedge of interest rate risk in a financial instrument may indicate that the hedging relationship will no longer be highly effective at achieving offsetting changes in fair value.

The results of the reporting entity's qualitative assessment should be documented. The extent of the documentation may vary, but generally we expect more robust documentation as the need for judgment increases.

### **9.12.3 *Impact of changes in facts and circumstances***

When there has been a change in facts and circumstances such that the entity can no longer assert qualitatively that the hedging relationship was and continues to be highly effective, a quantitative test will need to be performed for that hedging relationship, and potentially, other similar hedging relationships.

#### **ASC 815-20-35-2D**

If an entity elects to assess hedge effectiveness on a qualitative basis and then facts and circumstances change such that the entity no longer can assert qualitatively that the hedging relationship was and continues to be highly effective in achieving offsetting changes in fair values or cash flows, the entity shall assess effectiveness of that hedging relationship on a quantitative basis in subsequent periods. In addition, an entity may perform a quantitative assessment of hedge effectiveness in any reporting period to validate whether qualitative assessments of hedge effectiveness remain appropriate. In both cases, the entity shall apply the quantitative method that it identified in its initial hedge documentation in accordance with paragraph 815-20-25-3(b)(2)(iv)(03).



Often, the change in facts and circumstances will affect other similar hedges. However, there may be instances when a change only affects particular hedging relationships, for example, an adverse change in counterparty credit risk would only affect hedges with that counterparty.

It may be prudent to perform a quantitative test if there has been a change in facts and circumstances that could cause a decrease in effectiveness, even if the magnitude of the change does not appear to be significant. In other words, reporting entities should consider performing a quantitative test even when they still suspect there is some “headroom” in the effectiveness ratio.

While not necessary in all cases, some reporting entities may choose to periodically perform a quantitative assessment, rather than only performing the test qualitatively, as a control to monitor the continued ability to use the qualitative assessment.

A reporting entity is required to perform a quantitative assessment in a subsequent period if it no longer meets the requirement to use the qualitative assessment (e.g., due to changes in facts and circumstances). The quantitative method applied in that case must be consistent with (1) the method used for the initial prospective quantitative assessment and (2) the method documented at hedge inception. See DH 9.3.2 and DH 9.3.4.

#### **ASC 815-20-35-2E**

When an entity determines that facts and circumstances have changed and it no longer can assert qualitatively that the hedging relationship was and continues to be highly effective, the entity shall begin performing subsequent quantitative assessments of hedge effectiveness as of the period that the facts and circumstances changed. If there is no identifiable event that led to the change in the facts and circumstances of the hedging relationship, the entity may begin performing quantitative assessments of effectiveness in the current period.

The FASB observes in paragraph BC213 of the Basis for Conclusions to ASU 2017-12 that it did not intend for reporting entities to override judgments and conclusions made in prior periods when applying the qualitative method in those prior periods was deemed appropriate. We believe this concept applies as long as the qualitative assessment process in those prior periods was valid. In other words, we do not believe the Board’s observation in the Basis for Conclusions can be used to grandfather a nonexistent or invalid qualitative process that did not previously detect an effectiveness issue due to a flaw in design or execution.

#### **9.12.4 *Reverting to qualitative after a quantitative assessment***

After performing a quantitative assessment of hedge effectiveness for one or more periods, a reporting entity may revert to qualitative assessments of hedge effectiveness if it can reasonably support an expectation of high effectiveness on a qualitative basis for subsequent periods.

#### **ASC 815-20-55-79G(b)(1)(ii)**

A specific event or circumstance may cause a temporary disruption to the market that results in an entity concluding that the facts and circumstances of the hedging relationship have changed such that it no longer can assert qualitatively that the hedging relationship was and continues to be highly effective. In those instances, if the results of the quantitative assessment of effectiveness do not significantly diverge from the results of the initial assessment of effectiveness, that market disruption

should not prevent the entity from returning to qualitative testing in subsequent periods. If the results of the quantitative assessment of effectiveness do significantly diverge from the results of the initial assessment of effectiveness, the entity should continually monitor whether the temporary market disruption has been resolved when determining whether to return to qualitative testing in subsequent periods.

The event or circumstance that prevented use of a qualitative assessment might be temporary or isolated and its effects may have passed such that the hedged item and hedging instrument now behave more consistently relative to one another as they had at the time of the initial effectiveness assessment.

## **9.13 Effects of credit risk on effectiveness and other requirements**

The fair value of a derivative is impacted by credit risk, both of the counterparty and the reporting entity. Given the impact on the assessment of effectiveness, ASC 815-30-35-14 through ASC 815-30-35-18 and ASC 815-20-25-103 and ASC 815-20-25-122 discuss the effects of credit risk (nonperformance risk) on hedge accounting.

### **9.13.1 Measuring hedged items in a fair value hedge**

ASC 820, *Fair Value Measurement*, applies to assets and liabilities designated as the hedged item in a fair value hedge of the overall change in fair value. We believe the change in fair value of the hedged item in a fair value hedge of the overall change in fair value should be measured at exit value based on the fair value measurement framework that includes the effects of credit risk (nonperformance risk).

The change in fair value of the hedged item attributable to the risk being hedged should be measured over the hedge period and reported as an adjustment of the hedged item's carrying value. The risk being hedged may be the overall change in fair value or only the change in value attributable to a specific risk. In the latter situation, the change in fair value is based on the hedged risk and not on the asset or liability designated as the hedged item in a fair value hedge. The hedged item may be an item that is reported at fair value with changes in fair value reported in OCI (e.g., an available-for-sale debt security) or it may be reported based on some other measurement basis (e.g., a debt instrument reported at amortized cost). However, it is the change in the fair value of the hedged item due to changes in the hedged risk that is measured.

### **9.13.2 How nonperformance risk impacts hedge effectiveness**

Reporting entities need to consider nonperformance risk for derivatives used as hedging instruments in both fair value and cash flow hedges. Also, nonperformance risk will impact the measurement of the hedged item in a fair value hedge when the hedged risk is the total change in fair value.

Often, a reporting entity will have a master netting agreement in place with a counterparty. Consequently, it needs to (1) allocate the impact of nonperformance risk for the counterparty to the individual derivatives with that counterparty that are used in hedging relationships and (2) use the fair value, inclusive of nonperformance risk, in assessing effectiveness. When there is no master netting agreement, step (1) is not necessary; the calculation of counterparty credit risk is done at the individual instrument level.

The impact of considering nonperformance risk may vary depending on the type of hedge (fair value versus cash flow), the hedged risk (i.e., whether it is a hedge of total changes in fair value for a fair value hedge), and the method used to assess hedge effectiveness.

Different approaches, including qualitative ones, may be acceptable. However, even if a qualitative approach is appropriate for the assessment of effectiveness, reporting entities need to use a quantitative approach to allocating the nonperformance risk to the appropriate income statement line items or to other comprehensive income.

The assessment should take into account the effect on both the derivative's carrying amount and on hedge effectiveness. For example, if a hedging relationship is near 100% effective before considering the effect of credit risk, it may be easier to demonstrate that any adjustment would not materially affect the financial statements than if a hedge is, say, close to 80% effective before considering the effect of credit risk. In the latter circumstance, even a minor change could result in the hedge not meeting the 80%–125% threshold to qualify for hedge accounting.

### **9.13.2.1 Fair value hedges**

Reporting entities should consider nonperformance risk for derivatives used as hedging instruments in fair value hedges. In the case of a fair value hedge, a change in the creditworthiness of the derivative's counterparty would have an immediate impact because it would affect the change in the derivative's fair value, which would immediately affect both:

- The assessment of whether the relationship qualifies for hedge accounting
- The difference between the change in fair value of the hedged item attributable to the hedged risk and the change in fair value of the derivative recognized in earnings under fair value hedge accounting

Nonperformance risk is calculated based on multiple derivatives and collateral when master netting agreements are used. A reporting entity may make a qualitative assessment as to whether nonperformance risk, if allocated, would impact the determination of effectiveness of an individual hedging relationship. If, as a result of the qualitative analysis, the reporting entity concludes that the allocation of nonperformance risk is unlikely to affect its assessment of hedge effectiveness, it would not be required to allocate the impact of nonperformance risk to the individual derivatives for purposes of assessing effectiveness. However, this analysis does not affect the requirement to calculate the risk of nonperformance in the measurement of fair value and record the actual amount in the appropriate income statement line item.

If, on the other hand, the reporting entity concludes through its qualitative analysis that the risk of nonperformance could impact its assessment of hedge effectiveness, the reporting entity should allocate the effect of nonperformance risk to the individual derivative hedging instruments and consider that risk in evaluating hedge effectiveness.

### **9.13.2.2 Cash flow hedges**

For a reporting entity to conclude on an ongoing basis that a cash flow hedge is expected to be highly effective, it cannot ignore whether it will collect the payments it would be owed under the contractual provisions of the derivative instrument. The entity should assess the possibility that the counterparty to the derivative will default by failing to make any contractually-required payments to the entity. In

making that assessment, the entity should also consider the effect of any related collateralization or financial guarantees. The entity should be aware of the counterparty's creditworthiness (and changes in it) in determining the fair value of the derivative. Although a change in the counterparty's creditworthiness would not necessarily indicate that the counterparty would default on its obligations, such a change would warrant further evaluation.

The effect of counterparty credit risk on cash flow hedging relationships is slightly different than in a fair value hedge. If the likelihood that the counterparty will not default ceases to be probable, a reporting entity would be unable to conclude that the hedging relationship in a cash flow hedge is expected to be highly effective in achieving offsetting cash flows.

We believe a reporting entity may be able to apply a qualitative approach as to whether nonperformance risk, if allocated, would impact the determination of effectiveness in cash flow hedges. In addition, we believe a qualitative approach may be applied when evaluating the impact of nonperformance risk on the assessment of hedge effectiveness for all derivatives, not just those subject to master netting arrangements. However, in the absence of a master netting arrangement, the reporting entity will need to consider the nonperformance risk for each individual derivative position.

If the likelihood that the counterparty will not default is still probable, the impact of credit risk when assessing effectiveness of a cash flow hedge could vary depending on the method applied:

- Change in variable cash flows method: When applying this method, the present value of the cumulative changes in expected future cash flows on both the variable-rate leg of the interest rate swap and the variable-rate asset or liability is calculated using the discount rates applicable to determining the fair value of the interest rate swap (see ASC 815-30-55-92). Credit risk has an impact only when there are other differences between the floating leg of the swap and the variable-rate asset or liability or if default is probable.
- Hypothetical derivative method: The determination of the fair value of both the perfect hypothetical interest rate swap and the actual interest rate swap uses discount rates based on the relevant interest rate swap curves (see ASC 815-30-35-29). Credit risk has an impact only when there are other differences between the actual and hypothetical derivative or if default is probable.
- Change in fair value method: A change in the creditworthiness of the derivative instrument's counterparty in a cash flow hedge has an immediate impact under this method because credit and nonperformance risk are considered in determining the fair value of the swap in each period.

In summary, under the first two scenarios, hedge effectiveness is generally not significantly impacted by credit risk if it is probable that the counterparties will comply with the contractual provisions of the instrument and there are no other differences present. Credit risk more directly impacts hedge effectiveness under the third method, which is less commonly used in practice.

See FV 8 for a discussion of nonperformance risk.

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***Chapter 10:***  
***Discontinuance—updated July***  
***2022***

## 10.1 *Discontinuance of hedging overview*

This chapter discusses when the discontinuance of a hedging relationship is required or can be elected and how discontinuance is accounted for in fair value, cash flow, and foreign currency hedges.

## 10.2 *Discontinuance – general guidance*

Applying hedge accounting is an election; it may be voluntarily discontinued on an individual hedge basis without the discontinuation of other similar hedges. Hedge accounting must be discontinued if the hedging relationship no longer meets the qualifying criteria. ASC 815-25-40-1 and ASC 815-30-40-1 require that a reporting entity discontinue hedge accounting for fair value and cash flow hedges if:

- the hedging relationship no longer qualifies for hedge accounting or ceases to be highly effective;
- the derivative expired or was sold, terminated, or exercised; or
- the reporting entity elects to discontinue hedge accounting.

The dedesignation of a hedging relationship and the designation of a new hedging relationship is not a change in accounting principle under ASC 250, *Accounting Changes and Error Corrections*. However, as it relates to portfolio layer method hedging relationships, certain changes to how dedesignations are sequenced would be considered a change in accounting principle under ASC 250. See DH 10.3.8 for additional information on portfolio layer hedges.

### 10.2.1 *Redesignating a new hedging relationship*

After discontinuance of a prior hedge, a reporting entity may establish a new hedging relationship prospectively that involves either the same or a new derivative, or the same or a new hedged item, as long as the new hedging relationship satisfies the qualifying criteria for hedge accounting.

Once hedge accounting is discontinued, subsequent redesignation of an existing derivative in a new hedging relationship may be challenging because the derivative will typically have a fair value other than zero due to changes in market conditions since inception of the instrument. Off-market terms in a derivative create a financing element that may be a source of mismatch between the hedged item and hedging instrument that (in many cases) must be considered in determining whether the new hedging relationship is highly effective and can qualify for hedge accounting. The more off-market the derivative, the greater the possible mismatch and the less likely the proposed hedging relationship will be highly effective. The degree to which an off-market derivative will impact the assessment of effectiveness may depend on the method of assessing effectiveness (see DH 9 for discussion of assessing effectiveness).

#### **Question DH 10-1**

Does hedge accounting prohibit terminating or dedesignating a hedging relationship and redesignating a new hedging relationship with the same hedged item on a recurring basis?

***PwC response***

No. ASC 815 has no specific prohibition against terminating one hedge and initiating another, nor does it set limitations on the frequency of such terminations and redesignations. Delta-neutral and dynamic hedging are examples of strategies that involve dedesignations and redesignations. In delta-neutral hedging, the quantity of the hedging instrument is constantly adjusted to maintain a desired hedge ratio. Dynamic hedging may involve a single derivative, or more commonly, it involves a number of derivatives to make the hedge highly effective for a hedge period of one or several days to a week. Dynamic and delta-neutral hedging strategies are eligible for hedge accounting provided that reporting entities can (1) properly track all of the changes (i.e., terminations and redesignations) and (2) demonstrate that all other qualifying criteria, such as high effectiveness, have been met. Dynamic hedging is addressed in DH 6.2.2.2 and DH 9.2.4.

**10.2.2 *Change in the critical terms of the hedging relationship***

Generally, if a critical term of a hedging relationship is modified, the existing hedging relationship must be discontinued. If a reporting entity wishes to continue hedge accounting, it must create a new hedging relationship. ASC 815-20-55-56 and ASC 815-30-35-37A provide an exception for a change in the hedged risk in a cash flow hedge of a forecasted transaction.

**Excerpt from ASC 815-20-55-56**

If an entity wishes to change any of the critical terms of the hedging relationship (including the method designated for use in assessing hedge effectiveness), as documented at inception, the mechanism provided in this Subtopic to accomplish that change is the dedesignation of the original hedging relationship and the designation of a new hedging relationship that incorporates the desired changes. However, as discussed in paragraph 815-30-35-37A, a change to the hedged risk in a cash flow hedge of a forecasted transaction does not result in an automatic dedesignation of the hedging relationship if the hedging instrument continues to be highly effective at achieving offsetting cash flows associated with the hedged item attributable to the revised hedged risk.

**ASC 815-30-35-37A**

If the designated hedged risk changes during the life of a hedging relationship, an entity may continue to apply hedge accounting if the hedging instrument is highly effective at achieving offsetting cash flows attributable to the revised hedged risk. The guidance in paragraph 815-20-55-56 does not apply to changes in the hedged risk for a cash flow hedge of a forecasted transaction.

**10.2.2.1 *Changes to hedged items***

Some modifications to the hedged item that would require dedesignation of a hedging relationship include:

- Certain changes to the documented key terms of a forecasted transaction (e.g., changing from hedging the purchase of a commodity in November to the purchase of a commodity in February)
- Substitution of a new debt issuance for an existing debt issuance in a fair value hedge of interest rate risk of a specified debt issuance
- Addition or removal of a floor or cap to or from the agreement (or adjustment of the terms)

### **10.2.2.2 Changes to hedging instruments**

Some modifications to the hedging instrument that would require dedesignation of a hedging relationship include:

- Changes to the payment or maturity dates
- Modifications to a payment term of the derivative (changing the coupon on an interest rate swap or changing the strike price of a forward or option)
- Addition or removal of a floor or cap to or from the instrument
- Significant increase in credit risk such that the likelihood that the counterparty will not default ceases to be probable
- “Blend and extend” transactions in which a current derivative is settled by entering into a new derivative with similar terms and the gain or loss on the original contract is settled by the new contract having off-market terms

#### ***Changes to the counterparty to a derivative (novations)***

Novations of a derivative contract may occur for a number of reasons, including regulatory requirements (such as to effect central clearing of certain transactions), financial institution mergers, intercompany transactions, or financial institutions voluntarily exiting a particular derivative business or a customer relationship.

As discussed in ASC 815-25-40-1A for fair value hedges and ASC 815-30-40-1A for cash flow hedges, a change in the counterparty to a derivative hedging instrument in an existing hedging relationship would not, in and of itself, be considered a termination of the derivative. However, a reporting entity needs to evaluate whether it is probable that the counterparty will perform under the contract as part of its ongoing effectiveness assessment. Therefore, a novation of a derivative to a counterparty with a sufficiently high credit risk could still result in dedesignation of the hedging relationship.

#### ***Credit Support Annexes***

A Credit Support Annex (CSA) is an appendix to the ISDA master document establishing rules for the receiving and posting of collateral by each party to the ISDA contract. Adding a CSA is a modification that changes the credit risk of the derivative instrument. Given the existence of netting provisions within agreements, entering into a new individual derivative transaction can also impact the credit risk of other derivatives. Since any new derivatives do not typically call into question the existing designations of other derivatives with the same counterparty under the same ISDA master agreement, we do not believe that subsequent executions of the most common CSA agreements would call into question the existing hedge designations of the derivatives.

#### ***Legal nature of variation margin***

In some arrangements, the legal nature of variation margin payments is collateral, and in others, it is a settlement payment. See DH 1.3.2.1 for discussion of collateralized-to-market and settled-to-market transactions.



Because variation margin is paid or received on a daily basis, a question arises as to whether a derivative would need to be dedesignated and redesignated on a daily basis to maintain a hedging relationship when it is deemed a settlement payment. In an industry preclearance submission, the SEC staff did not object to a view that these settlement payments would not require daily dedesignation and redesignation if the terms of the derivative, such as the notional amount and fixed and floating rates, are not reset to market rates on a daily basis. As a result, these settlement payments would not result in the extinguishment of one instrument and the execution of a new instrument on a daily basis.

## **10.3 Discontinuance of fair value hedges**

A fair value hedge is discontinued when any of the following occurs:

- Hedge is no longer highly effective (DH 10.3.1)
- Hedging instrument is sold, extinguished, terminated, exercised, or expired (DH 10.3.2)
- Hedging instrument is dedesignated in its entirety (DH 10.3.3) or in part (DH 10.3.3.1), although it may be redesignated in a new hedging relationship (DH 10.3.4)
- Hedged item no longer meets the definition of a firm commitment in ASC 815-10-20 (DH 10.3.5)
- Hedged item is sold or extinguished, in its entirety (DH 10.3.6) or in part (DH 10.3.6.1)
- Portfolio layer method hedge is required to be fully or partially dedesignated (DH 10.3.8). Note that portfolio layer method hedges have unique rules regarding the treatment of basis adjustments when dedesignating a hedge and other aspects of ASC 815 may not be applicable to these specific hedges.

When a fair value hedging relationship is no longer intact or effective, a reporting entity should stop adjusting the carrying amount of the hedged item for changes in fair value due to the hedged risk. Unlike the accounting for the hedged item, if there were no components excluded from the assessment of effectiveness in the hedging relationship, the measurement of the derivative may not change when a fair value hedge is discontinued. If there were excluded components in the hedging relationship recognized in earnings under an amortization approach, when the derivative is no longer in the hedging relationship, that treatment would not be appropriate. As such, prospectively, the entire derivative should be measured at fair value through earnings, but without any offset, unless it is redesignated in a new hedging relationship.

Upon discontinuance of a fair value hedge, excluded components deferred in AOCI because they were recognized through an amortization approach are released to earnings consistent with how other components of the carrying amount of the hedged item are recognized in earnings. However, if the hedged item is derecognized, ASC 815-25-40-7 requires any amounts remaining in AOCI related to the excluded components to be recorded in earnings. Excluded components are discussed in DH 6.3.1.2 for hedges of financial items and DH 7.2.1.3 for hedges of nonfinancial items.

### **10.3.1 Hedge is no longer highly effective**

If a fair value hedging relationship does not pass the prospective effectiveness test, hedge accounting should be discontinued going forward.

If a hedging relationship does not pass the retrospective effectiveness test, hedge accounting should be discontinued as of the last date when the hedged item was assessed and demonstrated high effectiveness. The reporting entity would stop adjusting the carrying amount of the hedged item for the hedged risk as of that date, unless it can determine a specific point that it failed to be effective.

Adjustments to the carrying amount of the hedged item (basis adjustments) should be recognized in earnings consistent with how other components of the carrying amount of the hedged item are recognized in earnings. For example, adjustments to the basis of an interest-bearing loan are recognized in accordance with ASC 310-20, *Receivables - Nonrefundable Fees and Other Costs*.

Assume a reporting entity determines that a hedging relationship did not pass the retrospective and prospective effectiveness assessments during its monthly effectiveness assessment on July 31, 20X1. Hedge accounting should be discontinued as of June 30, 20X1, the last date on which the hedged item was assessed and demonstrated high effectiveness. The reporting entity would stop adjusting the carrying amount of the hedged item for the hedged risk as of that date, unless it can determine a specific point in July of 20X1 on which it failed to be effective.

For a discontinued fair value hedge in which the hedged item is not derecognized, ASC 815-25-40-7 indicates that amounts related to the excluded components remaining in AOCI should be recorded in earnings in the same manner as other components of the carrying amount of the hedged item are recognized in earnings.

### **10.3.2 Hedging instrument is sold, terminated, exercised, or expired**

At maturity of a derivative, any final amounts due are settled, there are no further rights or obligations of either party, and the fair value of the expired contract (after final settlement) is zero. There is no further accounting for the derivative because it no longer exists.

Similarly, a derivative settled in its entirety with the counterparty prior to its maturity date, or sold or novated/assigned to a third party no longer exists from the perspective of the reporting entity.

For a discontinued fair value hedge in which the hedged item is not derecognized, basis adjustments are recognized in earnings consistent with how other components of the carrying amount of the hedged item are recognized in earnings. For example, adjustments to the basis of an interest-bearing loan are recognized in accordance with ASC 310-20. In addition, ASC 815-25-40-7 indicates that amounts related to the excluded components remaining in AOCI are recorded in earnings in the same manner as basis adjustments.

### **10.3.3 Hedging instrument is dedesignated**

When a fair value hedging instrument is dedesignated, continues to exist, and is not redesignated in a new hedging relationship, the hedging instrument should be measured at fair value with changes recorded in current earnings prospectively. However, there is no basis adjustment on the hedged item to fully or partially offset the gain or loss on the derivative.

For a discontinued fair value hedge in which the hedged item is not derecognized, adjustments to the carrying amount of the hedged item are recognized in earnings consistent with how other components of the carrying amount of the hedged item are recognized in earnings. For example, adjustments to the basis of an interest-bearing loan are recognized in accordance with ASC 310-20. In addition, ASC 815-

25-40-7 indicates that amounts related to the excluded components remaining in AOCI should be recorded in earnings in the same manner as basis adjustments.

#### **10.3.3.1 *Partial dedesignation of the hedging instrument***

Within Example 19, *Hedging a Portfolio of Fixed Rate Financial Assets*, ASC 815-20-55-178 and the portfolio layer method guidance indicate that a partial dedesignation of a fair value hedge is permitted. In that example, a reporting entity dedesignated the portion of the notional amount of a swap that was in excess of the portfolio of fixed-rate loans that it had available to hedge. Changes in the fair value of the portion of the derivative that was dedesignated would be recorded in earnings with no offsetting basis adjustment to the hedged item from the point of partial dedesignation onward. However, changes in the fair value of the portion of the derivative that remains in the hedging relationship would be offset in earnings by changes in the fair value of the hedged item for the hedged risk.

The dedesignated portion of the derivative may be redesignated in a new hedging relationship.

#### **10.3.4 *Hedging instrument is dedesignated and redesignated***

When a fair value hedging instrument is dedesignated and subsequently redesignated in a new fair value hedging relationship, the accounting for the derivative may change depending on the reporting entity's elections for excluded components on the original and the new hedging relationships. As discussed in DH 10.3.3, for a discontinued fair value hedge in which the hedged item is not derecognized, basis adjustments and excluded components recognized in AOCI are recognized in earnings consistent with how other components of the carrying amount of the hedged item are recognized in earnings. Any excluded components in the new hedging relationship would be recognized in accordance with the reporting entity's election, as discussed in DH 6.3.1.2 for hedges of financial items and DH 7.2.1.3 for hedges of nonfinancial items.

#### **10.3.5 *Hedged item no longer meets definition of a firm commitment***

Although rare, when a hedged firm commitment no longer meets the definition of a firm commitment, 815-25-40-5 states that any asset or liability that was recognized under a fair value hedge through cumulative fair value adjustments of the firm commitment must be derecognized, and a corresponding gain or loss recorded in earnings.

A pattern of discontinuing hedge accounting and derecognizing firm commitments would call into question the application of hedge accounting to firm commitments in the future.

#### **10.3.6 *Hedged item is sold or extinguished in its entirety***

The fair value hedge model provides for recording a basis adjustment on the hedged item. As a result, when the hedged item is sold or extinguished, the basis adjustment is derecognized with the hedged item and impacts any gain or loss recorded on sale or extinguishment of the hedged item.

Amounts in AOCI related to excluded components recognized through an amortization approach should be reclassified to earnings currently when the hedge is discontinued because the hedged item was derecognized, per the guidance in ASC 815-25-40-7.

Because the derivative is no longer in a hedging relationship, it is measured at fair value through current earnings without any offset, unless it is redesignated in another hedging relationship.

See DH 10.3.8 for the treatment of basis adjustments for portfolio layer method hedges.

### **10.3.6.1 Hedged item is partially sold, prepaid, or extinguished**

If part of the hedged item is sold, prepaid, or otherwise extinguished, consistent with the treatment of a full extinguishment discussed in DH 10.3.6, a portion of the basis adjustment is derecognized.

In the case of partial sale or extinguishment, we believe the portion of the amount in AOCI related to excluded components recognized through an amortization approach on the partially sold or prepaid derivative should be reclassified to earnings currently.

See DH 10.3.8 for the treatment of basis adjustments for portfolio layer method hedges.

The hedging relationship may no longer be effective if a portion of the hedged item no longer exists. If so, the reporting entity will have to dedesignate the entire relationship (because it will no longer qualify for hedge accounting). Alternatively, it may partially dedesignate the hedging instrument if done concurrent with the change to the hedged item.

Example DH 10-1 illustrates a partial dedesignation of a hedging instrument when the hedged item is partially extinguished.

#### **EXAMPLE DH 10-1**

##### **Partial dedesignation of hedging instrument upon partial extinguishment of hedged item**

DH Corp issues \$100 million of fixed-rate non-callable debt and enters into a receive-fixed/pay-floating interest rate swap with a notional amount of \$70 million. DH Corp designates the interest rate swap as a fair value hedge of benchmark interest rate risk of 70% of the debt.

One year after issuing the debt, DH Corp repurchases \$20 million of the debt in the market so that the new debt balance is \$80 million.

What is the impact of the debt extinguishment on the hedging relationship?

##### *Analysis*

After the debt extinguishment, the amount of debt hedged would be \$56 million (70% of the \$80 million new debt balance). To maintain a highly effective hedge, DH Corp could partially dedesignate (concurrent with the extinguishment) the portion of the hedging instrument no longer needed once the debt balance decreases to \$80 million. Once the unnecessary portion of the swap is dedesignated, \$56 million of the notional amount would be designated as a hedge of 70% of the debt and \$14 million would not.

DH Corp may redesignate the \$14 million of swap notional in a new hedging relationship, including as a hedge of the originally unhedged portion of the debt.

### **10.3.7 Amortization of basis adjustments upon discontinuance**

When a reporting entity discontinues a fair value hedging relationship of an interest-bearing asset or liability by either dedesignating or terminating the derivative, the basis adjustment should generally

be amortized over the remaining life of the hedged item, with the amortization included in interest income or interest expense. Amortization must commence when the hedged item ceases to be adjusted for changes in fair value attributable to the hedged risk.

If the hedged item is not an interest-bearing financial instrument and the hedge is discontinued, the basis adjustment is generally recognized in the income statement when the hedged item impacts earnings in the same line item. For example, if a hedge of a commodity held in inventory is discontinued, the basis adjustment to the inventory balance would be recognized in earnings when the inventory is sold (as part of cost of goods sold).

Basis adjustments to interest-bearing and non-interest-bearing assets should be considered in ongoing credit loss and impairment analyses.

There are unique rules to account for basis adjustment of portfolio layer method hedges. Refer to DH 10.3.8 for the treatment of basis adjustments for portfolio layer method hedges.

#### **10.3.7.1 *Basis adjustment on a redesignated hedged item***

Any subsequent hedging relationship following a dedesignation would be considered a new designation accounted for prospectively. If the new hedging relationship is a fair value hedge, changes in the fair value of the hedged item that are attributable to the hedged risk from the date of the new designation onward will result in an adjustment of the carrying amount of the hedged item and offset the fair value changes of the derivative currently in earnings. Both changes in value (i.e., on the hedged item and the derivative) should be measured from the date that the new hedging relationship was established.

If a new hedging instrument is designated as a hedge of 100% of the existing hedged item for the same hedged risk, the carrying amount of the hedged item would resume being adjusted.

If only a portion of an item is redesignated as the hedged item in a new hedging relationship, only that portion of the carrying amount of the hedged item attributable to the risk being hedged will be adjusted for changes in fair value due to the hedged risk. The remaining portion of the hedged item would not be measured at fair value for the risk being hedged because it is not part of the hedging relationship.

Whether full or partial redesignation, basis adjustments from previous hedging relationships that were hedging interest rate risk of interest bearing hedged items generally should be amortized over the hedged item's remaining contractual life.

#### **10.3.7.2 *Amortization of basis adjustments in partial-term hedges***

For interest-bearing assets and liabilities, if a partial-term hedge is discontinued early, the remaining basis adjustment would be amortized in accordance with the applicable guidance for the hedged item. For example, for hedges of interest bearing loans, amortization of the basis adjustment would be calculated in accordance with ASC 310-20. Thus, the amortization period may change upon termination because basis adjustments amortized while the partial-term hedge is in place are amortized over the assumed term of the hedged item while amortization upon discontinuance under ASC 310-20 may be over the contractual life.

### **10.3.8 Discontinuance of portfolio layer method hedges**

This chapter assumes adoption of ASU 2022-01. ASU 2022-01 expanded the ability to use portfolio layer method hedges (previously referred to as the last-of-layer method) and clarified how portfolio layer method hedges should be accounted for. The standard is required to be adopted by public business entities for fiscal years beginning after December 15, 2022 and for all other entities for fiscal years beginning after December 15, 2023, however, can be adopted early at any time. As described in ASC 815-25-35-7A, when a hedged item qualifies and is designated under the portfolio layer method, the reporting entity is required to perform an analysis at each effectiveness assessment date (at a minimum) to determine whether the amount of assets supporting the hedged layer is still expected to be fully outstanding for the period hedged.

A portfolio layer hedge may be dedesignated voluntarily, either partially or fully, at any time, but must be at least partially dedesignated when an anticipated or actual breach occurs. An actual breach occurs when, on a testing date, the outstanding amount of the closed pool is less than the amount being hedged. An anticipated breach occurs when a reporting entity cannot, on a forward-looking basis, support that the hedged item will be outstanding through the period hedged, but an actual breach has not occurred. In that case, the reporting entity must dedesignate the portion of the derivative related to the portion of the hedged layer no longer expected to be outstanding. An entity may also choose to dedesignate the entire derivative.

Upon a voluntary discontinuance or as a result of an anticipated breach, whether full or partial, the portion of the outstanding basis adjustment associated with the amount dedesignated is allocated to the remaining individual assets in the closed portfolio and amortized over a period consistent with amortization of other discounts or premiums on the assets. If the closed portfolio has multiple hedged layers, the basis adjustment should be allocated to the remaining individual assets in the closed portfolio that supported the dedesignated hedged layer (i.e., only assets that have a contractual maturity date longer than the dedesignated hedged layer would be eligible to support that layer, see DH 6.5.1). The reporting entity needs to use a systematic and rational method to allocate the outstanding basis adjustment associated with the amount of the hedged item that is dedesignated as of the discontinuance date to the individual assets in the portfolio.

If an actual breach occurs, an entity must at least partially dedesignate the hedged layer in order to cure the breach. The proportion of the basis adjustment associated with the amount by which the hedged item exceeds the amount outstanding in the closed portfolio is required to be recognized in earnings as interest income. If there is also an anticipated breach, an entity must also at least partially dedesignate the hedged layer as discussed above.

When a reporting entity has multiple hedged layers designated against a closed portfolio, an entity must follow its existing accounting policy for dedesignations. This may require dedesignating one or multiple hedged layers. See DH 10.3.8.1.

Example DH 10-2 illustrates how to account for basis adjustments when a hedged layer has both an actual as well as an anticipated breach.

**EXAMPLE DH 10-2****Accounting for basis adjustments in a dedesignation of a portfolio layer hedge**

DH Corp has an active portfolio layer hedge with a single designated hedged layer of \$800 and a hedged term of five years. The hedge was entered into on December 31, 20X0 and at the time of hedge designation, the amount of assets in the closed pool totaled \$1,000. Based on DH Corp's expectations of prepayments, defaults, and other events, it projected that it would have sufficient assets (more than \$800) in the closed pool for the entire five-year hedged term. Just prior to the paydowns and the assessment that is performed on December 31, 20X3 (as further described below), the remaining balance of the assets in the closed portfolio is as follows:

<b>Asset</b>	<b>Amortized cost basis</b>	<b>Assumed maturity date</b>
1	75.00	12/31/20X5
2	100.00	12/31/20X5
3	100.00	12/31/20X5
4	100.00	12/31/20X5
5	50.00	12/31/20X5
6	100.00	12/31/20X5
7	100.00	12/31/20X5
8	50.00	12/31/20X5
9	100.00	12/31/20X5
10	25.00	12/31/20X5
<b>Total</b>	<b>\$800.00</b>	

As can be seen in the table above, the amount of assets remaining in the closed pool exactly equals the hedged amount such that if any further events occur that decrease the asset balance, a breach will occur. As of December 31, 20X3, there is a \$500 basis adjustment associated with the closed portfolio of assets. Also, on December 31, 20X3, asset 9 prepays in its entirety. Additionally, based on DH Corp's updated expectations, asset 1 is expected to prepay in its entirety prior to December 31, 20X4.

How should DH Corp account for the actual as well as an anticipated breach as of December 31, 20X3?

*Analysis*

Due to the prepayment of asset 9 on December 31, 20X3, DH Corp would recognize an actual breach since the amount of assets remaining in the closed portfolio total \$700 compared to the hedged amount of \$800. In accordance with ASC 815-25-40-9A(a), upon discovering that an actual breach has



occurred, DH Corp would determine the portion of the basis adjustment associated with the amount of the hedged layer that exceeds the closed portfolio using a systematic and rational method.

DH Corp determines the amount of basis adjustment based on the proportion of the hedged layer needing to be dedesignated in order to cure the breach. In order to cure the actual breach, DH Corp would have to dedesignate \$100 of the hedged layer, or 12.5%. Therefore, 12.5% of the basis adjustment would be determined to be associated with the actual breach, which equals \$62.50. In accordance with ASC 815-20-45-1CC, the \$62.50 would be recognized immediately in earnings through interest income. Since an actual breach has occurred, DH Corp is also required to disclose the amount of basis adjustment recognized in interest income in the period and the circumstances that led to the breach.

Next, DH Corp would determine whether after dedesignating to cure the actual breach, any anticipated breaches exist or if DH Corp wishes to voluntarily dedesignate any other portion of the hedge. Since DH Corp now projects that asset 1 will prepay in its entirety before the end of the hedge period, it would also have an anticipated breach and would be required to further dedesignate a portion of the hedged layer to cure the anticipated breach. Assuming all other assets will remain outstanding at their current amortized cost amounts through the end of the hedge period, DH Corp would only need to dedesignate the portion of the hedged layer associated with asset 1.

Since DH Corp is dedesignating \$75 of the hedged layer to cure the anticipated breach, which is 10.7% of the remaining hedged layer, and the remaining hedge basis adjustment after the actual breach is \$437.50 (since \$62.50 was already recorded through income), an additional \$46.88 of the basis adjustment would be associated with the anticipated breach. Unlike for actual breaches that are immediately recorded through income, in an anticipated breach, the amount of the basis adjustment should be allocated to the individual assets that continue to support the hedged layer, as detailed in ASC 815-25-40-9A(b). Therefore, DH Corp would allocate the \$46.88 to assets 1-8 and asset 10 proportionally based on each asset's amortized cost basis. DH Corp would account for the basis adjustments allocated to individual assets in a manner consistent with any premium or discount on those assets. The remaining \$390.63 of basis adjustments would remain allocated to the closed portfolio of assets and not allocated to individual assets.

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### **10.3.8.1 *Dedesignation sequence of a multiple layer portfolio layer hedge***

When a voluntary dedesignation, anticipated breach, or actual breach occurs on a portfolio layer hedge with multiple layers, a reporting entity must determine which layer or layers it will dedesignate. This will determine the amount and how the basis adjustments will be allocated.

ASC 815-25-40-8A requires that when an anticipated or actual breach occurs, a reporting entity should decide which hedged layer or layers to dedesignate based upon an entity-wide accounting policy. The accounting policy must establish a systematic and rational methodology for determining which layer or layers should be dedesignated. It should be in sufficient detail that it is clear to an independent third party which layer or layers would be dedesignated in any anticipated or actual breach scenario and it should not permit the exercise of any discretion at the time of dedesignation. This policy should be established prior to any anticipated or actual breach occurring and needs to be applied consistently to all future anticipated or actual breaches. Any change in this accounting policy would have to follow the guidance in ASC 250, *Accounting Changes and Error Corrections*.



Voluntary dedesignations are not required to follow the established policy and, as a result, any layer can be dedesignated as long as that dedesignation is voluntary and not in connection with an actual or anticipated breach.

## 10.4 *Discontinuance of cash flow hedges*

A cash flow value hedge is discontinued when any of the following occurs:

- Hedge is no longer highly effective (DH 10.4.1)
- Hedging instrument is sold, extinguished, terminated, exercised, or expired (DH 10.4.2)
- Hedging instrument is dedesignated in its entirety (DH 10.4.3) or in part (DH 10.4.3.1), although it may be subsequently redesignated in a hedging relationship (DH 10.4.4)
- Forecasted transaction is no longer probable but is reasonably possible of occurring (DH 10.4.5)
- Forecasted transaction is probable of not occurring (DH 10.4.6)
- Forecasted transaction is probable of occurring, but on a date more than two months after the initially-specified period (DH 10.4.7)
- Variability of cash flows ceases (DH 10.4.9)

A reporting entity is required to continually reassess the probability of a forecasted transaction occurring to determine if existing hedging relationships can continue and determine if any amounts in AOCI should be reclassified to earnings.

When a cash flow hedge is discontinued, the net derivative gain or loss remains in AOCI unless it is probable that the forecasted transaction will *not* occur in the originally-specified time period, range, or within an additional two-month period thereafter. The additional two-month period relates only to when the gain or loss on the derivative should be reclassified, not when hedge accounting should be discontinued. In rare circumstances, the additional period of time may exceed two months due to extenuating circumstances related to the nature of the forecasted transaction that are outside the control or influence of the reporting entity.

If it is probable that the hedged forecasted transaction will not occur by the end of the originally-specified time period, range or within the additional two-month period and the transaction does not qualify for the extenuating circumstances exception, the derivative gain or loss in AOCI should be reclassified to earnings immediately. Probability of the forecasted transaction is addressed in DH 6.3.3.4 for hedges of financial items and DH 7.3.2.2 for hedges of nonfinancial items.

A pattern of determining that hedged forecasted transactions will not occur will call into question a reporting entity's ability to accurately predict forecasted transactions and the propriety of using hedge accounting in the future for similar forecasted transactions. Reporting entities should develop a process to identify if and when specific forecasted transactions become less than probable of occurring.

ASC 815-30-40-6 precludes reversing gains/losses that were reclassified to earnings back to OCI due to a re-assessment of probabilities (e.g., if the reporting entity later concluded the forecasted transaction was again probable of occurring).

Examples included in ASC 815 provide further guidance on how documentation and probability assessments impact hedge accounting and amounts deferred in AOCI.

<b>ASC reference</b>	<b>Title</b>
ASC 815-20-55-88 through ASC 815-20-55-99	Example 4: <i>Variable Interest Payments on a Group of Variable-Rate Interest-Bearing Loans</i>
ASC 815-30-55-94 through ASC 815-30-55-99	Example 16: <i>Impact on Accumulated Other Comprehensive Income of Issuing Debt with a Term That Is Shorter Than Originally Forecasted</i>
ASC 815-30-55-128 through ASC 815-30-55-133	Example 21: <i>Effect on Accumulated Other Comprehensive Income from Issuing Debt at a Date That Is Not the Same as Originally Forecasted</i>

ASC 815-30-40-6A indicates that reclassifying excluded components recognized through an amortization approach to earnings follows the same guidance as for the gain or loss on the derivative in discontinued hedges.

### **815-30-40-6A**

When applying the guidance in paragraph 815-20-25-83A if the hedged forecasted transaction is probable of not occurring, any amounts remaining in accumulated other comprehensive income related to amounts excluded from the assessment of effectiveness shall be recorded in earnings in the current period. For all other discontinued cash flow hedges, any amounts associated with the excluded component remaining in accumulated other comprehensive income shall be recorded in earnings when the hedged forecasted transaction affects earnings.

#### **10.4.1 Hedge is no longer highly effective**

If a cash flow hedging relationship does not pass the prospective effectiveness test, hedge accounting should be discontinued going forward.

If a cash flow hedging relationship does not pass the retrospective effectiveness test, hedge accounting should be discontinued as of the last date when the hedged item was assessed and demonstrated high effectiveness, unless a reporting entity can determine a specific point that it failed to be effective.

Assume a reporting entity determines that a hedging relationship did not pass the prospective and retrospective effectiveness assessments during its monthly effectiveness assessment on July 31, 20X1. Hedge accounting should be discontinued as of June 30, 20X1, the last date on which the hedged item was assessed and demonstrated high effectiveness. The reporting entity would stop hedge accounting as of that date, unless it can determine a specific point in July of 20X1 on which it failed to be effective.

If the cash flow hedge is no longer effective, but the forecasted transaction is not probable of not occurring, the amounts previously recorded in AOCI, including amounts remaining related to excluded components that were recognized through an amortization approach, remain there until the forecasted transaction impacts earnings.

#### **10.4.2 *Hedge is sold, extinguished, terminated, exercised, or expires***

If a cash flow hedging instrument is sold, extinguished, terminated, exercised, or expires, it is derecognized and the amounts in AOCI, including amounts remaining related to excluded components that were recognized through an amortization approach, remain there until the forecasted transaction impacts earnings unless the forecasted transaction becomes probable of not occurring.

#### **10.4.3 *Hedging instrument is dedesignated***

When a reporting entity dedesignates or voluntarily discontinues a cash flow hedge and the forecasted transaction giving rise to variability in future cash flows will occur as expected, gains and losses that are in AOCI, including amounts remaining related to excluded components that were recognized through an amortization approach, will not be affected. In these cases, gains and losses remain in AOCI until the forecasted transaction impacts earnings.

Future changes in the derivative's fair value after discontinuance of hedge accounting, however, will be recorded in current-period earnings if the derivative is not terminated or redesignated in a qualifying hedge.

##### **10.4.3.1 *Partial dedesignation of the hedging instrument***

We believe partial dedesignation of cash flow hedging instruments is permitted in some instances.

In determining whether or not proportional dedesignation is acceptable under ASC 815-30-40-1, we considered ASC 815-20-25-45, which allows for proportional designation, and Example 11: *Cash Flow Hedge of the Foreign Currency Exposure in a Royalty Arrangements*, in ASC 815-30-55-72, which discusses proportional dedesignation.

The dedesignated portion of the derivative may be redesignated in a new hedging relationship, as illustrated in Example DH 10-3.

### **EXAMPLE DH 10-3**

#### **Redesignation of a portion of a derivative**

USA Corp is a US dollar functional currency manufacturing company.

USA Corp forecasts that it will sell 2,000 euro (EUR) of inventory on November 15, 20X1. The sales have not been firmly committed to, but historical experience and sales forecasts indicate that sales are probable.

On January 15, 20X1, USA Corp enters into a ten-month foreign currency forward contract to deliver EUR 1,000 and receive USD to hedge the foreign currency risk associated with the sale of the first EUR 1,000 of forecasted sales of inventory on November 15, 20X1.

In March 20X1, USA Corp re-evaluates its foreign currency exposure and decides to decrease the hedged amount to the first EUR 800 of forecasted sales of inventory expected on November 15, 20X1; however, the original EUR 1,000 of sales are still probable of occurring.

Can USA Corp partially dedesignate EUR 200 of the derivative and continue hedge accounting for the remaining EUR 800 under the existing hedging relationship?

*Analysis*

Yes. USA Corp may dedesignate EUR 200 of hedged item and EUR 200 of hedging instrument notional amount and continue to apply hedge accounting for the remaining EUR 800.

We believe partial dedesignation may be an acceptable alternative to full dedesignation and redesignation in certain circumstances. In this example, the cash flow hedging relationship remains intact for the portion associated with the first EUR 800 of notional value of the original transaction.

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**10.4.4 *Hedge is dedesignated and subsequently redesignated again***

If the hedging instrument is dedesignated and subsequently redesignated in a new hedging relationship, the amount in AOCI related to the first hedging relationship, including amounts remaining related to excluded components that were recognized through an amortization approach, would remain there until the first forecasted transaction impacts earnings, provided that the forecasted transaction does not become probable of not occurring.

The hedging instrument would be accounted for in its new hedging relationship from the point of redesignation onward.

**10.4.5 *Forecasted transaction is reasonably possible of occurring***

When a reporting entity determines it is reasonably possible but not probable that the forecasted transaction will *not* occur (so, it is no longer probable of occurring, but it is not probable of not occurring), the hedging relationship must be terminated, but gains and losses that are in AOCI, including amounts remaining related to excluded components that were recognized through an amortization approach, will remain there until the forecasted transaction impacts earnings or until it later becomes probable of not occurring.

**10.4.6 *Forecasted transaction is probable of not occurring***

When a reporting entity determines that it is probable that the forecasted transaction will not occur by the end of the originally specified time period or within an additional two-month period of time, amounts deferred in AOCI are recognized immediately. If the hedge had not previously been dedesignated, it must also be dedesignated.

When a hedged forecasted transaction is probable of not occurring, ASC 815-30-40-6A requires any amounts remaining in AOCI related to the excluded components to be recorded in earnings.

#### 10.4.7 *Extenuating circumstances impact the forecasted transaction*

Generally, a forecasted transaction being probable of occurring on a date more than two months after the originally-specified period would result in dedesignation of the hedging relationship and a reclassification of amounts recorded in AOCI. In rare circumstances, the existence of extenuating circumstances that are related to the nature of the forecasted transaction and are outside the control or influence of the reporting entity may cause the forecasted transaction to be probable of occurring on a date that is beyond the additional two-month period of time. In such rare circumstances, ASC 815-30-40-4 permits the net derivative gain or loss related to the discontinued cash flow hedge to remain in AOCI until the forecasted transaction impacts earnings.

#### 10.4.8 *Impact of documentation on probability of forecast occurring*

How a reporting entity specifically defines its forecasted transaction can significantly impact (1) when it must dedesignate a hedging relationship and (2) when the deferred gains or losses on the hedging instrument get reclassified from AOCI into earnings. The key is to be specific enough such that it is clear when the forecasted transaction occurs. However, the more specific the designation, the more likely that unanticipated changes in the terms of the forecasted transaction could result in the termination of the hedging relationship and the potential release of AOCI.

#### 10.4.8.1 *Summary - Impact of probability of forecasted transactions*

Figure DH 10-1 illustrates the impact of probability of forecasted transactions on the continuation of hedge accounting and the amounts in AOCI.

#### **Figure DH 10-1**

##### Assessing probability of forecasted transactions

<b>Probability of forecasted transaction(s) occurring</b>	<b>Impact on hedge accounting going forward (assuming no voluntary dedesignation)</b>	<b>Impact on OCI/AOCI (including excluded components recognized through an amortization approach)</b>
Probable of occurring	Continue hedge accounting	Current-period amounts are deferred through OCI, and cumulative amounts deferred are reclassified from AOCI when the forecasted transaction affects earnings.
Reasonably possible of occurring (DH 10.4.5)	Discontinue	No further amounts are deferred through OCI.  Amounts previously deferred remain in AOCI until the forecasted transaction either affects earnings or subsequently becomes probable of not occurring.

<b>Probability of forecasted transaction(s) occurring</b>	<b>Impact on hedge accounting going forward (assuming no voluntary dedesignation)</b>	<b>Impact on OCI/AOCI (including excluded components recognized through an amortization approach)</b>
Reasonably possible of not occurring	Discontinue	No further amounts are deferred through OCI.  Amounts previously deferred remain in AOCI until the forecasted transaction either affects earnings or subsequently becomes probable of not occurring.
Probable of not occurring (DH 10.4.6)	Discontinue	Amounts previously deferred in AOCI are reclassified immediately to earnings.

#### **10.4.9 Variability of cash flows ceases**

Cash flow hedge accounting is required to be discontinued when the variability in cash flows of the hedged forecasted transaction cease, for example, when a forecasted transaction becomes a firm commitment. The amounts in AOCI related to the gain or loss on the derivative and the components excluded from the assessment of effectiveness that were not yet amortized related to the time that it is in a designated hedging relationship would remain deferred there until the forecasted transaction impacts earnings. After discontinuance, the hedging instrument would be either (1) measured at fair value through current earnings or (2) in a new hedging relationship (if it is redesignated) from the point of redesignation onward.

In the example of a forecasted transaction that becomes a firm commitment, the firm commitment could be designated as the hedged item in a new fair value hedging relationship. See DH 7.3.5.3.

## **10.5 Discontinuance of foreign currency hedges**

Discontinuance of a foreign currency fair value hedge or a foreign currency cash flow hedge follows the respective fair value hedge or cash flow hedge discontinuance guidance in DH 10.3 and DH 10.4.

Discontinuance of a hedge of the foreign currency exposure of a net investment in a foreign operation should be accounted for in a manner consistent with the provisions of ASC 830-30, *Foreign Currency—Translation of Financial Statements*. ASC 830-30-40 requires reporting entities to reclassify the amount attributable to a particular foreign entity from the cumulative translation adjustment (CTA) in equity to earnings upon sale or complete or substantially complete liquidation of an investment in the foreign entity. A reporting entity must discontinue hedge accounting prospectively upon sale or complete or substantially complete liquidation of the foreign entity or through the deconsolidation of a subsidiary from a change in control, as provided in ASC 810-10, *Consolidation—Overall*. The reporting entity must also discontinue hedge accounting if the hedging relationship no longer qualifies or no longer is highly effective, or if the derivative expired or was sold, terminated, or exercised.

Consistent with fair value and cash flow hedges, a reporting entity may elect to voluntarily discontinue a net investment hedge.

See DH 8.6 for discussion of net investment hedges.

#### **10.5.1 *Net investment hedge is no longer effective***

If a net investment hedging relationship does not pass the prospective effectiveness test, hedge accounting should be discontinued going forward.

If a net investment hedging relationship does not pass the retrospective effectiveness test, hedge accounting should be discontinued as of the last date when the hedged item was assessed and demonstrated high effectiveness, unless it can determine a specific point that it failed to be effective.

Assume a reporting entity determines that a net investment hedging relationship did not pass the prospective and retrospective effectiveness assessments during its monthly effectiveness assessment on July 31, 20X1. Hedge accounting should be discontinued as of June 30, 20X1, the last date on which the hedged item was assessed and demonstrated high effectiveness. The reporting entity would stop hedge accounting as of that date, unless it can determine a specific day in July on which it ceased being effective.

If the net investment hedge is no longer effective, any amounts that have not yet been recognized in earnings remain in CTA until the net investment is sold, completely liquidated, or substantially liquidated. ASC 815-35-40-1 provides that this would also apply to amounts related to excluded components not yet recognized using the amortization approach if the entity assessed effectiveness using the spot method.

#### **10.5.2 *Hedging instrument is sold, terminated, exercised, or expires***

If a net investment hedging instrument is sold, extinguished, terminated, exercised, or expires, it is derecognized and the amounts that have not yet been recognized in earnings remain in CTA until the net investment is sold, completely liquidated, or substantially liquidated. ASC 815-35-40-1 provides that this would also apply to amounts remaining related to excluded components not yet recognized using the amortization approach if the entity assessed effectiveness using the spot method.

#### **10.5.3 *Hedging instrument is dedesignated***

When a reporting entity dedesignates or voluntarily discontinues a net investment hedge, any amounts that have not yet been recognized in earnings remain in CTA until the net investment is sold, completely liquidated, or substantially liquidated. ASC 815-35-40-1 provides that this would also apply to amounts related to excluded components not yet recognized using the amortization approach if the entity assessed effectiveness using the spot method.

Future changes in the derivative's fair value after discontinuance of hedge accounting, however, will be recorded in current-period earnings if the derivative is not terminated or redesignated in a qualifying hedge.

#### **10.5.4 *Hedging instrument is dedesignated and redesignated***

If the hedging instrument is dedesignated and subsequently redesignated in a new hedging relationship, the amount in CTA related to the first hedging relationship would remain there until the sale or complete or substantial liquidation of the foreign entity. ASC 815-35-40-1 provides that this would also apply to amounts remaining related to excluded components that were not yet recognized

through an amortization approach if the entity assessed effectiveness of the dedesignated hedging relationship using the spot method.

The hedging instrument would be accounted for in its new hedging relationship from the point of redesignation onward.

## **10.6 Business combination considerations regarding discontinuance**

In an acquisition, the acquired entity ceases to exist and the acquiring entity survives. Upon acquisition, ASC 815-20-55-199 through ASC 815-20-55-203, Example 24: *No Continuation of the Shortcut Method Following a Purchase Business Combination*, states that an acquired entity cannot continue a shortcut method hedge following a purchase business combination because the original hedging relationship is dedesignated, and a new hedging relationship is redesignated at the combined-entity level. At that point, the new hedging relationships will need to be reassessed to determine whether they qualify for the shortcut method at the combined-entity level, which is extremely unlikely because the derivatives would have fair values other than zero at the inception date of the new hedging relationship.

The new entity will need to elect whether or not to designate derivatives acquired as part of a business combination in new hedge relationships and demonstrate that the new hedging relationships meet all of the criteria to achieve hedge accounting, including that they are expected to be highly effective. It may be challenging to achieve hedge accounting for a redesignated hedge following a purchase business combination because:

- the derivatives likely have a fair value other than zero at the acquisition date,
- the hedged assets and liabilities, which are measured at fair value in a business combination, likely have a different basis than they did in the original hedging relationship, and
- the probability of a forecasted transaction occurring could change upon a business combination.



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***Chapter 11:***  
***Derivatives – private***  
***company guidance***

## **11.1 *Derivatives private company guidance overview***

The Private Company Council (PCC) provides advice on the FASB's technical agenda and proposes possible alternative treatments with respect to the needs of users of private company financial statements. As a result of a PCC recommendation, the FASB provided a simplified hedge accounting approach to account for swaps that economically convert variable-rate borrowings into fixed-rate borrowings.

This chapter discusses this simplified hedge accounting approach and other relief provided for private companies when applying ASC 815, *Derivatives and Hedging*. See FSP 19.6 and FSP 20.7.3 for information on derivative and hedging presentation and disclosure considerations for private companies.

## **11.2 *Simplified hedge accounting approach***

The ability of many private companies to borrow funds at a fixed rate of interest is often limited. As a result, these companies will typically borrow on a floating rate basis, and at the same time, enter into an interest rate swap to economically convert the borrowing into a fixed rate.

As discussed in DH 5, for an interest rate swap to be accounted for as a cash flow hedge under the hedge accounting rules, a reporting entity is required to document its election and assess the effectiveness of the hedging relationship. If a reporting entity does not contemporaneously document the hedging relationship, the interest rate swap would not qualify for hedge accounting and would be recorded at fair value, with changes in fair value recorded in earnings.

The simplified hedge accounting approach makes qualifying for hedge accounting simpler and measurement of the swap less complex. Under the simplified approach, private companies are allowed to assume perfect effectiveness for qualifying receive-variable, pay-fixed interest rate swaps designated in a cash flow hedging relationship provided certain criteria are met. In addition, the simplified hedge accounting approach relaxes the requirements for contemporaneous documentation.

The simplified hedge accounting approach is elective. If an eligible entity does not elect the simplified hedge accounting approach, it should apply the general cash flow hedge accounting guidance or choose to not apply hedge accounting and record the interest rate swap at fair value with changes in value recorded in earnings. See DH 5 for general information on cash flow hedge accounting, DH 6 for information on cash flow hedges of debt, and DH 11.3 for information on private company hedge documentation requirements if the simplified hedge accounting approach is not applied.

### **11.2.1 *Electing to use the simplified hedge accounting approach***

Before adopting the simplified hedge accounting approach, an eligible private company should weigh both the impact of applying the approach on its key financial metrics, and the potential cost of unwinding the accounting and reapplying the general hedge accounting requirements if its reporting requirements change because it no longer meets the definition of a private company.

A reporting entity that is private today could later meet the definition of a public business entity (e.g., by becoming a public company through an initial public offering or through acquisition or investment by a public company). Once a reporting entity meets the definition of a public business entity, it may no longer apply the simplified hedge accounting approach.

Additionally, if upon becoming a public business entity, it is subject to standalone SEC reporting requirements, it will need to retrospectively adjust its historical financial statements to remove the effect of applying the simplified hedge accounting approach for all prior periods.

### **11.2.2 Eligibility to use the simplified hedge accounting approach**

Public business entities (as defined the ASC Master Glossary) may not apply the simplified hedge accounting approach. The simplified hedge accounting approach may be applied by private companies that are not:

- Financial institutions, as defined in ASC 942-320-50-1, which includes banks, savings and loan associations, savings banks, credit unions, finance companies and insurance companies
- Not-for-profit-entities
- Employee benefit plans within the scope of ASC 960 through ASC 965

Question DH 11-1 asks if an entity can use the simplified hedge accounting approach if it is not a public business entity itself, but is a subsidiary of a public business entity.

#### **Question DH 11-1**

If a reporting entity is not a public business entity itself, but a subsidiary of a public business entity, may it use the simplified hedge accounting approach in its standalone financial statements?

#### ***PwC response***

Yes. The reporting entity may elect the simplified hedge accounting approach in its standalone financial statements (provided those financial statements are not publicly filed). A reporting entity that meets the definition of a public business entity solely because its financial statements are included in another entity's SEC filings is only a public business entity for purposes of the financial statements filed with the SEC.

Question DH 11-2 asks how a private company applying the simplified hedge accounting approach applies hedge accounting after becoming a public business entity.

#### **Question DH 11-2**

How should a private company applying the simplified hedge accounting approach apply hedge accounting after becoming a public business entity?

#### ***PwC response***

A public business entity should dedesignate the simplified hedge accounting relationship, and could prospectively designate a new hedging relationship. It is unlikely that the requirements for applying the shortcut method would be met on the date the new hedging relationship is designated.

### 11.2.3 *The simplified hedge accounting approach*

Private companies that elect the simplified hedge accounting approach can assume perfect effectiveness for qualifying receive-variable, pay-fixed interest rate swaps designated in a cash flow hedging relationship provided the criteria in ASC 815-20-25-137 are met. Interest rate swaps entered into by a private company for any other purpose do not qualify for the simplified approach.

#### **ASC 815-20-25-137**

An eligible entity under paragraph 815-20-25-135 must meet all of the following conditions to apply the simplified hedge accounting approach to a cash flow hedge of a variable-rate borrowing with a receive-variable, pay-fixed interest rate swap:

- a. Both the variable rate on the swap and the borrowing are based on the same index and reset period (for example, both the swap and borrowing are based on one-month London Interbank Offered Rate [LIBOR] or both the swap and borrowing are based on three-month LIBOR).
- b. The terms of the swap are typical (in other words, the swap is what is generally considered to be a “plain-vanilla” swap), and there is no floor or cap on the variable interest rate of the swap unless the borrowing has a comparable floor or cap.
- c. The repricing and settlement dates for the swap and the borrowing match or differ by no more than a few days.
- d. The swap’s fair value at inception (that is, at the time the derivative was executed to hedge the interest rate risk of the borrowing) is at or near zero.
- e. The notional amount of the swap matches the principal amount of the borrowing being hedged. In complying with this condition, the amount of the borrowing being hedged may be less than the total principal amount of the borrowing.
- f. All interest payments occurring on the borrowing during the term of the swap (or the effective term of the swap underlying the forward starting swap) are designated as hedged whether in total or in proportion to the principal amount of the borrowing being hedged.

Question DH 11-3 asks if a private company can apply the simplified hedge accounting approach to a variable rate borrowing that is based on an index other than LIBOR.

#### **Question DH 11-3**

Can a private company apply the simplified hedge accounting approach to a variable-rate borrowing that is based on an index other the LIBOR?

#### ***PwC response***

Yes. A variable-rate borrowing and a swap may be indexed to any variable interest rate (including rates that are not benchmark interest rates) and still be eligible for the simplified hedge accounting

approach provided the variable rate for both the borrowing and the swap are based on the same index, have the same reset period, and all other requirements are met.

Question DH 11-4 discusses the repricing and settlement date requirements in ASC 815-20-25-137(c).

### Question DH 11-4

How many days is considered “no more than a few days” with regard to the repricing and settlement date requirements in ASC 815-20-25-137(c)?

#### *PwC response*

The FASB did not provide a bright line, but we believe a week or less between repricing and settlement dates on the interest rate swap and the borrowing would generally represent a reasonable time period.

Question DH 11-5 discusses whether the simplified hedge accounting approach must be elected for all hedging relationships that meet the requirement.

### Question DH 11-5

If a private company elects the simplified hedge accounting approach for one eligible hedging relationship, must it elect the simplified approach for all hedging relationships that meet the requirements?

#### *PwC response*

No. ASC 815 generally requires reporting entities to use the same method to assess hedge effectiveness for all similar hedges; however, the decision to apply the shortcut method can be elected on a swap-by-swap basis. By analogy, we believe that private companies can elect to apply the simplified hedge accounting approach on a swap-by-swap basis.

#### **11.2.3.1 Index and reset period**

Certain borrowing arrangements provide the borrower with the option to periodically select the interest rate index and reset period. For example, when the interest rate on a borrowing resets, assume the borrower has the ability to designate the interest rate index as three-month LIBOR, 6-month LIBOR, or the Prime rate. The existence of this option does not preclude a private company from applying the simplified hedge accounting approach as long as the interest rate index and reset period on the swap and the borrowing match. For example, if the private company elects three-month LIBOR as the interest rate for the borrowing at inception of the hedge, the swap must also be based on three-month LIBOR.

If the private company subsequently elects to change the interest rate or reset period such that the rate on the swap no longer matches the borrowing, the relationship will no longer qualify for the simplified hedge accounting approach. The private company would have to dedesignate the hedging relationship and discontinue hedge accounting under the simplified approach. However, it would be able to attempt to designate a new hedging relationship. See DH 11.2.6 for information on discontinuance of the simplified hedge accounting approach.

### 11.2.3.2 *Fair value at inception*

ASC 815-20-25-137(d) requires the swap's fair value at inception of the hedging relationship to be at or near zero. Therefore, if a private company enters into an interest rate swap with terms that do not reflect the prevailing market rates and pays or receives a significant premium, or designates an existing interest rate swap with a significant fair value at the inception of the hedging relationship, the simplified hedge accounting approach should not be applied.

This guidance may also come into play when a private company acquires another private company that was applying the simplified approach. Because the date the acquisition is consummated is considered the inception of the hedging relationship for the acquirer, and the interest rate swap is not likely to have a fair value at or near zero at that date, the simplified approach cannot be continued by the acquirer in its consolidated financial statements.

### 11.2.3.3 *Forward starting swap*

As discussed in ASC 815-20-25-138, a private company may apply the simplified hedge accounting approach to a forward-starting interest rate swap entered into to hedge variable-rate interest payments on future debt issuances provided the qualifying criteria are met. Example DH 11-1 illustrates the application of the simplified hedge accounting approach to a forward-starting interest rate swap.

#### **EXAMPLE DH 11-1**

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##### *Use of the simplified hedge accounting approach for a forward-starting swap*

Private Co expects to issue \$5 million in a 10-year variable rate borrowing one year from today. To hedge the interest rate risk associated with the forecasted variable-rate interest payments, Private Co enters into a forward-starting receive-variable, pay-fixed interest rate swap with a notional amount of \$5 million, 10-year effective term, and commencement date on the same date Private Co plans to borrow. Private Co designates the swap as a cash flow hedge of the interest payments on the forecasted 10-year variable-rate borrowing.

Can Private Co apply the simplified hedge accounting approach for this cash flow hedging relationship?

##### *Analysis*

Provided the remaining criteria for applying the simplified hedge accounting approach are met, Private Co could apply the simplified hedge accounting approach to this hedging relationship. However, if Private Co delays its debt issuance (for example, it issues the debt two months after originally forecasted), it would no longer qualify for simplified hedge accounting. Private Co would have to dedesignate the hedging relationship and discontinue hedge accounting. If the forward-starting swap were to meet the requirements for long-haul hedge accounting, then Private Co could dedesignate the simplified hedge accounting approach hedging relationship and prospectively designate a new long-haul hedging relationship.

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### 11.2.4 *Documentation of a hedge under the simplified approach*

ASC 815 requires contemporaneous documentation of hedging relationships to be prepared at hedge inception. The simplified hedge accounting approach relaxes the requirements for contemporaneous

documentation. Under the simplified approach, hedge accounting documentation must be completed by the date on which the first annual financial statements are available to be issued after hedge inception. For example, if a calendar year-end private company enters into an interest rate swap on January 1, 20X1, and has until March 31, 20X2 to issue the annual financial statements, it would have until the financial statements are available to be issued (i.e., on or before March 31, 20X2) to complete the required hedge documentation.

Although a private company has additional time to complete its hedge documentation, all of the formal hedge documentation requirements in ASC 815-20-25-3 are applicable. These requirements are extensive and include documentation of the following:

- The hedging relationship
- The private company's risk management objective and strategy for undertaking the hedge, including identification of all of the following:
  - The hedging instrument
  - The hedged item or transaction
  - The nature of the risk being hedge
  - The method that will be used to retrospectively and prospectively assess the hedging instrument's effectiveness in offsetting the exposure to the hedged transaction's variability in cash flows attributable to the hedged risk
- The date the forecasted hedged interest payments are expected to occur (this must be described with sufficient specificity that when an interest payment occurs it is clear whether it is the hedged interest payment)

See DH 6.3.3.4 for information on the identification of the hedged forecasted transaction and the impact it may have on hedge accounting and DH 5.7 for additional information on hedge documentation requirements.

Although the simplified hedge accounting approach allows some latitude with regard to when hedging documentation must be completed, private companies should complete the hedge accounting documentation as soon as possible. If it is determined that an interest rate swap does not meet all of the requirements for the simplified approach, the private company would not be able to retroactively apply the long-haul method.

See DH 11.3 for information on private company hedge documentation requirements if the simplified hedge accounting approach is not applied.

### **11.2.5 Accounting under the simplified hedge accounting approach**

If all of the criteria for applying the simplified hedge accounting approach are satisfied, a private company may assume the hedging relationship is perfectly effective and elect to recognize the interest rate swap at its settlement value instead of fair value. Since the swap is considered perfectly effective, the change in settlement value of the swap (or fair value, if elected) is recorded in other comprehensive income and the swap accruals are recorded in interest expense. As a result, the amount of interest

expense recognized in the income statement under this approach would approximate the amount that would have been recognized if the private company had borrowed at a fixed rate.

The primary difference between settlement value and fair value is that nonperformance risk (the risk that an entity will not fulfill an obligation) is not considered in the measurement of settlement value. ASC 815-10-35-1B provides guidance on determining the settlement value of a swap.

#### **Excerpt from ASC 815-10-35-1B**

One approach for estimating the receive-variable, pay-fixed interest rate swap's settlement value is to perform a present value calculation of the swap's remaining estimated cash flows using a valuation technique that is not adjusted for nonperformance risk.

We believe the discount rate used in the present value calculation may either be the current market rate of interest adjusted for credit risk or the appropriate current risk free/benchmark rate.

Banks and other swap counterparties periodically send statements of an interest rate swap's value. The value furnished by the counterparty is typically a settlement value consistent with the guidance in ASC 815-10-35-1B. A private company should gain an understanding of the valuation techniques used by the swap counterparty to ensure the value provided is representative of settlement value before recording that value in its financial statements.

Question DH 11-6 discusses whether a private company is required to record a swap using settlement value if the simplified hedge accounting approach is elected.

#### **Question DH 11-6**

Is a private company that elects the simplified hedge accounting approach required to record the swap using settlement value?

#### ***PwC response***

No. Use of settlement value is optional under the simplified approach. A private company may elect the simplified hedge accounting approach for purposes of assessing hedge effectiveness but record the swap at fair value. Settlement value is provided as a practical expedient and can be elected on a swap-by-swap basis. As such, settlement value does not have to be used for all similar hedging relationships.

Question DH 11-7 discusses if a swap accounted for at settlement value under the simplified hedge accounting approach is subject to the disclosure requirements for fair value measurements.

#### **Question DH 11-7**

Is a swap accounted for at settlement value under the simplified hedge accounting approach subject to the disclosures for fair value measurements required by ASC 820, *Fair Value Measurement*?

#### ***PwC response***

Yes. The disclosures for fair value measurements required by ASC 820 are still required for amounts disclosed at settlement value. Disclosures related to swaps measured at settlement value should be



clearly identified separate from the fair value disclosures. In addition, all of the presentation and disclosure requirements of ASC 815 continue to apply. See FSP 19.6.1 and FSP 20.7.3 for additional information on disclosures for swaps accounted for using the simplified hedge accounting approach and fair value measurements.

#### **11.2.5.1 *Monitoring the hedging relationship and swap counterparty***

A private company should periodically assess whether the terms of the hedging relationship have been modified (i.e., confirm that the “critical terms” have not changed during the period) and that the forecasted interest payments are probable of occurring. As part of this assessment, a private company should consider the likelihood of the counterparty’s compliance with the contractual terms of the swap.

ASC 815 requires a reporting entity to assess counterparty credit risk on at least a quarterly basis. If there are no adverse developments regarding counterparty default risk and the terms of the swap continue to mirror the terms of the borrowing in accordance with the simplified hedge accounting approach criteria, a private company can conclude that the hedge is perfectly effective. However, if there have been adverse developments regarding counterparty credit risk such that it is no longer probable that the counterparty will not default, a private company can no longer apply the simplified hedge accounting approach. A private company should perform this assessment on a quarterly basis, but can defer the documentation to no later than the date the annual financial statements are available to be issued.

#### **11.2.6 *Discontinuance of a simplified hedge accounting relationship***

If a hedging relationship no longer meets the criteria to qualify for the simplified hedge accounting approach, the hedging relationship must be prospectively discontinued from the date the criteria were no longer met. A private company can also elect to discontinue a simplified hedge accounting relationship.

On the date the simplified hedge accounting approach is discontinued, a private company must calculate the fair value of the swap (not the settlement value) and record the difference between settlement value and fair value in other comprehensive income. Subsequent changes in the fair value of the swap will be reported in earnings unless the private company meets the requirements for cash flow hedge accounting using a method other than the simplified hedge accounting approach; in that case, the private company may designate a new hedging relationship prospectively.

Treatment of the gains and losses previously deferred in accumulated other comprehensive income upon discontinuance of a simplified hedge accounting relationship will depend on the cause of discontinuance and the original hedge documentation.

- If the forecasted hedged interest payments are still probable of occurring, amounts in accumulated other comprehensive income should be released when the interest payments are recorded in earnings.
- If the forecasted interest payments are considered probable of not occurring, amounts in accumulated other comprehensive income are reclassified to earnings in the current period.

Example DH 11-2 and Example DH 11-3 illustrate this distinction.

**EXAMPLE DH 11-2**

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**Hedged forecasted interest payments are probable of not occurring**

On January 1, 20X1, Private Co enters into a \$5 million, 10-year loan with an interest rate of 3-month LIBOR plus 2.50%.

Private Co concurrently enters into an at-market 10-year receive 3-month LIBOR, pay-fixed interest rate swap with a notional amount of \$5 million to economically convert the loan's variable rate interest payments to a fixed rate.

All of the requirements to qualify for the simplified hedge accounting approach are met. Private Co designates the interest rate swap as a cash flow hedge of the variable-rate interest payments and elects to apply the simplified hedge accounting approach. In its hedge documentation it defines the hedged transactions as the forecasted LIBOR interest payments associated with the specific January 20X1 loan.

Five years later, Private Co repays the loan. The hedging relationship no longer qualifies for hedge accounting because the hedged interest payments will no longer occur.

Should Private Co recognize the gains and losses on the swap accumulated in other comprehensive income in earnings immediately?

*Analysis*

Yes. The gains and losses on the swap accumulated in other comprehensive income should be reclassified to earnings immediately because the hedged forecasted transactions (i.e., the interest payments on the January 20X1 loan) are probable of not occurring.

**EXAMPLE DH 11-3**

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**Hedged forecasted interest payments are probable of occurring**

On January 1, 20X1, Private Co enters into a \$5 million, 10-year loan with an interest rate of 3-month LIBOR plus 2.50%.

Private Co concurrently enters into an at-market 10-year receive 3-month LIBOR, pay-fixed interest rate swap with a notional amount of \$5 million to economically convert the loan's variable rate interest payments to a fixed rate.

All of the requirements to qualify for the simplified hedge accounting approach are met. Private Co designates the interest rate swap as a cash flow hedge of the variable-rate interest payments and elects to apply the simplified hedge accounting approach. In its hedge documentation it defines the hedged transactions as the first forecasted LIBOR-based interest payments to occur each quarter on \$5 million of borrowings over the next 10 years (i.e., the hedging relationship is not tied to a specific borrowing).

Five years later, Private Co refinances its debt with a new lender. The new loan has interest payments based on 1-month LIBOR. The hedging relationship no longer qualifies for the simplified hedge accounting approach because the variable interest rate on the loan (1-month LIBOR) does not match the variable interest rate on the swap (3-month LIBOR) so Private Co dedesignated the hedging relationship and discontinues hedge accounting.

Should Private Co recognize the gains and losses on the swap accumulated in other comprehensive income in earnings immediately?

*Analysis*

No. The gains and losses on the swap accumulated in other comprehensive income should continue to be deferred because the forecasted transactions (as defined) are still probable of occurring since Private Co will continue to incur interest payments indexed to LIBOR on \$5 million of borrowings for the term of the hedge. The gains and losses on the interest rate swap deferred in accumulated other comprehensive income would not be reclassified until the forecasted interest payments are recorded in earnings.

### **11.3 Private company hedge documentation requirements**

ASC 815 (as amended by ASU 2017-12) also provides private companies (that are not financial institutions or certain not-for-profit entities) with extra time to complete some of the hedge documentation for hedging relationships other than those accounted for using the simplified hedge accounting approach. Unlike the documentation deferral for the simplified hedge accounting approach (under which all of the documentation can be deferred), documentation for hedges accounted for using another method are split between items that must be documented at hedge inception and others that can be deferred until the next interim (if applicable) or annual financial statements are available to be issued.

The following table summarizes the timing of documentation requirements discussed in ASC 815-20-25-139 and ASC 815-20-25-140.

<b>To be documented at inception of the hedging relationship</b>	<b>To be documented before the financial statements are available to be issued</b>
<ul style="list-style-type: none"> <li><input type="checkbox"/> The hedging relationship</li> <li><input type="checkbox"/> The hedging instrument</li> <li><input type="checkbox"/> The hedged item</li> <li><input type="checkbox"/> The nature of the risk being hedged</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> The method of assessing hedge effectiveness at inception and on an ongoing basis</li> <li><input type="checkbox"/> Initial hedge effectiveness assessments</li> </ul>

Private companies are still required to complete multiple assessments of effectiveness. For example, four assessments must be completed for every hedge outstanding for the entire year. This is because the purpose of the assessments is to validate that the application of hedge accounting was appropriate for the entire annual period. In addition, the effectiveness assessments must be done using relevant data as of hedge inception and each subsequent quarter-end, regardless of when they are performed.