
Guide to Accounting for Derivative Instruments and Hedging Activities

2013

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This publication has been updated to reflect new and updated authoritative and interpretive guidance since the 2012 edition. See Appendix B for a summary of changes from the 2012 edition.



Dear Clients and Friends:

PricewaterhouseCoopers is pleased to offer this updated comprehensive guide, which is meant to help you meet the challenges of accounting for derivative instruments and hedging activities. Domestically and internationally, the volume, variety, and inherent complexity of derivative transactions have steadily increased and the nature of hedging activities continues to evolve. In practice, hedge accounting is difficult to apply and leads to divergent interpretations. For this reason, the use of derivative instruments and related hedging activities still attracts heightened scrutiny from regulators and other interested parties.

In this guide we attempt to clarify a complex area of accounting by providing relevant guidance and examples. We also add our own perspective throughout, based on both our analysis of the guidance and our experience in applying it.

The FASB continues to amend and provide further clarification of the accounting and disclosure requirements for derivative and hedging activities to keep pace with the ever evolving nature of derivative transactions. Additional FASB guidance is sure to come, since practice issues will continue to arise in this area. We will keep you up-to-date on new guidance through further communications whenever it is necessary and useful.

Although this publication is intended to clarify the fundamental requirements of accounting for derivative instruments and to highlight key points that should be considered before transactions are undertaken, it is not a substitute for a thorough analysis of the facts and circumstances surrounding proposed transactions, nor should it be read in place of the relevant accounting literature. Nonetheless, we trust that you will find in these pages information and insights that will allow you to work with greater confidence and certainty when accounting for derivative instruments and hedging activities.

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Chapter 1: Executive Summary

This monograph offers a comprehensive discussion of the accounting guidance for derivatives and hedging activities contained in ASC 815, *Derivatives and Hedging*. It is intended to help preparers and accountants successfully navigate the rules and principles for appropriately accounting for derivative transactions. This executive summary provides a brief historical perspective, highlights the fundamental principles and key challenges associated with derivatives and hedge accounting, and provides a look ahead at what the future may hold.

1.1 Historical Perspective

Entities use derivative instruments to manage their exposure to various risks such as interest rate risk, foreign exchange risk, price risk, and credit risk. Prior to the issuance of the derivatives and hedging guidance, the accounting standards had failed to keep pace with the activities of the derivatives market, as entities were not required to report derivative instruments on the balance sheet. Negative publicity surrounding large derivative losses at several entities only heightened public concern. It was within this climate that the SEC and other parties urged the Financial Accounting Standards Board (FASB) to develop a comprehensive accounting framework for derivative instruments and hedges. The principles in ASC 815 reflect the FASB's response.

Although in 1998 the FASB could not foresee all of the complexities that entities would face in implementing the derivatives and hedging guidance, the Board did recognize that the intricacies of the guidance necessitated a novel post-standard-setting effort. As a result, the FASB staff undertook a project to identify and provide guidance on implementation issues that entities encountered as they applied accounting guidance for derivatives and hedging activities. To assist the FASB staff in this project, the Board formed the Derivatives Implementation Group (DIG), which was modeled after the Emerging Issues Task Force (EITF). The DIG had no voting authority and served solely as an advisory group to the FASB and its staff, identifying implementation issues, preparing them for discussion, and recommending potential solutions. Implementation issues on which the DIG and FASB staff reached a conclusion are referred to as DIG Issues. Today, over 130 DIG Issues have been included in the FASB Codification.

1.2 Fundamental Principles of Accounting for Derivatives and Hedging Activities

A broad and comprehensive accounting section, ASC 815 affects virtually all entities, large and small, that use derivative instruments to hedge business risks. It is based on four fundamental conclusions:

- **Derivative instruments represent rights or obligations that meet the definitions of assets or liabilities and should be reported in financial statements.**
- **Fair value is the most relevant measure for financial instruments and the only relevant measure for derivative instruments. Derivative instruments should be measured at fair value, and adjustments to the carrying amount of hedged items should reflect changes in their fair value (that is, gains or losses) that are attributable to the risk being hedged and that arise while the hedge is in effect.**
- **Only items that are assets or liabilities should be reported as such in financial statements.** Derivative instruments are classified as assets or liabilities. However, the gains or losses that result from changes in the fair values of derivative

instruments are not separate assets or liabilities and therefore should not be reported as such in the statement of financial position.

- **Special accounting for items that are designated as being hedged should be provided only for qualifying items. One aspect of qualification should be an assessment of the expectation of effectively offsetting changes in fair values or cash flows for the risk being hedged during the hedge period.** Entities are therefore required to assess whether the hedging instrument is highly effective in offsetting changes in the fair value or cash flows of the hedged item that are attributable to the hedged risk.

Entities must recognize derivative instruments as assets or liabilities in the statement of financial position and subsequently measure them at fair value unless any of the explicit scope exceptions are met. If a derivative instrument meets certain hedge accounting criteria, an entity may designate the instrument as one of the following hedges:

- **Fair value hedge:** A hedge of the exposure to changes (that are attributable to a particular risk) in the fair value of (1) a recognized asset or liability or (2) an unrecognized firm commitment.
- **Cash flow hedge:** A hedge of the exposure to variability (that is attributable to a particular risk) in the cash flows of (1) a recognized asset or liability or (2) a forecasted transaction.
- **Foreign currency hedge:** A hedge of the foreign currency exposure of (1) an unrecognized firm commitment, (2) a recognized asset or liability, (3) a forecasted transaction, or (4) a net investment in a foreign operation.

The relationships between the hedged items and the hedging instruments are typically referred to as *hedging activities* or *hedging transactions* and are subject to the specific hedge accounting criteria outlined in the guidance. For transactions that qualify for hedge accounting, the guidance requires that the timing of the effective portion of the gain or loss recognition on a hedging instrument match the timing and recognition in earnings of (1) the changes in the fair value of the hedged asset, liability, or firm commitment that are attributable to the hedged risk or (2) the effect of the exposure to the variability of cash flows from the hedged asset, liability, or forecasted transaction (that is attributable to a particular risk).

1.3 Challenges Associated with Accounting for Derivatives and Hedging Activities

For many entities, the breadth and complexity of accounting for derivatives and hedging activities have created significant challenges. The time and energy required have prompted some entities to use the assistance of third parties. Today, many years after the initial implementation of the current guidance that applies to derivatives and hedging activities, entities continue to face challenges associated with the ongoing application of that guidance. Several of these key challenges are highlighted below.

1.3.1 Securing Resources with the Appropriate Background and Work Experience

Accounting for derivatives and hedging activities involves the application of a number of requirements that an entity must fulfill to qualify for hedge accounting. However, before entities can begin to assess whether those requirements have been met, they must understand fully the purpose of the derivative transactions, as well as

the risks that are being hedged and how effective the hedge is at mitigating those risks. Entities should also understand the economics of transactions from a risk management perspective and the accounting impact of transactions from a financial reporting perspective. Achieving this understanding has proved difficult for some accounting and financial reporting departments, which may not have extensive knowledge of or work experience with derivative instruments and related risk management activities.

1.3.2 Preparing Hedge Documentation

The application of hedge accounting requires extensive documentation. To qualify for hedge accounting, an entity must clearly document at the inception of a hedging relationship its risk management objective and strategy for entering into the derivative transaction. An entity must also perform a hedge effectiveness assessment (and document that analysis) both at the outset of the hedge transaction and on an ongoing basis (at least quarterly). The assessment must include an evaluation of whether the relationship between the hedging instrument and the hedged item is considered highly effective. Given the nature of the hedge accounting criteria, it should be presumed that, absent contemporaneous, formal, and complete documentation, a hedging instrument does not qualify for hedge accounting.

Although the application of hedge accounting is elective, many entities believed, when the current guidance was first issued, that the application of hedge accounting was the only practical option for their hedging activities, given investor expectations surrounding earnings volatility. While many entities with significant infrastructure and resources were able to meet the documentation requirements associated with hedge accounting, a number of entities that lacked resources were unable to fully comply with the hedge documentation requirements. In some cases, derivatives were inappropriately accounted for as hedges due to documentation deficiencies resulting in a significant number of restatements.

1.3.3 Coordinating Between Departments

Measuring derivatives at fair value and recognizing changes in fair value in earnings may introduce significant volatility to an entity's accounting results. To avoid this volatility, entities may seek to apply hedge accounting. Entities that wish to apply hedge accounting must assess the hedging relationship on an ongoing basis to ensure that the hedging relationship is in fact highly effective. Preparing and aggregating the requisite information may prove a significant undertaking for some entities—depending on the nature of the hedging activities—and often require extensive coordination among several departments, including accounting, finance, treasury, risk management, legal, and information technology.

1.3.4 Applying Hedge Accounting and the Shortcut Method

Hedge accounting should not be considered as an accounting policy election but, rather, a privilege. If the conditions for hedge accounting are met, the application of hedge accounting is appropriate. If any of the conditions for hedge accounting are not met, the application of hedge accounting is inappropriate. The approach to the shortcut method is equally binary: inappropriate application of the shortcut method—a method permitted per an exception in the guidance with respect to the effectiveness assessment requirements—is perhaps the most common error associated with the application of hedge accounting. Use of the shortcut method is appropriate only if all the conditions associated with its application are precisely met—an assertion that many entities have found difficult to make with sufficient

precision. If an entity fails to meet all the conditions required for applying the shortcut method, use of that method will result in an accounting error. Since the application of the shortcut method, much like the application of hedge accounting, is an election and not a requirement, many entities have reduced or eliminated their use of the shortcut method to mitigate the risk of misapplication.

1.3.5 Identifying Embedded Derivatives

The requirement to account for certain embedded derivatives separately was originally intended to serve as an anti-abuse provision. Standard setters feared that entities might attempt to “embed” derivatives in contracts unaffected by the derivatives and hedging activities guidance so as to avoid its requirement to record the economics of derivative instruments in earnings. In this respect, the provisions for embedded derivatives have fulfilled their key objective. However, applying the provisions to certain complex financial instruments has proved difficult. As a result, there have been unforeseen consequences for some entities that were not attempting to circumvent the principles of the guidance but instead unintentionally misapplied the guidance for accounting for embedded derivatives.

For equity and debt transactions in particular, determining which embedded features should be accounted for separately can be particularly challenging. Embedded derivatives must be separated from the host contract and accounted for separately if all the requirements for bifurcation are met. However, the assessment of the conditions surrounding the bifurcation of embedded derivatives depends on the nature of the host contract, which for some financial instruments with both debt and equity characteristics may not be readily apparent. As a result of this complexity, some entities have inappropriately assessed the need to account for embedded derivatives separately from the applicable host contracts.

1.4 How Entities Have Responded

Misapplication of the accounting guidance for hedging activities has caused significant restatement activity in the marketplace. While some entities have responded to this activity by completely abandoning the application of hedge accounting, the majority of entities have taken a less dramatic approach. To improve their understanding of the principles and rules for hedge accounting, many entities have increased the number and quality of resources dedicated to derivative accounting, risk management, and related financial reporting activities. Because derivative instruments allow entities to disaggregate risks and manage those risks separately—an ability that translates into greater efficiency and cost effectiveness—most entities will continue to use derivative instruments despite the risk of restatement associated with the misapplication of hedge accounting.

1.5 Looking Forward: Considerations for Accounting for Derivatives and Hedging Activities

Applying the accounting guidance for derivatives and hedging activities continues to be a challenge for entities. Restatements resulting from the misapplication of the guidance have caused many entities to consider the guidance inflexible. In response to this perceived inflexibility, the FASB has expressed its commitment to improving the workability of the guidance.

In 2008 the FASB issued an exposure draft of a proposed standard to amend the existing guidance around derivatives and hedging. The proposed standard would have simplified certain key aspects of hedge accounting that many entities found

very challenging and make the results more useful and transparent for investors and other financial statement users. However, it would have also limited or eliminated other aspects of the current model that some entities found beneficial. A majority of respondents to the exposure draft expressed the concern that many of the proposed amendments would have created further divergence between hedge accounting under accounting principles generally accepted in the United States of America (U.S. GAAP) and under International Financial Reporting Standards (IFRS). Many of these respondents urged the FASB to work with the International Accounting Standards Board (IASB) on a joint project to improve hedge accounting.

As part of the FASB and IASB's broader goal of convergence set forth in their Memorandum of Understanding, the FASB is currently engaged in a joint project with the IASB intended to address the accounting for all financial instruments, including derivatives and hedging. While the project is officially a joint project, the FASB and IASB have been following different timetables and the early discussions do not indicate complete convergence.

In March 2010, the FASB communicated that the proposed amendments included in the 2008 exposure draft will be the foundation for the changes made to hedge accounting in the new U.S. GAAP standard. The *Accounting for Financial Instruments* exposure draft, as proposed, would have:

- replaced the current requirement to quantitatively assess hedge effectiveness each quarter with a qualitative assessment at inception with limited need to reassess in subsequent periods.
- lowered the threshold to qualify for hedge accounting.
- eliminated the shortcut and critical-terms match methods for assessing hedge effectiveness.
- prohibited the discretionary de-designation of hedging relationships.
- required the recognition of the ineffectiveness associated with both over- and under-hedges for all cash flow hedging relationships.
- changed the accounting for certain financial instruments requiring many to be carried at their fair values with changes recognized in current earnings. This would eliminate the requirement to bifurcate features that otherwise would be accounted for separately as embedded derivatives.

In February 2011, the FASB issued a discussion paper to solicit input on the IASB's Exposure Draft, *Hedge Accounting*, which proposed changes to hedge accounting that are substantially different from current U.S. GAAP and IFRS. One purpose of the FASB issuing the discussion paper was to obtain feedback about whether the changes to current hedge accounting guidance set forth by the IASB's exposure draft represents a better starting point for improving current U.S. GAAP than the changes set forth by the FASB proposed update. The Board received limited responses to the discussion paper. The FASB will consider the feedback received from the comment letters as well as the feedback received by the IASB during its redeliberations on hedge accounting. In addition, the FASB has requested the FASB staff to perform outreach with constituents, including users, to determine the best path forward for hedge accounting.

The FASB continues its outreach efforts on hedge accounting and will likely not begin to address hedge accounting until the classification and measurement and impairment aspects of the accounting for financial instruments is complete.

Significant progress in making changes to the current hedging model is not expected until 2014 and would likely not be effective before 2015. As the Boards continue to work on their projects to address the accounting for financial instruments entities should continue to focus on complying with the existing complex set of principles and rules.

1.6 A Note About This Guide

This guide is intended to provide a comprehensive analysis of the FASB's accounting rules for derivatives and hedging activities, as well as PricewaterhouseCoopers' insights on the implications of key aspects of the guidance. At the end of each chapter are frequently asked questions and interpretive responses that further explain the concepts discussed in the chapter. Some chapters provide examples, to illustrate the proper application of the guidance.

Chapter 2: Scope

Executive Takeaway

- ASC 815, *Derivatives and Hedging*, establishes a definition of a derivative instrument which is based on specific distinguishing characteristics. While the definition of a derivative instrument is very broad, there are numerous scope exceptions to prevent ASC 815 from being unduly burdensome.
- The application of certain scope exceptions to ASC 815 may sometimes result in different parties to a contract reaching different conclusions about whether a contract is required to be accounted for as a derivative instrument.
- The application of the definition of a derivative instrument, as well as the use of any scope exception, should be revisited each reporting period. The terms of the contracts or customary practices may have changed, thereby affecting the determination of whether a particular contract meets the definition of a derivative instrument and is subject to ASC 815.

2.1 Definition and Scope

ASC 815, *Derivatives and Hedging*, must be applied by all nongovernmental entities to all financial instruments or other contracts that meet the definition of a derivative and do not qualify for one of its scope exceptions. Additionally, ASC 815 must be followed by certain governmental organizations that have elected to apply post-1989 private-sector standards, with adjustments made, as necessary, for differences between the GASB and FASB financial reporting models (e.g., in the area of comprehensive income reporting) until the effective date of GASB 53, *Accounting and Financial Reporting for Derivative Instruments*, (GASB 53). GASB 53 is effective for periods beginning after June 15, 2009, with early adoption allowed. As a result of this standard being issued, a governmental entity should not apply the provisions of ASC 815 subsequent to the effective date of GASB 53.

The scope of ASC 815 is broad and its provisions can be complex. In order to understand which instruments fall within its scope and how its requirements apply to a particular contract, entities need to study the definition of a derivative instrument—as well as the many scope exceptions—in considerable detail.

This chapter examines some of the important concepts associated with the various terms that are included in the definition of a derivative instrument. An understanding of these concepts will be particularly important and relevant when an entity is evaluating instruments that might qualify as, or contain, a derivative instrument that is subject to the provisions of ASC 815.

ASC 815-10-15-83 defines a derivative instrument as 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 Board believes that the three sets of criteria listed above capture not only the traditional derivative instruments such as swaps, futures, forwards and options but also the essence of other instruments that are relatively similar to traditional derivative instruments.

The definition of a derivative instrument contains some key terms or concepts that require further analysis for their meaning to be fully understood. These terms are (1) *underlying*, (2) *notional amount*, (3) *payment provision*, (4) *initial net investment*, and (5) *net settlement*.

2.1.1 Underlying, Notional Amount and Payment Provision

An *underlying* (ASC 815-10-15-88) is a variable within a derivative instrument that, along with either a notional amount or a payment provision, determines the settlement amount of a derivative. An underlying usually is one or a combination of the following:

- A security price or security price index.
- A commodity price or commodity price index.
- An interest rate or interest rate index.
- A credit rating or credit index.
- An exchange rate or exchange rate index.
- An insurance index or catastrophe loss index.
- A climatic or geological condition (such as temperature, earthquake severity, or rainfall), another physical variable, or a related index.
- 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 instrument has a positive or negative value.

A *notional amount* (ASC 815-10-15-92) is a number of currency units, shares, bushels, pounds, or other units specified in a derivative contract. The notional amount generally represents the second half of the equation that goes into determining the settlement amount under a derivative instrument. Accordingly, the settlement of a derivative instrument is often determined by the interaction of the notional amount and the underlying. The interaction between the notional amount and the underlying may consist of simple multiplication, or it may involve a formula that has leverage factors or other constants.

ASC 815-10-55-77 through 55-83, *Example 3: Underlying—Determination of an Underlying if a Commodity Contract Includes Both Fixed and Variable Price Elements*, provides guidance to assist in the determination and identification of an underlying in commodity contracts through an example of a multi-attribute contract to purchase a commodity in the future. The contract calls for the commodity purchase at the prevailing market index price at that future date plus or minus a fixed “basis differential” set at the inception of the contract. This example concludes that if the characteristics of a notional amount, an underlying, and no initial net investment are present and the commodity to be delivered is readily convertible to cash, then

“The whole mixed-attribute contract is a derivative because the basis differential is a market variable in determining the final transaction price under the contract, and this variable has been fixed in the contract, producing an underlying.”

ASC 815-10-55-5 through 55-7, *Notional Amount—Identifying a Commodity Contract’s Notional Amount*, provides guidance to assist in evaluating whether a requirements contract has a notional amount. A requirements contract typically does not specify a fixed number of units but, rather, requires as many units as needed to be utilized or consumed within a specified period. A requirements contract that contains explicit provisions that support the calculation of a determinable amount reflecting a buyer’s needs would have a notional amount. One approach for determining the notional amount is to analyze the settlement and default provisions of the contract. These provisions may refer to specific quantities or require the use of historical usage quantities to calculate penalty amounts. If those amounts are determinable, they should be considered the notional amount of the contract. However, in those circumstances where the notional amount is not determinable, making the quantification of an amount highly subjective and relatively unreliable (for example, if a contract does not contain settlement and default provisions that specifically reference quantities or provide a formula based on historical usage), such contracts are considered to have no notional amount for purposes of applying ASC 815. See Question No. 2-4 at the end of this chapter for further discussion.

In lieu of specifying a notional amount, some derivatives contain a *payment provision* (ASC 815-10-15-93) specifying that a fixed or determinable settlement will be made if the underlying behaves in a specified manner. For example, a derivative contract might specify that a \$5,000,000 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. In such cases, the requirements of ASC 815-10-15-93 are met, even though the settlement of the contract is driven by the behavior of the underlying alone.

2.1.2 Initial Net Investment

Many derivative-like instruments do not require an initial cash outlay, while others require a 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., an in-the-money option or a premium on a forward purchase contract with a price that is less than the current forward price).

ASC 815-10-15-94 through 15-98 defines a derivative instrument 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” (ASC 815-10-15-96) than the initial net investment that would be required to acquire the asset related to the underlying or to incur an obligation related to the underlying. A derivative instrument does not require an initial net investment in a contract that is equal to the notional amount (or the notional amount plus a premium or minus a discount) or that is determined by applying the notional amount to the underlying.

PwC Observation: While the FASB did not provide a bright line for what constitutes “less by more than a nominal amount,” its intention appears to be that an initial net investment equal to or less than 90 or 95 percent of the amount that would be exchanged to acquire the asset or incur the obligation would satisfy the initial net investment criterion. For certain contracts, such as interest rate swaps, the underlying is not an asset or liability. Based on the guidance in ASC 815-10-55-148 through 55-168, *Example 16: Prepaid Interest Rate Swap*, the initial net investment analysis for an interest rate swap should be performed by comparing the initial net investment with the amount determined by applying the underlying (i.e., LIBOR or other variable-based interest flows) to the effective notional amount of the contract to determine whether it is “less by more than a nominal amount.” In those circumstances where one of the legs of the swap is fully prepaid (or at least 90 to 95 percent prepaid), the swap would not be considered a derivative instrument in its entirety.

Some derivative instruments 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. However, 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.

2.1.3 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 the physical delivery of the referenced asset. A contract may be considered net settled when its settlement meets one of the following criteria in ASC 815-10-15-99:

- a. Net settlement under contract terms**
- b. Net settlement through a market mechanism**
- c. Net settlement by delivery of derivative instrument or asset readily convertible to cash.**

2.1.3.1 Net Settlement Under Contract Terms

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—see the discussion beginning in ASC 815-10-15-104), whether or not that asset is readily convertible to cash.

Many derivative instruments contain explicit net settlement provisions that obviously meet this form of net settlement. However, certain purchase contracts can unexpectedly fall under the definition of a derivative as a result of the contract’s default provisions (ASC 815-10-15-103). For instance, a contract’s requirement that an entity pay a penalty for nonperformance that equals the changes in the price of the items that are the subject of the contract might be considered a net settlement

provision, depending on the specifics of the contract. An example of this situation is a contract with a liquidating-damages clause stipulating that if party A fails to deliver a specified quantity of a particular commodity or if party B fails to accept the delivery of that commodity, the party in an unfavorable position must pay to 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. This is an example of a symmetrical default provision.

ASC 815-10-15-103(d) states “An asymmetrical default provision does not give a commodity forward contract the characteristic described as net settlement beginning in paragraph 815-10-15-100.” As discussed in ASC 815-10-55-10 through 55-18, an asymmetrical default provision requires that the defaulting party 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 meet the definition of net settlement and thus does not qualify a contract as meeting the scope requirements of net settlement for qualification as a derivative. However, 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. Finally, net settlement of a contract designated as normal purchases and normal sales would result in a tainting event which would need to be evaluated to determine the impact on the contract itself and other contracts similarly designated as normal. See further discussion on “tainting” in DH 2.2.2 of this chapter. In addition, the presence of asymmetrical default provisions applied in contracts between the same counterparties would indicate 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.

A fixed penalty for nonperformance is not considered a net settlement provision because the amount is fixed and does not vary with changes in the underlying. Further, ASC 815-10-15-103(c) concludes that a variable penalty for nonperformance is not a form of net settlement if that penalty also contains an incremental penalty of a fixed amount that would be expected to be great enough to act as a disincentive for nonperformance throughout the term of the contract.

Contracts that provide for a structured payout of the gain (or loss) resulting from those contracts meet the characteristic of net settlement if the fair value of the cash flows to be received (or paid) by the holder under the structured payout are approximately equal to the amount that would have been received (or paid) if the contract had provided for an immediate payout related to the settlement of the gain (loss) under the contract. ASC 815-10-15-104 through 15-106 and ASC 815-10-55-19 through 55-21 also clarify that *net settlement* would not exist if the holder of a contract was to be required to invest funds in, or borrow funds from, the other party so that the party in a gain position under the contract could obtain the value of that gain only over time as a traditional adjustment of either the yield on the amount invested or the interest element on the amount borrowed. A structured payout of the gain on a contract can be described as an untraditionally high or atypical yield on a required investment or borrowing in which the overall return is related to the amount of that contract's gain. 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 as an untraditional adjustment of either the yield on the amount invested or the interest element on the amount borrowed, then an analysis of the terms of the contract could lead to a conclusion that there is net settlement under ASC 815-10-15-83(c) because the settlement is in

substance a structured payout of the contract's gain. ASC 815-10-55-21 provides the following example:

For example, if a contract required the party in a gain position under the contract 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 in that paragraph.

Some contracts contain provisions that provide for net share settlement as a settlement alternative. Net share settlement of an option or warrant contract to purchase common stock requires the delivery to the party with a gain of an amount of common shares with a current fair value equal to the gain. This provision would meet the net settlement criterion as noted in ASC-815-10-15-102. Therefore, if either counterparty could net share settle the contract, then it would be considered a derivative—regardless of whether the net shares were readily convertible to cash as described in ASC 815-10-15-119. While the net share settlement provisions qualify contracts to be derivatives, issuers of such instruments should consider whether such a contract would qualify for the scope exception in ASC 815-10-15-74(a).

2.1.3.2 Net Settlement Through a Market Mechanism

In this form of net settlement, one of the parties to a contract is required to deliver an asset of the type described in ASC 815-10-15-100, but there is an established market mechanism that facilitates net settlement outside the contract that 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.) Market mechanisms may have different forms. Many derivative instruments are actively traded and can be closed or settled before the contract's expiration or maturity by net settlement in active markets. The term *market mechanism* should be interpreted broadly and includes 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, as contemplated, must have all of the following primary characteristics as detailed in ASC 815-10-15-111:

- 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 first characteristic is present include markets that provide access to potential counterparties regardless of a seller's size or market position, and 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.

- 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. Refer to *Example 6: Net Settlement Through a Market Mechanism—Ability to Offset Contracts* (ASC 815-10-55-91 through 55-98) and ASC 815-10-15-117.

Additional factors that would indicate that the second characteristic is present include situations where there are multiple market participants willing and able to enter into a transaction at market prices to assume the seller's rights and obligations under a contract or instances where there is sufficient liquidity in the market for the contract, as indicated by the transaction volume as well as a relatively narrow and observable bid/ask spread.

- 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 possesses this characteristic.

The assessment of whether a market mechanism exists should be performed on an individual contract basis and not on an aggregate holdings basis. Pursuant to ASC 815-10-15-118, this assessment must be performed at the inception and on an ongoing basis throughout a contract's life. Because the criteria are applied at the individual contract level, the lack of a liquid market for a group of contracts does not affect the determination of the existence of a market mechanism that facilitates net settlement for an individual contract within that group.

2.1.3.3 Net Settlement by Delivery of Derivative Instrument or Asset Readily Convertible to Cash

ASC 815-10-15-119 states:

In this form of net settlement, one of the parties is required to deliver an asset of the type described in paragraph 815-10-15-100, but that asset is readily convertible to cash or is itself a derivative instrument.

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 (ASC 815-10-15-120).

The above criterion addresses situations in which there is no *actual* net settlement but instead, the delivery of an asset that puts the receiving party in a position that is *equivalent* to a net settlement. 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, and resale costs). However, if the asset to be delivered is readily convertible to cash, those risks are minimal, and therefore the parties should be indifferent as to whether there is a gross physical exchange of the asset or a net settlement in cash.

ASC 815-10-20 defines the phrase *readily convertible to cash* in the Glossary, which includes some of the guidance in FASB Concepts Statement No. 5, *Recognition and Measurement in Financial Statements of Business Enterprises* (CON 5). This definition refers to the following characteristics as support that an asset is readily convertible to cash: (1) interchangeable (fungible) units, and (2) quoted prices that are available in an active market, which can rapidly absorb the quantity held by an entity without significantly affecting the price. Based on this concept, a security or commodity that is traded in a deep and active market, or a unit of foreign currency that is readily convertible to the functional currency of the reporting entity, is an asset that is readily convertible to cash. Conversely, securities that are not actively traded, as well as 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) shall be considered to be readily convertible to cash only if the net amount of cash that would be received from a sale of the asset in an active market is either equal to or not significantly

less than the amount an entity would typically have received under a net settlement provision. The net amount that would be received upon sale need not be equal to the amount typically received under a net settlement provision. Parties generally should be indifferent as to whether they exchange cash or the assets associated with the underlying, although the term *indifferent* is not intended to imply an approximate equivalence between net settlement and proceeds from sale in an active market.

An 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. For purposes of assessing significance of such costs, an entity shall consider those estimated conversion costs to be significant only if they are 10 percent 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 815-10-15-126).

Example 7: Net Settlement—Readily Convertible to Cash—Effect of Daily Transaction Volumes (ASC 815-10-55-99 through 55-110), states that in assessing whether a contract, which can contractually be settled in increments, meets the definition of net settlement, an 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. For example, assume that an entity has an option to purchase one million shares of a publicly traded stock, which can be exercised in increments of 25,000 shares. When determining whether the shares can be rapidly absorbed in the market without significantly affecting the price, the entity must base its assessment on the exercise of the smallest increment (25,000 shares), not on the entire option's notional amount (one million shares).

Most futures, forwards, swaps, and options are considered derivative instruments 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 only a net cash settlement. Included under the definition of a derivative instrument are commodity-based contracts that permit settlement through the delivery of either a commodity or cash (e.g., commodity futures, options, or swap contracts), commodity purchase and sales contracts that require the delivery of a commodity that is readily convertible to cash (e.g., wheat, oil, or 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. Pursuant to ASC 815-10-15-139 and ASC 815-10-55-84 through 55-89, *Example 4: Net Settlement at Inception and Throughout a Contract's Life*, companies must evaluate at inception and on an ongoing basis throughout the contract's life whether items delivered under the contract are readily convertible to cash.

2.2 Contracts Excluded From ASC 815's Scope

To prevent ASC 815 from being unduly burdensome to certain industries and markets in which practice consists of purchasing and selling financial instruments and nonfinancial assets that, under contractual terms, often meet the definition of a derivative instrument but traditionally have not been treated as such, the Board decided to specifically exclude certain contracts from the scope of ASC 815. Thus, some contracts that meet the definition of a derivative may nevertheless be outside the scope of ASC 815 because they qualify for a scope exception. The following section addresses contracts that are excluded from ASC 815's scope.

2.2.1 Regular-way Security Trades

Regular-way security trades are defined as 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 being executed.

Regular-way security trades often are recorded as completed purchases or sales of securities on the trade date. The scope exception specified in ASC 815-10-15-15 applies to trades in securities that (1) require the delivery of securities that are readily convertible to cash, and (2) customarily do not settle on the trade date but shortly thereafter—within a normal settlement period (e.g., a trade of equity securities on the New York Stock Exchange (NYSE) that settles within the normal settlement period of three days would qualify for the scope exception, whereas a trade on the NYSE that settles within fifteen days would not qualify for that exception). Contracts for existing securities do not qualify for this scope exception if they require or permit net settlement or if a market mechanism to facilitate net settlement of that contract exists (ASC 815-10-15-16), unless the reporting entity is required to account for security transactions on a trade-date basis (rather than a settlement-date basis).

The *regular-way* 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 an 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 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. Even though an outright exception may not be available to an entity because it is not “required to account for the contract on a trade-date basis,” the contract may still be eligible for the “regular-way security trade” 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. Net settling contracts that were previously considered eligible for this scope exception would call into question the continued exemption of other similar contracts.

The Board incorporated the regular-way scope exception into ASC 815 because a requirement that all forward contracts for purchases and sales of financial instruments that are readily convertible to cash be accounted for as derivatives would effectively mean that an entity would have to apply settlement-date accounting to all such transactions; however, resolution of the “settlement-date” versus “trade-date” accounting issue is not an objective of ASC 815.

2.2.2 Normal Purchases and Normal Sales

Another scope exception under ASC 815 is the “Normal Purchases and Normal Sales” exception. Normal purchases and normal sales are contracts that 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.

2.2.2.1 Qualifying Criteria for the Normal Purchases and Normal Sales Exception

ASC 815-10-15-27 through 15-29 provide guidance on interpreting the scope exception for normal purchases and normal sales:

To qualify for the scope exception, a contract's terms must be consistent with the terms of an entity's normal purchases or normal sales, that is, the quantity purchased or sold must be reasonable in relation to the entity's business needs. Determining whether or not the terms are consistent requires judgment.

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.**

Further, each of the following types of evidence should help in identifying contracts that qualify as normal purchases or normal sales:

- a. Past trends**
- b. Expected future demand**
- c. Other contracts for delivery of similar items**
- d. An entity's and industry's customs for acquiring and storing the related commodities**
- e. An entity's operating locations.**

ASC 815-10-15-25 describes additional requirements that a contract must meet to qualify for the normal purchases and normal sales exception. A contract must be indexed to an underlying that is *clearly and closely related* to the asset that is being purchased or sold. ASC 815-10-15-30 through 15-34 expands on the meaning of *clearly and closely related* in the context of normal purchases and normal sales. For purposes of determining whether a contract qualifies for the normal purchases and normal sales exception, *clearly and closely related to the asset being sold or purchased* should be evaluated based on both qualitative and quantitative considerations. The analysis is specific to the contract being considered for the normal purchases and normal sales exception and designed to identify the components of the asset being sold or purchased. A contract that includes a price adjustment must be evaluated based on the guidance below (ASC 815-10-15-32) to determine if the contract qualifies for the normal purchases and normal sales exception:

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.**

If a price adjustment in a contract that otherwise satisfies the requirements for the normal purchases and normal sales exception is expected, at the inception of the contract, to impact the purchase or sales price in a manner comparable to the outcome that would be obtained if, at each delivery date, the parties were to reprice the contract amount under the then-existing conditions for the asset being delivered on that date, then the price adjustment's underlying would be considered clearly and closely related to the asset being sold or purchased, and the price adjustment would not be an impediment to the contract's qualifying for the scope exception. The assessment of whether the price adjustment within the contract is clearly and closely related to the asset being sold or purchased should be performed only at the inception of the contract.

Additionally, the purchase or sale contract must be denominated in a currency that meets the requirements of ASC 815-15-15-10. To meet these requirements the contract must be denominated in (1) the functional currency of one of the substantial parties to the contract, (2) a currency in which such contracts are routinely denominated in international commerce, (3) the local currency of any substantial party to the contract, or (4) 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. Thus, when a contract contains a foreign currency that does not meet the requirements above, the contract does not qualify for the normal purchases and normal sales exception. Such a contract is a compound derivative comprising a functional currency forward contract for the purchase of the commodity and 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.

PwC Observation: When a company has determined that a contract meets the criteria for the normal purchases and normal sales exception and wishes to designate it as such, the company must contemporaneously document its designation of the contract as a normal purchase or normal sale, including either of the following: (1) its basis for concluding that it is probable that the contract will not net settle and will result in physical delivery for contracts that qualify under ASC 815-10-15-41 or ASC 815-10-15-42 through 15-44, or (2) its basis for concluding that the agreement meets the criteria in ASC 815-10-15-45 through 15-51 for contracts qualifying for the scope exception under that paragraph, including the basis for concluding that the agreement is a capacity contract. ASC 815-10-15-39 clarifies that the normal purchases and normal sales scope exception is an election an entity can make at the inception of a contract or at a later date. However, once an entity documents its election and a contract's compliance with other requirements for this exception, an entity is not permitted at a later date to change its election and treat the contract as a derivative.

The documentation requirements for the normal purchases and normal sales scope exception may be applied to either (1) groups of contracts, or (2) an individual contract. In addition, the Board has stated that an entity may document which contracts are *not* designated as normal purchases and normal sales (i.e., when qualifying for the normal purchases and normal sales exceptions is normal for a company, it may be easier for that company to document contracts that do not qualify as normal purchases and normal sales). However, a company's documentation must be specific enough to enable a third party to determine which specific contracts are designated as normal purchases and normal sales.

A contract that is designated as a normal purchase or normal sale must be grouped with other "similarly designated contracts." ASC 815 does not explain whether a company may have only one group of similarly designated contracts (i.e., whether *all* of a company's contracts that are designated as normal purchases and normal sales must be included in one group) or more than one group of contracts (i.e., whether a company may group its contracts for normal purchases and normal sales based on the type of contract that is being sold/purchased e.g., oil contracts or grain contracts). The rationale a company uses in grouping its contracts that are designated as normal purchases and normal sales is important, since ASC 815 stipulates that if a company were to net settle a contract that was designated as a normal purchase or normal sale, it would call into question the company's designation of other contracts in the group, as well as the entity's ability to designate similar contracts as normal purchases and normal sales in the future.

PwC Observation: The normal purchases and normal sales scope exception applies solely to a contract that results in a gross delivery of "something other than a financial instrument or derivative instrument" under the terms of that contract. Within ASC 815's normal purchases and normal sales exception, the Board wanted to ensure that constituents would not abuse the provisions. The guidance therefore specifies that an entity that designates a contract as a normal purchase or normal sale should be highly certain that the contract will not net settle. Net settlement of a particular contract would preclude application of the normal purchases and normal sales exception to that contract in the future. In addition, it may "taint" the application of the normal purchases and normal sales exception to other similar contracts and to the business in its entirety. We would expect that it would be unusual for management to continue to apply the normal purchases and normal sales exception to a group of contracts after more than one or two net settlements, except in very rare circumstances. For example, a company may net settle a contract for the delivery of natural gas due to economic considerations whereby it decided to monetize an unrealized gain. We would consider this a tainting event that may require the loss of the scope exception for the entire group of contracts. However, a net settlement due to a supplier bankruptcy may be viewed as a one time (and unpredictable) event which taints the particular contract but not the entire group. Net settlement as described in ASC 815-10-15-83(c)(3) is not referenced in the normal purchases and normal sales scope exception. This is because the contracts discussed in that paragraph have terms that do not provide for a net settlement between the parties either directly or through a market mechanism. However, we can envision situations in which counterparties might agree to a net cash settlement of a contract even if the terms of the contract do not provide for a net settlement. We would consider a negotiated settlement of this type to be a net settlement that results in a tainting event that would need to be evaluated consistent with the guidance in the preceding paragraph. Accordingly, the circumstances resulting in a net cash settlement of contracts that are designated as normal purchases and normal sales will have to be monitored carefully.

Normal purchases and sales contracts are contracts that are considered no different from ordinary purchases or sales that a company makes in the ordinary course of business. This point is highlighted in ASC 815-20-25-7, which states that a contract that meets the definition of a derivative but that is not accounted for as a derivative because it qualifies for the normal purchases and normal sales exception is eligible to be the hedged item in either a fair value hedge or cash flow hedge.

The Board acknowledges that sometimes the normal purchases and normal sales scope exception will result in different parties to a contract (e.g., the buyer and the seller) reaching different conclusions about whether the contract falls within the scope of ASC 815. For example, a *normal* sale for one party to a contract may not be a *normal* purchase for the counterparty. This is one of the few areas of ASC 815 where a contract may be treated as a derivative for one party and not treated as a derivative by the counterparty. That is, the application of the scope exception may not and is not required to result in symmetrical treatment by both counterparties to a contract.

PwC Observation: This illustrates an important point regarding the application of ASC 815. The criteria for a contract meeting the definition of a derivative instrument are the same for both parties to an agreement. However, the scope exceptions are often unique to each individual 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 ASC 815 applies because the scope exceptions are applied individually.

ASC 815-10-15-40 through 15-51 describe the characteristics of derivative contracts that should be considered when determining whether each of the following specific types of contracts qualify for the normal purchases and normal sales scope exception:

- a. Freestanding option contracts
- b. Forward (non-option-based) contracts
- c. Forward contracts that contain optionality features
- d. Power purchase or sale agreements

Each of these types of contracts is discussed in more detail below.

2.2.2.2 Freestanding Option Contracts

As noted in ASC 815-10-15-40 option contracts that would require delivery of the related asset at an established price under the contract only if exercised are not eligible to qualify for the normal purchases and normal sales scope exception. Exceptions apply for power purchase and sale agreements as provided in paragraphs 815-10-15-45 through 15-51 (discussed in DH 2.2.2.5).

The rationale for not allowing options to be eligible for the normal purchases and normal sales exception is that it cannot be determined if it is “probable at inception and throughout the term of the individual contract that the contract will result in physical delivery,” since option contracts only contingently provide for such physical delivery (i.e., delivery is made only when the price of the item is above the strike price).

2.2.2.3 Forward (Non-Option-Based) Contracts

Forward contracts are eligible to qualify for the normal purchases and normal sales exception. This exception applies to forward contracts such as gas, coal, oil, and other commodities forward contracts.

However, forward contracts that contain net settlement provisions as discussed in either ASC 815-10-15-100 through 15-109 or ASC 815-10-15-110 through 15-118 are not eligible for the normal purchases and normal sales scope exception unless 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.

The institutional convention that allows certain energy contracts to be booked out is a form of net settlement and precludes qualification for this exception (except for the electric utility industry as described below) even if the company does not intend to book out and does not have a practice of booking out. A book out is an unplanned netting of a purchase and sale agreement by the contracting counterparties. Book outs are the accepted practice in the electricity utility industry and arise as multiple transactions routinely occur at the same point of delivery as utility companies balance their loads to meet their forecasts. To avoid transmission losses and administrative fees, counterparties reduce their schedules when they have a buy and a sell of like quantities at the same point. A book out is considered to be a mechanism that allows for a net settlement of a contract as physical delivery does not occur. Generally, contracts subject to book outs are not eligible for the normal purchases and normal sales exception. However, the Board provided an exception for power contracts that qualify as capacity contracts and otherwise meet the definition of a derivative. Note that this exception is restricted to power contracts only and is not analogous to gas and other commodity contracts. See further discussion under ASC 815-10-15-45 through 15-51 and below in DH 2.2.2.5.

2.2.2.4 Forward Contracts That Contain Optionality Features

Forward contracts that contain optionality features that do not modify the quantity of the asset to be delivered under the contract are eligible to qualify for the normal purchases and normal sales scope exception. Except for power purchase or sales agreements addressed in paragraphs 815-10-15-45 through 15-51, if an option component permits modification of the quantity of the assets to be delivered, the contract is not eligible for the normal purchases and normal sales scope exception, unless the option component permits the holder only to purchase or sell additional quantities at the market price at the date of delivery. For forward contracts that contain optionality features to qualify for the normal purchases and normal sales scope exception, the criteria discussed in ASC 810-10-15-41 must be met.

ASC 815-10-55-26 specifically prohibits a company from bifurcating from a combined contract the forward component from the option component and then asserting that the forward component is eligible to qualify for the normal purchases and normal sales exception.

ASC 815-10-15-43 states that if volumetric option features within a forward contract have expired or have been completely exercised (even if delivery has not yet occurred), there is no longer any uncertainty as to the quantity to be delivered under the forward contract. Accordingly, following such expiration or exercise, the forward contract would be eligible for designation as a normal purchase or normal sale, provided that the other conditions are met, including full physical delivery of the exercised option quantity. Forward contracts that contain optionality features would

also be eligible to qualify for the normal purchases and normal sales exception only if the optionality feature could not modify the quantity of the asset to be delivered under the contract. Therefore, commodity contracts in which there is a cap or floor on the price, but in which delivery of the originally contracted quantity is always required, may qualify for the normal purchases and normal sales exception.

2.2.2.5 Power Purchase or Sale Agreements

ASC 815-10-15-45 addresses the application of the normal purchases and normal sales scope exception to power contracts and states that:

Notwithstanding the criteria in paragraphs 815-10-15-41 through 15-44, a power purchase or sales agreement (whether a forward contract, option contract, or a combination of both) that is a capacity contract for the purchase or sale of electricity also qualifies for the normal purchases and normal sales scope exception if all of the following applicable criteria are met:

- a. For both parties to the contract, both of the following criteria are met:**
 - 1. The terms of the contract require physical delivery of electricity. That is, the contract does not permit net settlement, as described in paragraphs 815-10-15-100 through 15-109. For an option contract, physical delivery is required if the option contract is exercised.**
 - 2. The power purchase or sales agreement is a capacity contract. Differentiating between a capacity contract and a traditional option contract (that is, a financial option on electricity) is a matter of judgment that depends on the facts and circumstances. For power purchase or sale agreements that contain option features, the characteristics of an option contract that is a capacity contract and a traditional option contract, which are set forth in paragraph 815-10-55-31 shall be considered in that evaluation; however, other characteristics not listed in that paragraph may also be relevant to that evaluation.**
- b. For the seller of electricity: The electricity that would be deliverable under the contract involves quantities that are expected to be sold by the reporting entity in the normal course of business.**
- c. For the buyer of electricity, all of the following criteria are met:**
 - 1. The electricity that would be deliverable under the contract involves quantities that are expected to be used or sold by the reporting entity in the normal course of business.**
 - 2. The buyer of the electricity under the power purchase or sales agreement is an entity that meets both of the following criteria:**
 - i. The entity is engaged in selling electricity to retail or wholesale customers.**
 - ii. The entity is statutorily or otherwise contractually obligated to maintain sufficient capacity to meet electricity needs of its customer base.**
 - 3. The contracts are entered into to meet the buyer's obligation to maintain a sufficient capacity, including a reasonable reserve margin established by or based on a regulatory commission, local standards, regional reliability councils, or regional transmission organizations.**

ASC 815-10-15-46 and 15-47 further state:

Power purchase or sales agreements that meet only the applicable criteria in paragraph 815-10-15-45 qualify for the normal purchases and normal sales scope exception even if they are subject to being booked out or are scheduled to be booked out.

Forward contracts for the purchase or sale of electricity that do not meet those applicable criteria as well as other forward contracts are nevertheless eligible to qualify for the normal purchases and normal sales scope exception by meeting the criteria in this Subsection (other than paragraph 815-10-15-45), unless those contracts are subject to unplanned netting (that is, subject to possibly being booked out).

Due to unique characteristics of the electric power industry, including the fact that electricity cannot be readily stored in significant quantities, the Board provided the above criteria to qualify electricity contracts for the normal purchases and normal sales exception. The following guidelines can be used in applications of the requirements listed above:

- **Buyer**

To meet the criterion in ASC 815-10-15-45(a)(2) in the buyer's assessment of the seller's ability to provide capacity, it would not be necessary for the contract to specify the source of the power. However, the buyer must have evidence (beyond the regulatory requirements to qualify as a *firm energy forward*) that the seller has access to capacity at or near the delivery point at the time the contract is designated as *normal*. In addition to the broad regulatory requirement, the buyer would have to consider evidence of the seller's existing capacity. This requirement could be met if:

1. the seller is known to have generating capacity at or near the delivery point;
2. the seller is selling to the buyer at a location where the seller has access to a power pool (e.g., NEPOOL or PJM) that makes generating capacity available to all participants, in which case the buyer can assume such capacity, since the power pool would, if necessary, provide it to the seller; or
3. other evidence is obtained that demonstrates that the seller has the available capacity either through direct ownership of a generating plant or by contract.

For example, if the seller is a power broker that does not have access to a pool, the buyer would have to obtain evidence supporting a conclusion that the seller has access to capacity at or near the delivery point (e.g., a long-term power purchase contract or tolling agreement) to back the contract. Similarly, such evidence would have to be obtained if the seller or a sister company is a known owner of generation, but the delivery point in the contract is a location that cannot be served from their owned capacity.

- **Seller**

The seller could assess the buyer's ability to meet the criterion ASC 815-10-15-45(a)(2) in the seller's assessment of the buyer's load requirements, based on knowledge (including publicly available information) of the buyer's existing load commitments (i.e., the seller could presume the buyer is purchasing under the contract to meet its load requirements if the buyer is known to have such a requirement at or near the delivery point under the contract). Load requirements would include retail and wholesale requirements and certain contractual requirements. The seller would

not have to verify whether the specific quantity being purchased, when added to the buyer's existing generating capacity and other purchases by the buyer, would exceed the buyer's projected power needs. There is a presumption that a sale to a non-load-serving entity (including a power broker or a load-serving utility with no load at or near the delivery point) would not qualify under this criterion. However, that presumption could be overcome if evidence is obtained that demonstrates that the ultimate use of the power will be to fulfill a load-serving requirement (e.g., of a customer of the non-load-serving purchaser). Such evidence can be assumed to exist if the purchaser is a sister company of a load-serving entity that has a load requirement at or near the delivery point (see further discussion below).

The seller must also consider certain specific factors in determining whether it has the capacity to meet the commitment. To meet this requirement, the seller would have to consider its own existing generating assets plus firm capacity purchase contracts and deduct existing native load requirements and any other existing power sales contracts. In other words, the seller cannot double count the same capacity (i.e., the seller cannot count existing capacity as both meeting its native load capacity requirements and at the same time backing a sales contract it wishes to qualify as normal). On the other hand, the seller may consider power resources that it has available because the seller has access to a power pool (e.g., NEPOOL or PJM) that makes generating capacity available to all participants. In addition, the seller would have to meet this requirement on the date of the normal designation, (i.e., a sales contract would not qualify if the seller intends to obtain the quantity through a future purchase, except if the future purchase will be from a power pool that makes generating capacity available to all participants or if access to the power pool provides a backup source to fulfill the delivery obligation).

2.2.3 Certain Insurance Contracts

Generally, insurance contracts that are within the scope of ASC 944, *Financial Services—Insurance*, are not subject to the requirements of ASC 815. ASC 815-10-15-52 through 15-57 address a scope exception for certain insurance contracts. Specifically ASC 815-10-15-52 and 815-10-15-53 state:

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.

The following types of contracts written by insurance entities or held by the insureds are not subject to the requirements of this Subtopic for the reasons given:

- a. Traditional life insurance contracts. The payment of death benefits is the result of an identifiable insurable event (death of the insured) instead of changes in a variable.**

- b. Traditional property and casualty contracts. The payment of benefits is the result of an identifiable insurable event (for example, theft or fire) instead of changes in a variable.**

Insurance enterprises, however, often enter into other types of contracts that may be subject to the provisions of ASC 815. In particular, contracts that consist of both derivative portions and nonderivative portions may fall under ASC 815's provisions for *embedded* derivative instruments, which are discussed in DH 3.

2.2.4 Certain Financial Guarantee Contracts

ASC 815-10-15-58 addresses a scope exception for certain financial guarantee contracts:

Financial guarantee contracts are not subject to this Subtopic only if they meet all of the following conditions:

- 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, as a precondition in the contract (or in the back-to-back arrangement, if applicable) for receiving payment of any claim under the guarantee, exposed to the risk of nonpayment both at inception of the financial guarantee contract and throughout its term either through direct legal ownership of the guaranteed obligation or through a back-to-back arrangement with another party that is required by the back-to-back arrangement to maintain direct ownership of the guaranteed obligation.**

In contrast, financial guarantee contracts are subject to this Subtopic if they do not meet all three criteria, for example, if they provide for payments to be made in response to changes in another underlying such as a decrease in a specified debtor's creditworthiness.

To qualify for this scope exception, the contract must specify that the guaranteed party will be reimbursed only for those losses that are incurred because the debtor fails to pay when payment is due. 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 for the scope exception. Financial guarantee contracts that guarantee performance under derivative contracts do not qualify for this scope exception.

PwC Observation: A guaranteed party must demand payment from the debtor prior to collecting any payment from the guarantor in order for a guarantee contract to be eligible for the scope exception. Additionally, the guarantor must either receive the rights to any payments subsequently advanced to the guaranteed party or delivery of the defaulted receivable. Therefore, a contract that instead promises to pay the guaranteed party the difference between the post-credit-event fair value and the book value would not qualify for the scope exception. Guarantee contracts eligible for the scope exception must entitle the holder to compensation as a result of an identifiable insurable event (failure to pay on a specific asset for which the holder is at risk) rather than merely a credit event.

2.2.5 Certain Contracts That Are Not Traded on an Exchange

ASC 815-10-15-59 through 15-62 address a scope exception for certain contracts that are not traded on an exchange. Specifically ASC 815-10-15-59 states:

Contracts that are not exchange-traded are not subject to the requirements of this Subtopic if the underlying on which the settlement is based is any one of the following:

- a. A climatic or geological variable or other physical variable. 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. (See Example 13 [paragraph 815-10-55-135].)**
- b. 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. 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 price or value of the nonfinancial asset. (If the contract is a call option, the scope exception applies only if that nonfinancial asset is owned by the party that would not benefit under the contract from an increase in the price or value of the nonfinancial asset above the option's strike price.)**
- c. The price or value of a nonfinancial liability of one of the parties to the contract provided that the liability does not require delivery of an asset that is readily convertible to cash.**
- d. Specified volumes of sales or service revenues of one of the parties to the contract. (This scope exception applies to contracts with settlements based on the volume of items sold or services rendered, for example, royalty agreements. This scope exception does not apply to contracts based on changes in sales or revenues due to changes in market prices.)**

This exception is intended to apply to contracts providing for settlements that are based on the volume of items sold or services rendered—for example, royalty agreements or leases stipulating that rental payments be based on sales volume. This exception may also be extended to net income or EBITA (earnings before interest, taxes, and amortization) unless the income measure is due predominantly to the movement of the fair value of a portfolio of assets. This is because 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 issued by an entity to pay a counterparty 3 percent of its net sales of gold would not be subject to the requirements of ASC 815, but a contract to pay the counterparty 3 percent of a price increase that raises the market price of gold to above \$1,000 per ounce *would* be subject to those requirements.

Many derivative contracts have more than one underlying. In certain situations, a derivative contract might have some underlyings that qualify for the scope exceptions discussed above while also having other underlyings that do not qualify for those scope exceptions (e.g., a structured insurance contract with an interest rate swap and a climatic variable). The guidance in ASC 815-10-15 indicates that in a situation such as this, the holder of the derivative contract should evaluate the contract based on its predominant characteristics. That is, if a derivative contract is made up predominantly of underlyings that qualify for a scope exception and, when considered in combination, the underlyings are expected to behave in a manner similar to how the underlyings discussed in the scope exception would behave, the derivative contract is not within the scope of ASC 815. Conversely, a derivative contract that is composed predominantly of underlyings that do not meet the specifications of the scope exception fall within the scope of ASC 815, so long as the contract meets all of ASC 815's other criteria for derivatives.

2.2.6 Derivative Instruments That Impede Sale Accounting

ASC 815-10-15-63 through 15-66 address a scope exception for certain instruments that impede sale accounting. Specifically ASC 815-10-15-63 states:

A derivative instrument (whether freestanding or embedded in another contract) whose existence serves as an impediment to recognizing a related contract as a sale by one party or a purchase by the counterparty is not subject to this Subtopic. For example, the existence of a guarantee of the residual value of a leased asset by the lessor may be an impediment to treating a contract as a sales-type lease, in which case the contract would be treated by the lessor as an operating lease. Another example is the existence of a call option enabling a transferor to repurchase transferred assets that is an impediment to sales accounting under Topic 860. Such a call option on transferred financial assets that are not readily available would prevent accounting for that transfer as a sale. The consequence is that to recognize the call option would be to count the same thing twice. The holder of the option already recognizes in its financial statements the assets that it has the option to purchase.

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.

2.2.7 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 that is accounted for under ASC 325-30, *Investments—Other, Investments in Insurance Contracts*, is not subject to ASC 815. This scope exclusion does not affect the accounting by the issuer of the life insurance contract.

2.2.8 Certain Investment Contracts

ASC 815-10-15-68 addresses a scope exception for certain investment contracts and states that a contract that is accounted for under either ASC 960-325-35-1 or ASC 960-325-35-3, *Plan Accounting—Defined Benefit Pension Plans—Investments—Other*, is 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*.

2.2.9 Certain Loan Commitments

ASC 815-10-15-69 through 15-71 address a scope exception for certain loan commitments. For the holder of a commitment to originate a loan (that is, the potential borrower), that commitment is not subject to the requirements of ASC 815. For issuers of commitments to originate mortgage loans that will be held for investment purposes, as discussed in ASC 948-310-25-3 through 25-4, *Financial Services—Mortgage Banking—Receivables*, those commitments are not subject to ASC 815. In addition, for issuers of loan commitments to originate other types of loans (that is, other than mortgage loans), those commitments are not subject to the requirements of ASC 815.

PwC Observation: Understanding certain characteristics of loan commitments is necessary in order to apply this exception appropriately. Pursuant to ASC 815-10-15-70, a loan commitment is a legal obligation to extend credit to another party. Examples include residential mortgage loan commitments, commercial loan commitments, credit card lines of credit, automobile financing, and subprime lending. Questions that are useful to consider include:

1. Is the entity the *issuer* or the *holder* of the loan commitment?
2. Is the loan commitment related to loans that will be *held for sale* or *held for investment*?
3. Is the loan commitment *originated* or *purchased*?
4. Is the loan commitment related to a *mortgage* loan or a *nonmortgage* loan?

Loan commitments that relate to the origination of mortgage loans that will be *held for sale* should be accounted for as derivatives under ASC 815 by the issuer. *Holders* of loan commitments are not subject to ASC 815. *Issuers* of loan commitments to originate mortgage loans that will be *held for investment* are not subject to ASC 815. *Issuers* of loan commitments to *originate nonmortgage* loans are not subject to ASC 815.

2.2.10 Leases

Per ASC 815-10-15-79 leases that are within the scope of Topic 840—*Leases* are not derivative instruments subject to ASC 815, although a lease may contain an embedded derivative feature that requires bifurcation under ASC 815-15-25-1. See a discussion of embedded derivatives in lease hosts at DH 3.6.3.

2.2.11 Residual Value Guarantees

A residual value guarantee contract meets the definition of a derivative because it (1) has an underlying and a notional amount, (2) requires no initial net investment, and (3) 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, the FASB provides an exception for such contracts in ASC 815-10-15-80 and 15-81.

Specifically ASC 815-10-15-80 and 15-81 state:

Residual value guarantees that are subject to the requirements of Topic 840 are not subject to the requirements of this Subtopic.

A third-party residual value guarantor shall consider the guidance in this Subtopic for all residual value guarantees that it provides to determine whether they are derivative instruments and whether they qualify for any of the scope exceptions in the Subtopic. The guarantees described in paragraph 840-10-15-20 for which the exceptions of paragraphs 460-10-15-7(b) and 460-10-25-1(a) do not apply are subject to the initial recognition, initial measurement, and disclosure requirements of Topic 460.

Certain residual value guarantee contracts issued by third-party guarantors like insurance companies are examples of contracts that may qualify for this scope exception. Additionally, residual value guarantee contracts that are subject to ASC 840, *Leases*, are not subject to the requirements of ASC 815.

2.2.12 Registration Payment Arrangements

In conjunction with a debt or equity offering, registration rights may be provided to investors in the form of a separate agreement, such as a registration rights agreement, or included as part of another agreement, such as an investment purchase agreement, a warrant agreement, a debt indenture, or a preferred stock indenture. A registration payment arrangement is an arrangement with both of the following characteristics: the arrangement specifies that the issuer will endeavor (1) to file a registration statement for the resale of specified financial instruments or for the resale of equity shares that are issuable upon exercise or conversion of specified financial instruments and for that registration statement to be declared effective by the SEC or other applicable securities regulators, and/or (2) to maintain the effectiveness of the registration statement for a specified period of time or in perpetuity; and the arrangement requires the issuer to transfer consideration to the counterparty (investor) if the registration statement for the resale of the financial instrument or instruments subject to the arrangement is not declared effective or if effectiveness of the registration statement is not maintained.

Contingent obligations to make future payments or otherwise transfer consideration under a registration payment arrangement (e.g., a requirement to pay an investor if a registration statement for the resale of securities subject to the arrangement is not

declared effective or maintained) may meet the definition of a derivative because it (1) has an underlying (in this case a contingent event) and a payment provision, (2) requires no initial net investment, and (3) calls for net settlement. Additionally, such a payment provision could disallow the associated instrument or conversion feature from being afforded the “indexed to and potentially settled in” scope exception discussed in DH 2.3.1.

To address this, the FASB provided a scope exception from ASC 815 for such arrangements which are instead required to be separately recognized and measured in accordance with ASC 450-20-25. For further discussion of registration payment arrangements see DH 3.4.3.2 and ARM 5280.85.

2.3 Certain Contracts Involving an Entity’s Own Equity

The following contracts that involve an entity’s own equity are not within the scope of ASC 815:

- a. Contracts issued or held by that reporting entity that are both:
 1. Indexed to its own stock.
 2. Classified in stockholders’ equity in its statement of financial position.
- b. Contracts issued by an entity that are subject to the share-based payment guidance in ASC 718 or ASC 505-50.
- c. Contracts issued by an entity as contingent consideration from a business combination.
- d. Certain financial instruments that are within the scope of ASC 480.

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

2.3.1 Contracts Indexed to, and Potentially Settled in, an Entity’s Own Stock

The following contracts are specifically excluded from ASC 815’s scope for the reporting entity (i.e., the issuer), as stated in ASC 815-10-15-74:

- a. **Contracts issued or held by that reporting entity that are both:**
 - 1. Indexed to its own stock.**
 - 2. Classified in stockholders’ equity in its statement of financial position.**

As noted above, ASC 815-10-15-74(a) specifies that a contract that would otherwise meet the definition of a derivative issued or held by the reporting entity that is **both** (a) indexed to its own stock, and (b) classified in stockholders’ equity in its statement of financial position shall not be considered a derivative financial instrument for purposes of applying ASC 815. If a freestanding financial instrument meets the scope exception in ASC 815-10-15-74(a), it is classified as an equity instrument and is not accounted for as a derivative instrument.

ASC 815-15-25-1 requires that an embedded derivative instrument be separated from the host contract and accounted for as a derivative instrument if certain criteria are met. One of those criteria, set forth in ASC 815-15-25-1(c), is that a separate

instrument with the same terms as the embedded derivative instrument would, pursuant to ASC 815-10-15, be a derivative instrument subject to the requirements of ASC 815. Consequently, if an embedded feature meets the scope exception in ASC 815-10-15-74(a), it would not be separated from the host contract and accounted for as a derivative by the issuer. See DH 3 for further discussion of embedded derivatives.

2.3.1.1 Determining Whether a Contract Is Indexed to An Entity's Own Stock

Determining if an instrument or embedded feature qualifies for the scope exception under ASC 815-10-15-74(a) is a two-step process, as discussed in ASC 815-40, *Contracts in Entity's Own Equity*, and usually requires significant analysis. The first step is to determine whether a contract is considered indexed solely to the reporting entity's stock and the second step is to determine if it would be classified as equity within the entity's statement of financial position.

The first step to determining the applicability of the ASC 815-10-15-74(a) scope exception is itself a two-step analysis, as prescribed by ASC 815-40-15-5 through 15-7. This guidance was modified for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those years (refer to DH 11.2) to provide additional guidance in determining whether an instrument or embedded feature is indexed to an entity's own stock and has resulted in a major change to the first step of the analysis of the ASC 815-10-15-74(a) scope exception. This analysis now requires the following:

Step 1: Evaluate the instrument's contingent exercise provisions, if any.

Step 2: Evaluate the instrument's settlement provisions.

Under the first step of the model, any contingent provision that permits, accelerates, extends or eliminates the holder's ability to exercise the instrument or embedded feature must be evaluated. If the exercise contingency is based on (1) an observable market, other than the market for the issuer's stock, or (2) an observable index, other than one measured solely by reference to the issuer's own operations (e.g., sales revenue, EBITDA or net income), then the presence of the exercise contingency precludes an instrument/feature from being considered indexed to an entity's own stock. For example, if a warrant becomes exercisable only if the S&P 500 increases 10 percent, the contingency would fail this step and preclude the warrant from being considered indexed to the entity's own stock. However, if the warrant became exercisable only if the entity's stock price increased 10 percent, this step of the guidance would be met. If the evaluation of Step 1 does not preclude an instrument from being considered indexed to the entity's own stock, the analysis would proceed to Step 2.

The second step of the assessment requires an entity to analyze the settlement terms of the instrument or embedded feature. If the settlement amount equals the difference between the fair value of a fixed number of the entity's equity shares and a fixed monetary amount or a fixed amount of a debt instrument issued by that entity, the instrument or embedded feature would be considered indexed to an entity's own stock. Additionally, if the instrument's strike price or the number of shares used to calculate the settlement amount are not fixed, the instrument or embedded feature would still be considered indexed to an entity's own stock if the only variables that could affect the settlement amount would also be variables that are typically used to determine the fair value of a "fixed-for-fixed" forward or option on equity shares. Therefore, variables such as the term of the instrument, expected dividends, stock borrow costs, interest rates, the entity's credit spread, the entity's stock price

volatility, and the ability to maintain a standard hedge position could all impact the settlement amount of an instrument or embedded feature without violating the second step of the model. However, if the settlement calculation incorporates variables other than those noted above, or if it contains a leverage factor that increases the instrument's exposure to the variables used to determine the fair value of a "fixed-for-fixed" forward or option on equity shares, then the instrument would not be considered indexed to the entity's own stock and would therefore not qualify for the ASC 815-10-15-74(a) scope exception.

ASC 815-40-15-7(l) addresses the evaluation of an instrument's settlement provisions when the strike price is denominated in a foreign currency. The issuer of an equity-linked financial instrument incurs an exposure to changes in currency exchange rates if the instrument's strike price is denominated in a currency other than the functional currency of the issuer. An equity-linked financial instrument or embedded feature would not be considered indexed to the entity's own stock if the strike price is denominated in a currency other than the issuer's functional currency (including a conversion option embedded in a convertible debt instrument that is denominated in a currency other than the issuer's functional currency). The determination of whether an equity-linked financial instrument is indexed to an entity's own stock is not affected by the currency (or currencies) in which the underlying shares trade.

PwC Observation: Settlement adjustments designed to prevent a holder's position from being diluted should not prevent an instrument or embedded derivative feature from being indexed to an entity's own stock. Adjustments for events such as the occurrence of a stock split, rights offering, dividend, or a spin-off would typically be inputs to the fair value of a "fixed-for-fixed" forward or option on equity shares and would thus be addressed by the analysis in the second step of the model. Settlement adjustments due to issuances of an entity's shares for an amount below their current fair value, or repurchases of an entity's shares for an amount that exceeds the current fair value of those shares, also meet the criteria of ASC 815-40-15-5 through 15-7 if they are designed to offset the dilution caused by such off-market transactions.

However, there are certain provisions billed as "anti-dilution" provisions in many equity-linked instruments that would not meet the criteria in ASC 815-40-15-5 through 15-7. For example, there may be provisions that require a reduction in an instrument's strike price as a result of a subsequent at-market issuance of shares below the instrument's original strike price or as a result of the subsequent issuance of another equity-linked instrument with a lower strike price. Because the issuance of shares for an amount equal to the current market price of those shares would not dilute the holders of outstanding shares and equity-linked instruments, any settlement adjustments related to such events should not be considered as having met the criteria of ASC 815-40-15-5 through 15-7. These provisions give the investors a level of protection that is not afforded to typical holders of outstanding shares and are not based on inputs to the fair value of a "fixed-for-fixed" forward or option. As a result, instruments with settlement adjustments that provide protection against share price declines cannot qualify as being indexed to an entity's own stock.

ASC 815-40-55 contains numerous examples illustrating the application of the two-step approach to determining whether an equity-linked financial instrument or embedded feature is indexed to its own stock, including two examples related to the "anti-dilution" provisions discussed in the Observation above, refer to Example 9 in ASC 815-40-55-33 through 55-34 and Example 17 in ASC 815-40-55-42 through 55-43.

2.3.1.2 Determining Whether a Contract is Classified in Stockholders' Equity

If an instrument or an embedded feature that has the characteristics of a derivative instrument is indexed to an entity's own stock, it is still necessary to evaluate whether it is classified in stockholders' equity (or for embedded features, would be classified in stockholders' equity if it were a freestanding instrument). Therefore the next step is to determine if the contract would be classified within stockholders' equity on the reporting entity's statement of financial position, i.e., step 2 of ASC 815-10-15-74(a).

To determine if the contract would be classified within stockholders' equity, the reporting entity should apply the guidance in ASC 480, *Distinguishing Liabilities from Equity* and ASC 815-40, *Contracts in Entity's Own Equity*, if the contract is a freestanding derivative. If the ASC 815-10-15-74(a) exception is being assessed to determine if an embedded derivative should be bifurcated from its host contract pursuant to ASC 815-15-25-1(c), the reporting entity should apply ASC 815-40 only, because the guidance in ASC 480 is applicable only to freestanding financial instruments. If the entity were to classify a contract as an asset or a liability pursuant to ASC 480-10 or ASC 815-40, the contract must be accounted for as a derivative instrument. For example, an entity may purchase a call option on its own common stock. If the option is required to be cash settled, it would be classified as an asset in accordance with ASC 480 and therefore would have to be accounted for as a derivative under ASC 815-10.

Under ASC 810, *Consolidation*, noncontrolling interests (subsidiary stock held by entities other than the parent) are reported in the consolidated statement of financial position within equity. After applying this standard, financial instruments and embedded features for which the payoff is based, in whole or part, on the stock of a consolidated subsidiary will qualify for the second part of the scope exception in ASC 815-10-15-74(a), as long as they are not required to be classified as liabilities under other applicable literature, such as ASC 480-10 or ASC 815-40. However, ASC 810 does not address whether these financial instruments or embedded features should qualify for the first part of the scope exception. Frequently, financial instruments such as options, warrants, and convertible debt are issued by an entity based on the equity of a consolidated subsidiary. A question therefore arises as to whether such instruments would be considered indexed to a reporting entity's own stock in the consolidated financial statements, and thus, eligible for the scope exception of ASC 815-10-15-74(a).

In ASC 815-40-15-5C an instrument based on the stock of a subsidiary should be considered indexed to its own stock for purposes of the ASC 815 scope analysis. This guidance was modified for fiscal years beginning on or after December 15, 2008, and interim periods within those years. Prior to the issuance of this guidance, the stock of a subsidiary was not considered equity of the parent (reporting entity). Accordingly, freestanding contracts indexed to, and potentially settled in, the stock of a consolidated subsidiary that did not meet the criteria of a liability under ASC 480 did not qualify for the scope exception in ASC 815-10-15-74(a) from the perspective of the reporting parent. Therefore, as a result of the new guidance in ASC 815-40-15-5C, certain instruments previously accounted for as derivatives will now be included in equity.

ASC 815-40-15-5C applies to freestanding financial instruments and embedded features for which payoff to the counterparty is based, in whole or in part, on the stock of a consolidated subsidiary whether those instruments were entered into by the parent or the subsidiary.

For purposes of applying the ASC 815-10-15-74(a) scope exception, paragraph ASC 815-10-15-76 states that temporary equity is considered stockholders' equity even though the SEC requires that temporary equity be displayed outside the permanent equity section.

2.3.2 Share-based Payments

Another scope exception applicable to contracts involving an entity's own equity is for stock-based compensation. ASC 815-10-15-74(b) states the following contracts will not be considered derivative instruments:

- b. Contracts issued by the entity that are subject to ASC 718, *Compensation—Stock Compensation*, or Subtopic 505-50, *Equity—Equity-Based Payments to NonEmployees*. If any such contract ceases to be subject to Topic 718 or Subtopic 505-50 in accordance with paragraphs 718-10-35-9 through 35-14, the terms of that contract shall then be analyzed to determine whether the contract is subject to this Subtopic. An award that ceases to be subject to Topic 718 or Subtopic 505-50 in accordance with those paragraphs shall be analyzed to determine whether it is subject to this Subtopic.**

This scope exception in ASC 815-10-15-74(b) raises the question: When does a compensation arrangement cease to be subject to the guidance in ASC 718, *Compensation—Stock Compensation* or ASC 505, *Equity*? ASC 718-10-35-10 states:

A freestanding financial instrument issued to an employee in exchange for past or future employee services that is subject to initial recognition and measurement guidance within this Topic shall continue to be subject to the recognition and measurement provisions of this Topic throughout the life of the instrument, unless its terms are modified when the holder is no longer an employee. Only for purposes of this paragraph, a modification does not include a change to the terms of an award if that change is made solely to reflect an equity restructuring provided that both of the following conditions are met:

- a. There is no increase in fair value of the award (or the ratio of intrinsic value to the exercise price of the award is preserved, that is, the holder is made whole) or the antidilution provision is not added to the terms of the award in contemplation of an equity restructuring.**
- b. All holders of the same class of equity instruments (for example, stock options) are treated in the same manner.**

ASC 718-10-35-11 continues:

Other modifications of that instrument that take place when the holder is no longer an employee shall be subject to the modification guidance in paragraph 718-10-35-14. Following modification, recognition and measurement of the instrument should be determined through reference to other applicable generally accepted accounting principles (GAAP).

ASC 815-10-15-75 addresses the question of whether equity instruments (including stock options) that are granted to non-employees as compensation for goods and

services in share-based payment transactions are subject to ASC 815-10. The issuer of equity instruments is subject to analysis under ASC 815-10 once performance, as discussed by ASC 505-50, has occurred. Although the scope exception in ASC 815-10-15-74(b) will no longer apply once performance has occurred, the issuer might still qualify for the scope exception in ASC 815-10-15-74(a) if the instrument is indexed to the issuer's own stock and classified in stockholders' equity.

2.3.3 Forward Contracts to Enter into a Business Combination

ASC 815-10-15-74(c) states the following contracts will not be considered derivative instruments:

c. Any of the following contracts:

- 1. A contract between an acquirer and a seller to enter into a business combination.**
- 2. A contract to enter into an acquisition by a not-for-profit entity.**
- 3. A contract between one or more NFPs to enter into a merger of not-for-profit entities.**

Per ASC 815-10-15-74(c), a reporting entity shall not consider a contract "between an acquirer and a seller to enter into a business combination at a future date" to be a derivative instrument subject to ASC 815.

2.3.4 Financial Instruments within the Scope of ASC 480

ASC 815-10-15-74(d) states the following contracts will not be considered derivative instruments:

- d. Forward contracts that require settlement by the reporting entity's delivery of cash in exchange for the acquisition of a fixed number of its equity shares (forward purchase contracts for the reporting entity's shares that require physical settlement) that are accounted for under paragraphs 480-10-30-3 through 30-5, 480-10-35-3, and 480-10-45-3.**

ASC 480-10 requires forward contracts that require settlement by the reporting entity's delivery of cash in exchange for the acquisition of a fixed number of its equity shares to be classified as liabilities and subsequently measured at the present value of the full repurchase price if the amount to be paid is fixed or at the undiscounted amount if the shares were repurchased at the reporting date if the amount or settlement date can vary. The Board considers such contracts to be more akin to a treasury stock purchase using borrowed funds than a derivative instrument.

When (1) an entity either can or must settle a contract by issuing its own equity instruments, but (2) the contract is indexed to something other than the entity's own stock, the contract is a derivative instrument for the issuer (as well as for the holder).

2.4 Examples of Contracts That Meet the Definition of a Derivative

The following exhibit lists several contracts and assesses whether or not each contract qualifies as a derivative instrument. The exhibit also discloses the nature of any underlying for contracts that meet the definition of a derivative instrument.

Exhibit 2-1: Table of Derivatives: Contract Types

Contract	Underlying	Notional or Payment Provision	Smaller Initial Net Investment	Net Settlement	Does the Contract Meet the Criteria to Be a Derivative?	Is the Contract a Derivative within the Scope of ASC 815-10?
1. Equity security	No	Yes	No. An initial net investment is required to purchase an equity security.	No	No	No
2. 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
3. "Regular-way" security trade (e.g., trade of a debt or equity security)	Yes	Yes	Yes	Yes	Yes	No. Such trades are specifically excluded from the scope of ASC 815.
4. Lease	Yes. The underlying of a lease is the value of the leased property.	Yes. A lease's notional amount is 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
5. 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
6. Interest-only (IO) security/ Principal-only (PO) security	Yes	Yes	No. An initial net investment is required to purchase an IO/ PO security.	No	No	It depends. Refer to ASC 815-10-15-72 through 15-73; 815-15-25-33 through 25-36; Example 11 in 815-15-55-137 through 55-139 for further guidance on making this assessment.
7. Option to purchase or sell real estate	Yes. 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	No. The underlying is the price of the real estate, which is an excluded underlying ASC 815-10-15-59(b).

(continued)

Contract	Underlying	Notional or Payment Provision	Smaller Initial Net Investment	Net Settlement	Does the Contract Meet the Criteria to Be a Derivative?	Is the Contract a Derivative within the Scope of ASC 815-10?
8. Option to purchase or sell an exchange-traded security	Yes. 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
9. Option to purchase or sell a security not traded on an exchange	Yes. 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 (explicit terms).	It depends. Refer to ASC 815-10-15-59 through 15-62 for additional guidance in making this assessment.	It depends.
10. Employee stock option	Yes. 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 (explicit terms).	It depends.	It depends.
11. Futures contract	Yes. 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
12. Forward contract to purchase or sell securities other than the equity securities of the parties involved in the transaction	Yes. Price of a security.	Yes. A specified number of securities or a specified principal or face amount.	Yes	It depends. The contract may (qualifies) or may not (does not qualify) be able to be net settled. The contract or security may (qualifies) or may not (does not qualify) be able to be readily converted into cash.	It depends.	It depends. The contract may qualify for the “regular-way” security-trade exception in ASC 815-10-15-15. Also; see factors under Net Settlement column.
13. Forward contract to purchase or sell manufactured goods	Yes. Price of manufactured goods.	Yes. A specified quantity.	Yes	It depends on whether the contract contains symmetrical default provisions and whether the manufactured goods can be readily converted into cash.	It depends.	It depends on whether the seller owns the manufactured goods, whether the contract meets the requirements of net settlement, and whether the purchase or sale qualifies for the normal exception.
14. A non-exchange-traded forward contract to purchase or sell a commodity	Yes. Price of the commodity.	Yes. A specified quantity or face amount.	Yes	It depends on whether the notional amount of the underlying is readily convertible to cash.	It depends.	Yes, but it may meet the criteria for the normal purchases and normal sales exception.

(continued)

Contract	Underlying	Notional or Payment Provision	Smaller Initial Net Investment	Net Settlement	Does the Contract Meet the Criteria to Be a Derivative?	Is the Contract a Derivative within the Scope of ASC 815-10?
15. Interest rate swap	Yes. A benchmark interest rate.	Yes. A specified amount.	Yes	Yes. Periodic payments.	Yes	Yes
16. Currency swap	Yes. An exchange rate.	Yes. A specified currency amount.	Yes	Yes	Yes	Yes
17. Swaption	Yes. Value of the swap.	Yes. The notional amount of the swap.	Yes	Yes	Yes	Yes
18. Stock-purchase warrant	Yes. Price of stock.	Yes. A specified number of shares.	Yes	For the holder, it depends on whether (1) the warrant (a) contains a net share or net cash settlement provision or (b) can be net settled through a market mechanism or (2) the underlying shares are readily convertible to cash. For the issuer, no, if the warrant is indexed only to its own equity and is classified as stockholders' equity.	It depends.	It depends.
19. Mortgage loan commitment	Yes. Interest rate.	Yes. Principal amount of the loan commitment.	Yes	Yes, if the loan commitment can readily be net settled or readily convertible into cash.	Yes	From the borrower's perspective, no. From the lender's perspective, it depends on whether the commitment, when exercised by the borrower, will be classified as <i>held for sale</i> by the lender in accordance with ASC 948.
20. Traditional property/casualty insurance contract	Yes. The occurrence of an identifiable insurable event.	Yes. Contract value, i.e., the insured amount.	Yes. Initial net investment is less than notional.	Yes. The policy is typically net settled.	Yes	No. This type of contract is specifically excluded by ASC 815-10-15-53(b).

(continued)

Contract	Underlying	Notional or Payment Provision	Smaller Initial Net Investment	Net Settlement	Does the Contract Meet the Criteria to Be a Derivative?	Is the Contract a Derivative within the Scope of ASC 815-10?
21. Traditional life insurance	Yes. The mortality of the insured.	Yes. Contract value, i.e., the death benefit.	Yes. Initial net investment is less than the notional.	Yes. The policy is typically net settled.	Yes	No. This type of contract is specifically excluded by ASC 815-10-15-53(a).
22. 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. This type of contract may be excluded if the criteria in ASC 815-10-15-58 are met.
23. Financial guarantee contract payment occurs if there is a change in another underlying such as a decrease in a specified debtor's creditworthiness	Yes. Decrease in specified debtor's creditworthiness.	Yes	Yes	Yes	Yes	Yes
24. Credit-indexed contract payment occurs if a credit index (or the creditworthiness of a specified debtor) varies in a specified way	Yes. Credit index or credit rating.	Yes. A specified payment amount (which may (1) vary, depending on the degree of change, or (2) be fixed).	Yes	Yes, for the delta in fair value.	Yes	Yes
25. Royalty agreement	Yes	Yes. Payment is based on a percentage of output.	Yes. Payment occurs if sales are made.	No. The underlying is not readily convertible to cash, as it is not traded on an exchange.	No	No. It is based on the sales of one of the parties, which is an excluded underlying by ASC 815-10-15-59(d).
26. Interest rate cap	Yes. An interest rate.	Yes. A specified amount.	Yes	Yes	Yes	Yes
27. Interest rate floor	Yes. An interest rate.	Yes. A specified amount.	Yes	Yes	Yes	Yes

(continued)

Contract	Underlying	Notional or Payment Provision	Smaller Initial Net Investment	Net Settlement	Does the Contract Meet the Criteria to Be a Derivative?	Is the Contract a Derivative within the Scope of ASC 815-10?
28. Interest rate collar	Yes. An interest rate.	Yes. A specified amount.	Yes	Yes	Yes	Yes
29. Synthetic guaranteed-investment contracts	Yes. Formula which by interest is calculated.	Yes. A specified amount.	Yes	Yes	Yes	Yes
30. Non-exchange 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. It is a non exchange-traded contract based on a climatic or geologic variable or other physical variable, which is an excluded underlying by ASC 815-10-15-59(a).

2.5 Questions and Interpretive Responses

Derivative-Like Instruments

Question No. 2-1: Does the scope of ASC 815-10 include non-exchange-traded derivative-like instruments that (1) cannot be net settled, and (2) involve assets that are not readily convertible to cash (e.g., options on (1) the common stock of a private entity or (2) other assets in markets that are not fully developed)?

PwC Interpretive Response: Generally, no. Because the common stock of a private entity or other underlying asset in a less than fully developed market generally is not liquid, the issuer of the derivative-like instrument often is not able to deliver an asset that is (1) readily convertible to cash, or (2) has another means of net settlement. Therefore, in this type of situation in which the issuer could potentially deliver an asset that would put the recipient in a position substantially different from what the recipient's position would be in a net settlement, the derivative-like instrument would fall outside the scope.

However, if an option or warrant contract provides for net share settlement by requiring delivery to the party with a gain, an amount of common shares with a current fair value equal to the gain, the contract would meet the definition of net settlement and would be considered a derivative—regardless of whether the net shares are readily convertible to cash.

Examples of non-exchange-traded derivative-like instruments that lie outside the scope are options to buy real estate and options on intellectual or artistic property that are used in the publishing and motion picture industries. (Such options are subject to the scope exception discussed in ASC 815-10-15-59.)

Forward Commitment in a Securitization Transaction

Question No. 2-2: If an entity were to enter 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), would the forward commitment qualify as a derivative instrument under ASC 815-10?

PwC Interpretive Response: Generally, no. The forward commitment usually would not qualify as a derivative instrument because it typically does not possess all of the characteristics inherent in a derivative instrument. Although such a commitment generally has gains or losses based on changes in interest rates, it does not have net settlement provisions or a means outside the contract to meet the net settlement criterion specified in the definition of a derivative. A commitment of this type is fulfilled by the transfer of financial assets, such as credit card receivables. When the financial assets that are to be delivered under a forward commitment 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 become derivatives, assuming that the commitments otherwise met the definition of a derivative.

Short Sales

Question No. 2-3: What types of short sales qualify as derivatives?

PwC Interpretive Response: ASC 815-10-55-57 through 55-59 address the various activities in a typical short sale and state that entities should conduct a careful analysis when determining whether the individual contracts involved in short sale activities qualify as derivatives. Generally, a short sale in which (1) the seller receives the notional amount at the inception of the contract, and (2) the security is physically delivered in a subsequent period does not qualify as a derivative. On the other hand, a short sale that is essentially a contract for a forward sale of a security that does not qualify for the regular-way security trade exception and that permits net settlement will fall within the scope and definition of a derivative.

Commodity Requirements Contracts

Question No. 2-4: Many commodity contracts specify a fixed amount of units of a commodity to be bought or sold based on the pricing terms of the contract. Some commodity contracts do not specify a fixed number of units but rather, require as many units as needed to be utilized or consumed within the specified period the contract is outstanding (otherwise known as a *requirements contract*). Does a commodity contract that does not specify a fixed number of units of a commodity to be bought or sold have a notional amount as defined by ASC 815-10-15-83(a)?

PwC Interpretive Response: It depends. ASC 815-10-15-92 defines a notional amount as “a number of currency units, shares, bushels, pounds, or other units specified in a derivative instrument.” Generally, the amount of units anticipated to be bought or sold under a requirements contract represents the amount of units a buyer will need. Upon negotiation of a requirements contract, both parties need to understand the estimated needs of the buyer. Because a buyer may rely exclusively on the seller to provide a particular commodity, it is very important that the buyer ensure that the seller is aware of the anticipated volumes under the contract. A requirements contract has a notional amount only if a reliable means exists to determine the quantity required under the contract. ASC 815-10-55-5 through 55-7 provide four different variations of a requirements contract and discuss whether or not a notional amount exists within the contract. Based on the examples provided in ASC 815-10-55-5 through 55-7, a requirements contract that contains explicit provisions that support the calculation of a determinable amount reflecting a buyer’s needs, and which can be enforced by a means within the contract, would have a notional amount (i.e., default provisions that anticipate quantities to utilize in the calculation of penalty amounts in the event of nonperformance). In addition, contracts that contain minimum unit provisions also contain notional amounts equal to at least the required minimum unit levels.

Payment Provisions

Question No. 2-5: Does a contract fall under the provisions of ASC 815-10 when it has no notional amount but specifies that the issuer must pay the holder \$3 million in the event that LIBOR exceeds 8 percent at any time during the next three years?

PwC Interpretive Response: Yes. ASC 815-10-15-83(a) specifies that a derivative has (1) one or more underlyings, and (2) one or more notional amounts or payment provisions or both.

Although the contract cited above has no notional amount, it has an underlying (LIBOR rates) and a payment provision specifying a fixed or determinable settlement (\$3 million) if the underlying behaves in a specified way (i.e., if LIBOR exceeds 8 percent). Thus, assuming that the contract also satisfies the other criteria in paragraph ASC 815-10-15-83, it would meet the definition of a derivative and fall within the scope of ASC 815-10.

Question No. 2-6: In the event of default a contract provides the non-defaulting party a right to terminate the contract early and require payment for net amounts under the contract. Does this default provision (i.e., the unilateral right to elect net settlement upon default) meet the net settlement criteria of ASC 815-10-15-83(c)?

PwC Interpretive Response: ASC 815-10-55-18 states that “a contract that permits only one party to elect net settlement of the contract (by default or otherwise), and thus participate in either favorable changes only or both favorable and unfavorable price changes in the underlying meets the derivative characteristic described in paragraph 815-10-15-83(c)...”

Upon default, the non-defaulting party would have the unilateral right to elect net settlement of the contract under any pricing circumstance. In such a case, a delivery of the asset would not be required, and the net settlement characteristic could be met as provided for in ASC 815-10-15-83(c). Therefore, the parties to a contract with such a provision should re-evaluate the net settlement characteristic for this contract upon default by either party. Prior to the default, neither party has the right to net settle the contract and therefore, the net settlement criteria would not be met.

“Regular-Way” Securities Trades

Question No. 2-7: ASC 815-10-15-15 states that its provisions do not apply to trades of regular-way securities. What are some examples of securities trades that would not be considered trades of regular-way securities and would therefore be treated as derivatives?

PwC Interpretive Response: A securities trade would be treated as a derivative if the contract were to contain provisions for settlement that extend beyond the period that is generally established by regulations and conventions in the marketplace (or established by the exchange in which the transaction is being executed). For example, the settlement period for a U.S. government security is one day, while the settlement period for secondary market trades of an equity security is generally three to twenty days in foreign markets. Contracts containing provisions that allow for settlement extending beyond these periods would be considered derivative (i.e., forward) contracts that settle after the normal or regular periods. Settlement periods for when-issued securities that go beyond the date on which others would receive the same security at issuance would also be considered derivatives.

Question No. 2-8: Is the regular-way security trade scope exception outlined in ASC 815-10-15-15 elective by analogy to the normal purchases and normal sales election described in ASC 815-10-15-39?

PwC Interpretive Response: No. The regular-way security trade scope exception is not elective because there is no specific documentation requirement for regular-way securities, unlike for the normal purchases and normal sales scope exception documentation requirements in ASC 815-10-15-37 through 15-39.

To-Be-Announced or When-Issued Securities Trades

Question No. 2-9: Do the provisions of ASC 815-10 apply to forward contracts for to-be-announced (TBA) or when-issued securities?

PwC Interpretive Response: It depends. The Board was concerned that in applying ASC 815-10's provisions, some entities that currently use trade-date accounting for TBA and when-issued securities would be subject to potentially burdensome regulatory requirements for transactions in derivatives. Accordingly, the Board decided to extend the regular-way scope exception to purchases and sales of TBA and when-issued securities provided that (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 scope exception is also available to entities that use settlement date accounting as long as the three requirements identified above have been satisfied.

Take-or-Pay Contracts

Question No. 2-10: Can take-or-pay contracts qualify for the normal purchases and normal sales scope exception?

PwC Interpretive 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. A take-or-pay commodity contract in which the commodity is readily convertible to cash may meet the net settlement criterion. That criterion would also be satisfied if the contract were to contain a symmetrical liquidated-damages provision that is based on the current market price of the referenced asset (e.g., the spot price of natural gas in a take-or-pay contract for natural gas). Thus, the requirements to be a derivative would be satisfied by the contracts.

When a take-or-pay contract meets the definition of a derivative, it may qualify for the normal purchases and normal sales scope exception in ASC 815-10-15-22 through 15-26. For example, assume that (1) 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 (2) it is probable that the contract at inception and throughout its term will not net settle but will instead result in physical delivery. 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. Subsequently violating these assertions would risk tainting the normal purchases and normal sales portfolio. However, if the purchaser reasonably expects that the commodity under contract will be used in the normal course of business but subsequently unforeseen circumstances arise such that the purchaser cannot use the quantity of the commodity under contract, the normal purchases and normal sales exception can still be applied as long as the purchaser takes physical delivery and does not net settle the contract. In this case, the normal purchases

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and normal sales scope exception may continue to be applied regardless of whether the purchaser chooses to (1) forfeit the use of the excess commodity purchased, or (2) sell into the market the excess commodity purchased.

When a take-or-pay contract meets the definition of a derivative and does not qualify for the normal purchases and normal sales exception, it must be accounted for as a derivative under ASC 815-10.

Fair Value Option

Question No. 2-11: Can an entity apply the fair value option (ASC 825-10) to a contract designated as “normal” under the normal purchase and normal sales scope exception?

PwC Interpretive Response: No. An entity may not apply the fair value option to contracts designated as “normal” because normal purchases and normal sales contracts are not financial instruments. The fair value option only applies to financial instruments with certain exceptions that do not include normal purchase and normal sales contracts.

Normal purchase and normal sales contracts meet the definition of a derivative and are accounted for as such (i.e., measured at fair value with changes in fair value reported in earnings) unless the conditions in ASC 815-10-15-20 through 15-26 are met and that scope exception is elected. Because a normal purchase and normal sales contract provides for the purchase or sale of something other than a financial instrument (e.g., a physical good or commodity), it does not meet the definition of a financial instrument. Thus the fair value option cannot be applied to normal purchases and normal sales contracts under ASC 825-10.

Option to Purchase Leased Property

Question No. 2-12: Is a fixed-price purchase option for a property underlying an operating lease or a capital lease considered a derivative instrument?

PwC Interpretive Response: Generally, no. ASC 815-10-15-59 through 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.

Accounting for Weather Derivatives

Question No. 2-13: Assume that a company enters into a financial instrument indexed to weather or climatic data (e.g., an option, a swap, or a collar) and that instrument qualifies for the scope exception in ASC 815-10-15-59(a). How should the company account for the contract?

PwC Interpretive Response: ASC 815-45-25 concludes that entities entering into non exchange-traded weather derivative contracts for nontrading (e.g., risk management) purposes should account for such instruments by using an intrinsic value method. When applied to such contracts, an intrinsic value method compares the actual weather data to date (e.g., snowfall measurements or temperature readings) with the expected weather conditions used to set the strike value of the contract. The strike value of the measured weather condition would first be allocated to the various periods of the contract based on historical weather dispersion data (and other relevant factors) to determine the expected value for each period. At each interim reporting date, actual results of the measured weather condition to date would be compared against the cumulative expected value, and the hypothetical settlement calculated (and recorded through the income statement) based on the terms of the contract. Entities that enter into these contracts for trading or speculative purposes should account for such instruments at their fair value. Further, all weather derivative contracts that are in the form of written options should be recorded at fair value.

Royalty Agreements

Question No. 2-14: ASC 815-10-15-59(d) provides a scope exception whereby contracts that are not exchange traded are not subject to the requirements of ASC 815-10 when the settlement of the contract is based on an underlying comprising specified volumes of sales or service revenues of one of the parties to the contract:

Specified volumes of sales or service revenues of one of the parties to the contract. (This scope exception applies to contracts with settlements based on the volume of items sold or services rendered, for example, royalty agreements. This scope exception does not apply to contracts based on changes in sales or revenues due to changes in market prices.)

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 extraction units 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) and in some instances has been characterized as an intercompany billing for overall company research and development instead of characterized as the company's consolidated revenues. Based on these examples, it is evident that royalties can be based on either units or sales dollars of units (a fixed number of units multiplied by the sales price) or both, among still other factors. 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 this scope exception?

PwC Interpretive Response: Yes. However, as stated in ASC 815-10-15-59(d), agreements based on changes in sales that are due solely to a change in the market price are not eligible for the scope exception.

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. Based on our discussions with the FASB staff, we believe that by including the phrase “changes in sales or revenues due to changes in market prices” in ASC 815-10-15-59(d), the Board did not intend to exclude from ASC 815’s scope exception those royalty agreements wherein payment is based on changes in revenues that are due to changes in market prices when those changes are applied to the volume of items sold or services rendered.

The Staff has indicated that the Board’s intention is 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. Regarding the type of contract described in item 2, the guidance in ASC 815-10-15-60 should be carefully considered:

If a contract has more than one underlying and some, but not all, of them qualify for one of the scope exceptions in the preceding paragraph, the application of this Subtopic to that contract depends on its predominant characteristics. That is, the contract is subject to the requirements of this Subtopic if all of its underlyings, considered in combination, behave in a manner that is highly correlated with the behavior of any of the component variables that do not qualify for a scope exception.

The purpose of this guidance is to prevent companies from circumventing the requirements of ASC 815 merely by establishing in their royalty agreements payment terms that are based on an underlying (e.g., the market price per unit) that would act very much like a derivative.

Stock Purchase Warrants

Question No. 2-15: Do warrants (or option contracts) issued to purchase either public or private company stock meet the definition of a derivative?

PwC Interpretive Response: It depends. The issuer of the stock purchase warrant must first determine whether the warrant is classified as a liability under ASC 480, *Distinguishing Liabilities from Equity*.

If the warrant is not classified as a liability under ASC 480, classification of the warrant as equity or as a liability is dependent on whether the warrant meets the definition of a derivative within ASC 815-10-15-83. Typically, a warrant contains an underlying (the price of the stock that is to be purchased) and a notional amount (the number of shares of common stock) and does not require the holder to make an initial net investment equal to the market price of the underlying shares on the date the warrant is acquired (two of the three characteristics of a derivative as

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specified in ASC 815-10-15-83). The third characteristic, net settlement, is the key qualifying criterion as to whether certain warrants meet the definition of a derivative. ASC 815 provides for three definitions of net settlement.

The first method of net settlement (explicit net settlement) is commonly referred to as contractual net settlement. This method is often based on a contractual provision that allows the parties to the contract to settle any gains and losses on a net cash basis—meaning that the issuer makes a cash payment to the holder equal to the gain on the warrant (i.e., the current market price less the strike price). However, ASC 815-10-15-100 clearly states that a contractual net settlement “may be made in cash or by delivery of any other asset, whether or not it is readily convertible to cash.”

Many warrants contain net share settlement provisions, which can require that, upon exercise of that warrant, the issuer deliver shares that have a current fair value equal to the gain on the warrant (commonly referred to as a cashless exercise). A net share settlement provision results in the delivery of an asset (i.e., the net shares) in a settlement of the net gain. Such a warrant meets the net settlement criterion regardless of whether the shares received are privately held or explicitly restricted from being transferred for a specified period. This conclusion is confirmed by ASC 815-10-15-102. A warrant with this provision, therefore, would qualify as a derivative from the perspective of the holder and possibly from the perspective of the issuer.

The second method of net settlement is effected through a market mechanism that facilitates net settlement. ASC 815-10-15-111 states that “the term market mechanism is to be interpreted broadly and includes any institutional arrangement or other agreement having the requisite characteristics.” These further characteristics are discussed in paragraphs (a) through (d) of ASC 815-10-15-111.

In addition, *Case A of Example 6: Net Settlement Through a Market Mechanism—Ability to Offset Contracts* (ASC 815-10-55-91 through 55-95), states that “The arrangement is considered a market mechanism under 815-10-15-110” based on the assumption that a broker-dealer stands ready to buy and sell a non-exchange traded commodity forward contract that would relieve either party to the contract of their obligation to make or accept delivery of the commodity and their right to receive or make payment. Further, *Case A of Example 4: Net Settlement at Inception and Throughout a Contract’s Life* (ASC 815-10-55-84 through 55-86), states that “The existence of the broker-dealer market and the ability of the purchaser to be relieved of its rights and obligations under the purchase contract are consistent with the characteristics of a market mechanism as discussed beginning in paragraph 815-10-15-110.”

To date, little discussion has been devoted to warrants that can be net settled through a market mechanism. It seems reasonable, however, to presume that a significant number of investment banks and other financial institutions would be willing to buy a warrant even if the underlying shares were restricted from being sold for some period, provided that the shares are publicly traded. We therefore believe that a freely transferable warrant to purchase a publicly traded company will likely meet the net settlement criteria via a market mechanism. However, it would be unlikely that a freely transferable warrant to purchase the shares of a privately held company would meet the net settlement criteria for a market

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mechanism. Although there could be a significant number of investment banks and other financial institutions that might be willing to buy a warrant on a nonpublic company, it is unlikely they would do so without significant negotiation and extensive due diligence. In such circumstances, a market mechanism is unlikely to be present as noted in ASC 815-10-15-111 through 15-116.

The third and last method of net settlement is fulfilled when the warrant's underlying asset is readily convertible to cash. Generally, when a warrant's underlying shares are in a publicly traded entity, those shares are considered readily convertible to cash. Conversely, when a warrant's underlying shares are in a privately held entity, those shares are not, as a rule, considered readily convertible to cash. However, shares in a privately held entity may become shares in a publicly traded entity when the entity makes an initial public offering (IPO). It is possible that a conclusion regarding whether or not a contract is a derivative may change when an entity makes an IPO; a contract that did not meet the net settlement criterion prior to the IPO may meet the net settlement criterion upon the IPO because the underlying shares become readily convertible to cash. Therefore, companies must continually reassess their warrant contracts to determine whether they meet the definition of a derivative.

ASC 815-10-15-131 states that the underlying shares are not considered readily convertible to cash if both of the following conditions are met: (1) the stock purchase warrant is issued by an entity for only its own stock (or the stock of its consolidated subsidiaries), and (2) the sale or transfer of the issued shares is restricted (other than in connection with being pledged as collateral) for a period of 32 days or more from the date the stock purchase warrant is exercised.

Even when publicly traded shares are not prohibited from being sold for 32 days after the exercise of the warrant, they do not necessarily meet ASC 815's criteria for a net settlement. As noted in ASC 815-10-15-136:

However, even if the sale or transfer of the shares is restricted for 31 days or less after the stock purchase warrant is exercised, an entity still must evaluate both of the following criteria:

- a. Whether an active market can rapidly absorb the quantity of stock to be received upon exercise of the warrant without significantly affecting the price**
- b. Whether the other estimated costs to convert the stock to cash are expected to be not significant. (The assessment of the significance of those conversion costs shall be performed only at inception of the contract.)**

Thus, the guidance in paragraph 815-10-15-122 shall be applied to those stock purchase warrants with sale or transfer restrictions of 31 days or less on the shares of stock.

Thus, when a warrant is for a large number of shares, an entity should determine whether those shares could be sold (upon exercise of the warrant) without having a significant effect on the stock's market price. The entity's determination should be based on the smallest increment that may be exercised. Because the market for a particular entity's shares may change, so too might the entity's determination.

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Consequently, an entity should assess each warrant on at least a quarterly basis. A warrant that initially does not meet the definition of a derivative but later does because of an initial public offering or an increase in the trading volume must be accounted for as a derivative from the date it meets the definition of a derivative (assuming it does not meet one of the scope exceptions).

In addition, an entity must determine whether the estimated cost of converting the shares to cash will be significant, as defined in ASC 815-10-15-126. In most cases, the cost of selling the shares received will not meet the definition of significant as defined in ASC 815-10-15-126, since brokerage commissions are typically less than 10 percent. Entities should nevertheless refer to ASC 815-10-15-126, especially when the value of the shares at the inception of the warrant is relatively low and the fixed cost of selling the shares may be relatively high when the warrant is exercised.

Once the determination has been made that the stock purchase warrant is considered a derivative, a warrant may still meet the scope exception provided in ASC 815-10-15-74(a) for the issuing entity. ASC 815-10-15-74(a) provides a scope exception for instruments that are (1) indexed to a company's own stock, and (2) classified as equity. Thus, the issuer of a warrant must determine whether the warrant is indexed solely to the issuer's own stock and whether it should be classified as equity or a liability using the guidance in ASC 815-40, *Contracts in Entity's Own Equity*.

Entities That Record Financial Instruments at Fair Value

Question No. 2-16: Does ASC 815 apply to all entities? Would entities that account for most financial instruments on a mark-to-market basis (such as broker/dealers, pension plans, and mutual funds) be required to follow ASC 815's provisions?

PwC Interpretive Response: ASC 815 must be applied by all nongovernmental entities to all financial instruments or other contracts that meet ASC 815's definition of a derivative and that do not qualify for one of its scope exceptions. Additionally, ASC 815 must be followed by certain governmental organizations that have elected to apply post-1989 private-sector standards, with adjustments made, as necessary, for differences between the GASB and FASB financial reporting models (e.g., in the area of comprehensive income reporting) until the effective date of GASB 53, *Accounting and Financial Reporting for Derivative Instruments*, (GASB 53). GASB 53 is effective for periods beginning after June 15, 2009, with early adoption allowed. As a result of this standard being issued, a governmental entity should not apply the provisions of ASC 815 subsequent to the effective date of GASB 53. ASC 815, however, may have little effect on entities that already record most of their financial instruments at fair value, since those entities will have already recorded many or all of their derivative instruments at fair value. Further, ASC 815-15's provisions for embedded derivatives do not apply to instruments that are marked to market, with changes in fair value reported in earnings. These entities will, however, be impacted by ASC 815 when they hedge financial instruments that are not reported on a mark-to-market basis (e.g., long-term debt).

Continual Reassessment of Nonderivative Contracts

Question No. 2-17: If a contract fails to qualify as a derivative contract at its inception, does an entity have to periodically reassess whether the contract qualifies as a derivative contract?

PwC Interpretive Response: Generally, yes, unless otherwise provided in ASC 815-10-15 (e.g., 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 these penalties constitute net settlement). The characteristics of certain contracts (e.g., stock-purchase warrants) may change over the life of the contract (i.e., the contract may not qualify as a derivative contract at its inception but could qualify as one later). A contract that subsequently qualifies as a derivative should be carried at fair value prospectively at the time that the contract is determined to be a derivative instrument.

Question No. 2-18: If a contract fails to qualify as a derivative contract at its inception due to the fact that there is no notional amount pursuant to ASC 815-10-55-5 through 55-7 but later qualifies as a derivative, how does an entity account for the contract upon its qualification as a derivative?

PwC Interpretive Response: ASC 815-10-15-3 requires that a contract that meets the definition of a derivative subsequent to its acquisition be immediately recognized as a derivative, and recorded at its then current fair value, with the offsetting entry recorded in earnings. The guidance in ASC 815-10-55-86 is specific to the creation of a market mechanism or the determination that the asset being delivered is now readily convertible to cash. However, we believe this guidance can be analogized to this fact pattern (whereby a nonderivative instrument becomes a derivative instrument due to the later inclusion of a notional amount) as it discusses the accounting for a contract that changes its characteristics as a derivative or nonderivative in general terms.

An entity should immediately record the fair value of the contract and recognize the gain through earnings in the period in which the modification occurs. Subsequently, the contract should be recorded at its fair value each period with changes in its fair value recorded through earnings.

Alternatively, and if the requirements are met, the company may elect the normal purchases and normal sales exception immediately after the contract becomes a derivative, in which case the contract will be recorded at its fair value at the time it becomes a derivative but subsequent unrealized gains and losses will not be recorded through earnings. The fair value of the contract at the date of the modification will become its accounting basis and it will be amortized into earnings over the periods that the sales are made, using a rational basis such as the units of production method.

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A company may wish to avoid the potential complexities associated with accounting for the contract as a derivative. One way it could accomplish that objective is by pre-designating the normal purchases and normal sales exception for the contract, in which case the company would not record the fair value of the contract upon its becoming a derivative. For example, if at the inception of the contract it qualified for the normal purchases and normal sales exception, the company could avoid accounting for the contract as a derivative in the future should it become one if it had documented that it was electing the normal purchases and normal sales exception should the contract meet the definition of a derivative at a future date.

Question No. 2-19: What is the accounting for a contract that no longer meets the criteria for the normal purchases and normal sales exception?

PwC Interpretive Response: When a contract no longer qualifies for the normal purchases and normal sales exception, for example when physical delivery is no longer probable, the derivative contract should be recognized at fair value with changes in fair value recognized currently in income. ASC 815-10-15-35 states that “For a contract that meets the net settlement . . . 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.”

A careful consideration of the facts and circumstances must be made to determine whether or not a previously designated normal purchases and normal sales contract that required physical delivery is no longer probable of being settled through physical delivery. This assessment should not be made in a manner to achieve a desired accounting result, for example, by merely influencing a situation that may cause a normal purchases and normal sales designated contract to be net settled or by making assertions that the contract is no longer probable of physical settlement when there is no defined event that has occurred (and that was previously remote of occurring). Such circumstances may indicate that a contract was never eligible for normal purchases and normal sales and may also call into question the company’s ability to assume physical settlement for other similarly designated normal purchases and normal sales contracts (i.e., tainting) and/or designate new contracts as normal purchases and normal sales.

Impracticability of a Fair Value Estimate

Question No. 2-20: If an entity were to determine that it is impracticable to estimate the fair value of a derivative instrument (or the fair value of a hedged item that is attributable to the risk that is being hedged in a fair value hedge), could that entity elect not to apply the provisions of ASC 815?

PwC Interpretive Response: ASC 815 does not provide a practicability exception that permits an entity to avoid calculating the required fair value measurements. The Board believes that prudent risk management generally requires that an entity measure the fair value of any derivative it holds, as well as the fair value (attributable to the risk that is being hedged) of any item that is designated as the hedged item in a fair value hedge.

Repurchase Agreements

Question No. 2-21: Are repurchase agreements within the scope of ASC 815?

PwC Interpretive Response: Possibly. Repurchase agreements are contracts under which a transferor transfers a security to a transferee in exchange for cash (or other securities or letters of credit) and simultaneously agrees to reacquire that security at a future date for an amount equal to the cash exchanged plus an *interest* factor. A repurchase agreement that is accounted for as a sale under ASC 860, *Transfers and Servicing*, or ASC 405, *Liabilities*, contains two separate features, one of which may be a derivative. The initial exchange of financial assets for cash is a sale-purchase transaction; such a transaction generally does not result in a derivative instrument. However, the accompanying forward contract that gives the transferor the right and obligation to repurchase the transferred asset involves an underlying and a notional amount (the price of the security and its denomination), and it does not require an initial net investment in the contract. Consequently, if the forward contract were to require the delivery of a security that is readily convertible to cash or that otherwise meets the net settlement criterion, the contract would fall within the scope of ASC 815 and therefore would need to be accounted for as a derivative instrument (i.e., marked to market, with changes in fair value recorded in earnings).

If, however, the initial transfer of a financial asset were accounted for under ASC 860 or ASC 405 as a secured borrowing (instead of a sale), the borrower would continue to recognize the pledged asset. Thus, the contract would not require the repurchase of a transferred asset but would instead require the repayment of the borrowing and the return of the pledged asset. The arrangement, therefore, would not include a derivative as defined in ASC 815-10-15. Derivatives that serve as impediments to sales accounting are also excluded from the scope, refer to ASC 815-10-15-63 and 15-64.

Application of ASC 815 to Not-for-Profit Organizations

Question No. 2-22: Is the application of ASC 815 different for not-for-profit organizations than the application for business enterprises?

PwC Interpretive Response: Yes, for certain contracts for certain types of not-for-profit organizations. ASC 954-815-25-2 requires not-for-profit health care organizations to apply the provisions of ASC 815 in the same manner as business enterprises. Not-for-profit health care organizations are required to include gains and losses on nonhedging derivatives in the performance indicator. The performance indicator of a not-for-profit health care organization is analogous to income from the continuing operations of a business enterprise. ASC 815-10-35-3 states that an entity that does not report earnings as a separate caption in a statement of financial performance (for example, a not-for-profit organization or a defined benefit pension plan) shall recognize the gain or loss on a nonhedging derivative instrument as a change in net assets in the period of change. Not-for-profit health care organizations are not “entities that do not report earnings as a separate caption in a statement of financial performance,” as contemplated by ASC 815-10-35-3. Consequently, such entities cannot use the guidance in ASC 815-10-35-3 to support a policy of reporting nonhedging derivative gains and losses as part of other changes in net assets (i.e., below the performance indicator).

Therefore, not-for-profit entities that choose to voluntarily report a performance indicator measure, which is defined in a manner different from that provided in the Glossary in ASC 954-205-20, have flexibility as to where in the Statement of Activities these amounts are presented. However, not-for-profit entities that either choose not to report a performance indicator measure or define their performance indicator measure in a manner different from that of the not-for-profit health care organizations are precluded from applying cash flow hedge accounting.

Chapter 3:

Embedded Derivative Instruments

Executive Takeaway

- In certain circumstances, ASC 815 requires a derivative feature that is embedded in a contract that does not meet the definition of a derivative in its entirety to be bifurcated and accounted for separately.
- Determining whether a contract contains an embedded derivative and defining its specific terms can be difficult in practice. Because few contracts actually use the word *derivative*, a thorough evaluation of the terms of a contract must be performed to determine whether an embedded derivative is present.
- Sometimes, the determination of the host contract and bifurcation analysis will be straightforward, but more often they will require considerable interpretation and the application of professional judgment. This chapter discusses some of the complexities associated with applying the embedded derivative model and provides interpretive guidance to help navigate through the guidance.

Chapter Outline

After an introduction to the concepts that are relevant for an embedded derivative assessment, this chapter is organized based on the types of host contracts that exist and discusses considerations to determine if an embedded derivative(s) exists that requires bifurcation. Sections 3.1 through 3.3 of the Chapter discuss general topics that are applicable to an embedded derivative assessment regardless of the type of hybrid instrument being considered. For users of this chapter, this is a logical place to begin.

Specifically, Section 3.1 discusses the definitions of a hybrid instrument, host contract and embedded derivative as well as terms and phrases that may indicate an embedded derivative is included in a contract. This section also discusses factors to consider in determining if a feature is either “embedded” or “freestanding.” This is a key consideration as a freestanding feature would not be assessed under the guidance in ASC 815-15 (which relates to embedded derivatives). Section 3.1 also discusses the SEC views on identifying the host contract and embedded features.

Section 3.2 goes on to provide the criteria that are required to be met for bifurcation of embedded derivatives as detailed in ASC 815-15-25-1. The guidance in ASC 815 provides three criteria that must be met prior to bifurcating an embedded derivative from a host contract. The three criteria are:

- The economic characteristics and risks of the embedded derivative are not *clearly and closely related* to those of the host contract
- The hybrid instrument is not remeasured at fair value under other applicable GAAP with changes in fair value recognized in earnings
- A separate instrument with the same terms of the embedded feature would be a derivative instrument pursuant to ASC 815-10-15

If all of these three criteria are met, bifurcation of the embedded derivative would be required unless the fair value option is elected to account for the hybrid instrument, in its entirety, at fair value through current earnings as permitted for certain instruments under ASC 825-10-15-4 and prohibited under ASC 825-15-5. The accounting relating to bifurcation of an embedded derivative is discussed in Section 3.7. Section 3.2 also discusses certain exceptions from the embedded derivative analysis relating to interest-only and principal-only strips and foreign exchange contracts. At the end of the section, a decision tree of the guidance in ASC 815-15-25-1 is provided, including the applicability of these exceptions.

Section 3.3 discusses additional factors that are relevant in the overall assessment for potential embedded derivatives including the timing and frequency of the required assessment. The section also discusses the fact that there may be asymmetry between the parties of the hybrid instrument and provides some common examples where the assessment of *clearly and closely related* is different for the issuer than for the holder. It also goes on to discuss how a purchaser of the hybrid instrument subsequent to the contract’s inception may arrive at a different conclusion than the initial purchaser and initial issuer. A discussion relating to the accounting for multiple derivative features that are required to be bifurcated from a single hybrid instrument is also discussed in this section.

Section 3.4 discusses the considerations relating to debt host contracts. This section first discusses common embedded features that are found in debt host contracts and then goes on to discuss the following:

- The embedded derivative analysis that is required for embedded interest features that can change the contractual interest payable on a debt host's contract (in some cases principal) amounts (as discussed in ASC 815-15-25-26)
- The embedded derivative analysis that is required for callable and puttable debt instruments, including when the option is only contingently exercisable
- The embedded derivative assessment that is required to be performed by the issuer of a convertible debt instrument. This includes assessing whether the conversion option would meet a scope exception in ASC 815-40, specifically, if the conversion option would be indexed to the company's own stock and classified as shareholders' equity if it was a freestanding instrument
- The order of the assessment needed for convertible securities with beneficial conversion features (BCF) or contingently adjustable conversion ratios as well as the for certain types of convertible debt instruments that would be under the "Cash Conversion" subsections of ASC 470-20
- The SEC's views relating to freestanding and embedded conversion features and share settled features
- The considerations relating to beneficial interests in securitizations, including examples of common forms of potential embedded derivatives, guidance relating to credit derivatives embedded in beneficial interests in securitized financial assets and the application exception for beneficial interests in prepayable securitized assets

Section 3.5 covers equity host contracts and includes discussion of the SEC views on determining if an instrument is a debt host or an equity host and considerations relating to put and call features in equity hosts.

Section 3.6 highlights several other types of host contracts and considerations that should be made relating to these types of contracts, including executory contracts, insurance and lease contracts.

Section 3.7 discusses the accounting considerations for hybrid instruments including the accounting implications if an embedded derivative requires bifurcation from a host contract, the accounting required if a conversion option that previously was bifurcated no longer requires bifurcation and the fair value option for hybrid instruments.

3.1 Hybrid Instruments, Host Contracts, and Embedded Derivatives

To begin, some basic terminology to assist our understanding. If derivatives are embedded in a financial instrument or other contract, the base contract (i.e., excluding the embedded derivative) is referred to as the *host contract*. The combination of the host contract and the embedded derivative is referred to as the *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, and the debt instrument component of the contract that is to pay interest without such adjustment and to repay the principal amount is considered the host contract.

Certain financial instruments and other contracts that do not in their entirety meet the definition of a derivative instrument (including prepayable loans, convertible bonds, insurance policies, and leases) often contain embedded derivative instruments with implicit or explicit terms that affect (1) some or all of the cash flows or (2) the value of other exchanges required by the contract in a manner similar to that of a derivative instrument(s). The effect of embedding a derivative instrument in a host contract is that some or all of the cash flows or other exchanges that otherwise would be required by the host contract (whether unconditional or contingent upon the occurrence of a specified event) will be modified based on an underlying (e.g., an event, an interest rate, a price index, or some other index) that is applied to a notional amount (or there is a payment provision triggered by the underlying).

The Board noted that if ASC 815 failed to address the issue of embedded derivatives, an entity would have been able to embed a derivative in another contract solely for the purpose of achieving an accounting result different from the accounting result that the entity would have achieved if it had issued two separate contracts. The Board considered it important that entities not be able to avoid ASC 815's requirements merely by embedding a derivative in a non-derivative contract.

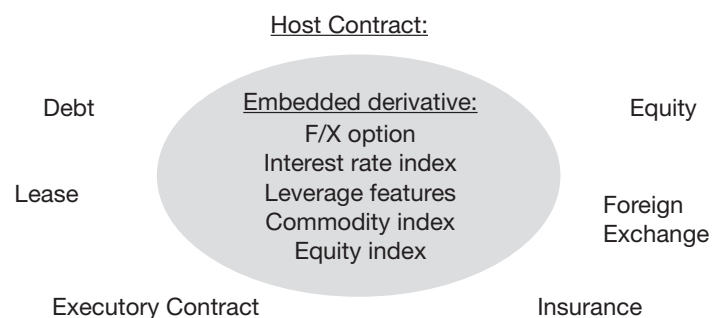
Sometimes, the determination of the host contract and performance of the bifurcation analysis will be straightforward. More often, this will be challenging and require considerable professional judgment.

The assessment of embedded derivatives applies only to contracts that do not meet the definition of a derivative in its entirety. Refer also to DH 3.9, Question No. 3-20.

Exhibit 3-1 depicts examples of common embedded derivatives and host contracts.

Exhibit 3-1

Types of Embedded Features Added to Host Contracts



3.1.1 Identifying an Embedded Derivative

Determining whether a contract contains an embedded derivative and the embedded derivative's specific terms can be difficult in practice. Because few contracts actually use the term *derivative*, a thorough evaluation of the terms of a contract must be performed to determine whether an embedded derivative is present. Certain terms and phrases, however, may indicate the presence of an embedded derivative in a contract. Such terms and phrases include the following:

- 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

Another method of determining whether a contract has an embedded derivative is to compare the terms of the contract (such as interest rate, maturity date, and cancellation provisions) with the corresponding terms of a similar, non-complex contract. This comparison of differences may uncover one or more embedded derivatives. However, even instruments with typical market terms may have embedded derivatives.

3.1.1.1 Determining Embedded vs. Freestanding

One of the difficulties in applying the embedded derivative model is determining whether a feature is, in fact, embedded or freestanding. Both may be subject to ASC 815, but how to apply ASC 815 would be different. ASC 815-10-15-6 and the related example at ASC 815-10-55-66 note that options added to an instrument by a party other than its issuer are not embedded in that instrument. Additionally, options exercisable by someone other than the issuer or investor are not embedded in the instrument. ASC 815-10-15-7 and the related implementation guidance at ASC 815-10-55-3 conclude that options that are transferable separately from the instrument to which they relate should be considered attached freestanding options. Additionally, 'freestanding financial instrument' is defined in the Master Glossary as 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.

Therefore, although a derivative instrument may be written into the same contract as another instrument (i.e., in a debt agreement), it is considered embedded only if it cannot be legally separated from the host contract and transferred to a third party. In contrast, features that are written in the same contract, but that may be legally detached and separately exercised would be considered attached, freestanding derivatives rather than embedded derivatives by both the writer and the holder. These freestanding derivatives would be accounted for separately regardless of whether they meet ASC 815's criteria for bifurcation of an embedded derivative.

PwC Observation: The analysis for determining whether a feature is embedded or freestanding may not always be straightforward and can require judgment. When assessing separately exercisable, consideration should be given to whether the exercise or expiration of one feature impacts or changes the other feature(s) (i.e., a put feature). When assessing legally detachable, consideration is warranted with respect to transferability of the embedded feature from the host. Often with private company transactions, both the host contract and the embedded feature are not transferrable under any circumstance. In certain situations, this factor alone would not preclude a feature from being considered legally detachable or freestanding.

3.1.2 Defining the Host Contract

A host contract is the base 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 bifurcation from the hybrid instrument (i.e., into its host contract and embedded derivative components) would be required. Therefore, in order to apply the embedded derivative model, it is necessary to properly define the host contract based on its underlying economic characteristics and risks.

Sometimes, the determination of the host contract will be straightforward. More often, it will require interpretation and the application of professional judgment. Major types of host contracts include the following:

- Debt instruments (refer to DH 3.4)
- Equity instruments (refer to DH 3.5)
- Executory contracts (refer to DH 3.6.1)
- Insurance policies (refer to DH 3.6.2)
- Leases (refer to DH 3.6.3)

Most financial instruments will have either a debt or equity host. ASC 815-15-25-16 through 25-17 and the related example at ASC 815-15-55-119 provide guidance for determining whether the host contract is more akin to debt or equity. This guidance explains that generally an equity host encompasses a residual interest in an entity, but it acknowledges that most financial instruments will have debt hosts. Refer to DH 3.5.1 regarding additional considerations for deciding whether the host contract is more akin to debt or equity. Refer to DH 3.6 for a discussion of other host contracts.

ASC 815-15-25-24 through 25-25 provide additional guidance as it relates to determining the characteristics of debt hosts. They state that the characteristics of the host contract should be based on the stated or implied substantive terms of the hybrid instrument. In the absence of stated or implied terms, an entity may make its own determination of whether to assume a fixed-rate, floating-rate, or zero-coupon bond debt host, so long as terms are not introduced in the debt host that are not present in the hybrid instrument.

3.1.3 SEC Views on Identifying Host Contracts and Embedded Features

At the 2009 AICPA National Conference on Current SEC and PCAOB Developments, the SEC staff noted that it continues to see errors in identifying and assessing embedded derivatives. The staff suggested registrants understand the instrument and reiterated that the values of an embedded feature and the host contract should

add up to the value of the total hybrid instrument. Registrants should exercise care to make sure that economic characteristics are not lost or double counted in the process of bifurcating the instrument. Proper identification of the host and embedded feature(s) 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.

ASC 815-10-S99-3 codifies the March of 2007 position the SEC established originally in EITF Topic D-109: Determining the Nature of a Host Contract Related to a Hybrid Instrument Issued in the Form of a Share under Topic 815. This topic provides guidance relating to the determination of whether the characteristics of the host contract related to the hybrid financial instrument issued in the form of a share are more akin to a debt instrument or more akin to an equity instrument. Two key concepts were illustrated in their announcement. (1) in considering the economic characteristics and risks of the host contract all stated and implied substantive terms or features of the hybrid financial instrument must be considered, the existence or omission of any single term or feature is not necessarily determinative to when establishing a host to be a debt host, or an equity host, (2) the determination of a host contract as a debt, or equity host for purposes of determining which features are to be bifurcated from the hybrid under ASC 815 does not determine the ultimate accounting for the host under other applicable GAAP. Specifically that a preferred stock contract without a mandatory redemption feature would be classified as temporary equity under ASC 480-10-S99-3A is not in and of itself determinative of the nature of the host contract (that is, whether the nature of the host contract is more akin to a debt instrument or more akin to an equity instrument). Rather the SEC believes that the nature of the host contract depends upon the economic characteristics and risks of the preferred stock instrument. For more information refer to DH 3.5.1.

3.2 Bifurcation of the Hybrid Instrument

Under ASC 815, an embedded derivative instrument would be required to be separated from the host contract and accounted for separately as a derivative instrument with changes in fair value reported in current period earnings if, and only if, all of the following criteria of ASC 815-15-25-1 are met:

1a. The economic characteristics and risks of the embedded derivative instrument are not *clearly and closely related* to the economic characteristics and risks of the host contract.

ASC 815 does not specifically define the concept of *clearly and closely related*, but it is intended to focus attention on the question of whether the underlying economic characteristics and risks of an embedded derivative (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. Said differently, 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 a derivative that is embedded in a debt instrument embodies the economic characteristics of an equity instrument (e.g., the embedded derivative has a rate of return that is tied to the S&P 500 Index), it must be separated from the debt host if the conditions of paragraphs ASC 815-15-25-1(b) and 25-1(c) are met. This is because 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 dissimilar.

PwC Observation: When evaluating *clearly and closely related* criterion for equity related risks embedded in equity hosts, consideration should be given to whether the feature is considered indexed to the entity's own stock (see DH 3.4.3.1). The determination of whether an embedded derivative feature is *clearly and closely related* to the host contract is a broader economic concept than the determination of whether an embedded derivative feature is indexed to the issuer's stock price. The use of the words "closely related" implies that the relationship is not required to be perfectly or completely related to the issuer's equity to comply with ASC 815-15-25-1(a). Although the guidance for Evaluating Whether an Instrument Is Considered Indexed to an Entity's Own Stock under ASC 815-40-15-5 through 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 evaluating the *clearly and closely related* criterion. We believe that in those instances where 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.

1b. 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.

ASC 815 specifies that hybrid instruments that are remeasured at fair value through earnings should not be bifurcated into individual components that are separately accounted for. Bifurcation in these situations is unnecessary, because both instruments are remeasured at fair value with changes in fair value reported in earnings. The Board also reasoned that bifurcation in this situation would create unnecessary bookkeeping complexity. This provision simplifies the impact of ASC 815 for entities in certain specialized industries (primarily investment companies, pension plans, and broker dealers). Since many of their instruments are remeasured at fair value in their entirety, no further accounting is required for embedded derivatives in these instruments. This provision equally applies to:

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

1c. A separate instrument with the same terms as the embedded derivative instrument 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.)

Under the criterion in ASC 815-15-25-1(c), an embedded derivative would cause bifurcation of the hybrid instrument and require separate accounting only if it would meet the definition of a derivative, if it were a freestanding instrument, under ASC 815-10-15-83. However, if the embedded derivative meets any of the scope exceptions in ASC 815-10-15-13 or ASC 815-15-15-3 (Refer to DH 2.2, DH 3.2.3 and DH 3.2.4), it would not meet the criterion in ASC 815-15-25-1(c). There is no sense in requiring separate accounting for an embedded derivative if it would have been scoped out of ASC 815 if it was a freestanding instrument. Note, however, certain disclosure requirements for embedded credit derivatives may still be required as discussed further in DH 10.3.2.6.

While the analysis under ASC 815-15-25-1(c) is generally performed as if the embedded derivative was a freestanding instrument, there is one important exception to this approach when it comes to the application of the scope exception for an instrument that is (1) indexed to the reporting entity's own stock and (2) would be classified in shareholders' equity if it was a freestanding derivative (ASC 815-10-15-74(a), see DH 2.3). ASC 815-15-25-14 clarifies that the guidance in ASC 480-10-25-4 through 25-14 for distinguishing liabilities from equity should not be considered in determining whether or not such an embedded derivative would be classified in equity for purposes of applying the scope exception in ASC 815-10-15-74(a). ASC 480-10 addresses the accounting for freestanding forward purchase contracts and written put options indexed to an issuer's own stock, which are required to be accounted for as liabilities under ASC 480-10. An issuer of debt that contains a written put option or forward purchase contract indexed to its own stock must consider whether such embedded derivatives meet the scope exception in ASC 815-10-15-74(a), which requires a determination of the classification of the derivative as a liability or equity if it were a stand-alone instrument. However, ASC 815-15-25-14 is intended to signal that the primary guidance in determining balance sheet classification in such instances is not ASC 480-10 but, rather, ASC 815-40, *Derivatives and Hedging—Contracts in Entity's Own Equity*. The rationale for this treatment is that ASC 480-10 applies only to freestanding instruments, whereas ASC 815-15-25-1(c) relates to embedded features. Although ASC 480-10 requires that freestanding written put options indexed to an issuer's own stock be classified as liabilities, the Board did not intend that this requirement apply to put options embedded in equity instruments. Thus, ASC 480-10 is not applicable when evaluating ASC 815-15-25-1(c).

Refer also to DH 3.9, Question No. 3-2.

3.2.1 Reserved

3.2.2 Reserved

3.2.3 Application Exception for Interest-Only and Principal-Only Strips

To determine the appropriate accounting for interest-only strips (IOs) and principal-only strips (POs), an entity must first determine whether such investments qualify for the scope exception in ASC 815-10-15-72. 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 IOs and POs that (1) represent the right to receive only (a) a specified proportion of the contractual interest cash flows of a specific debt instrument or (b) a specified proportion of the contractual principal cash flows of a specific debt instrument and (2) do not incorporate any terms not present in the original 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. The allocation of a portion of the interest or principal cash flows to provide for a guarantee or for servicing in an amount greater than adequate compensation would not meet the exception.

3.2.4 Application Exception for Foreign Exchange Contracts

ASC 815-15-15-10 offers the following guidance on embedded foreign-currency derivatives:

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.

The implementation guidance in ASC 815-15-55-84 through 55-86 clarifies that a guarantor is not a substantial party to a contract even if the guarantor is a related party (such as a parent company). Thus, companies must ensure that the evaluation of embedded derivatives is conducted by the appropriate legal entity under the contract.

Example 2 in ASC 815-15-55-96 clarifies that the phrase *routinely denominated in international commerce* in ASC 815-15-15-10 should be based on how similar transactions for certain products or services are routinely structured around the world, not in just one local area. Thus 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 to any of those other transactions. This analysis will involve more than reviewing in what currency the product or service is typically quoted. For example, just looking at the coal index and noting that coal is quoted in U.S. dollars is not sufficient to conclude that coal is traded primarily in U.S. dollars.

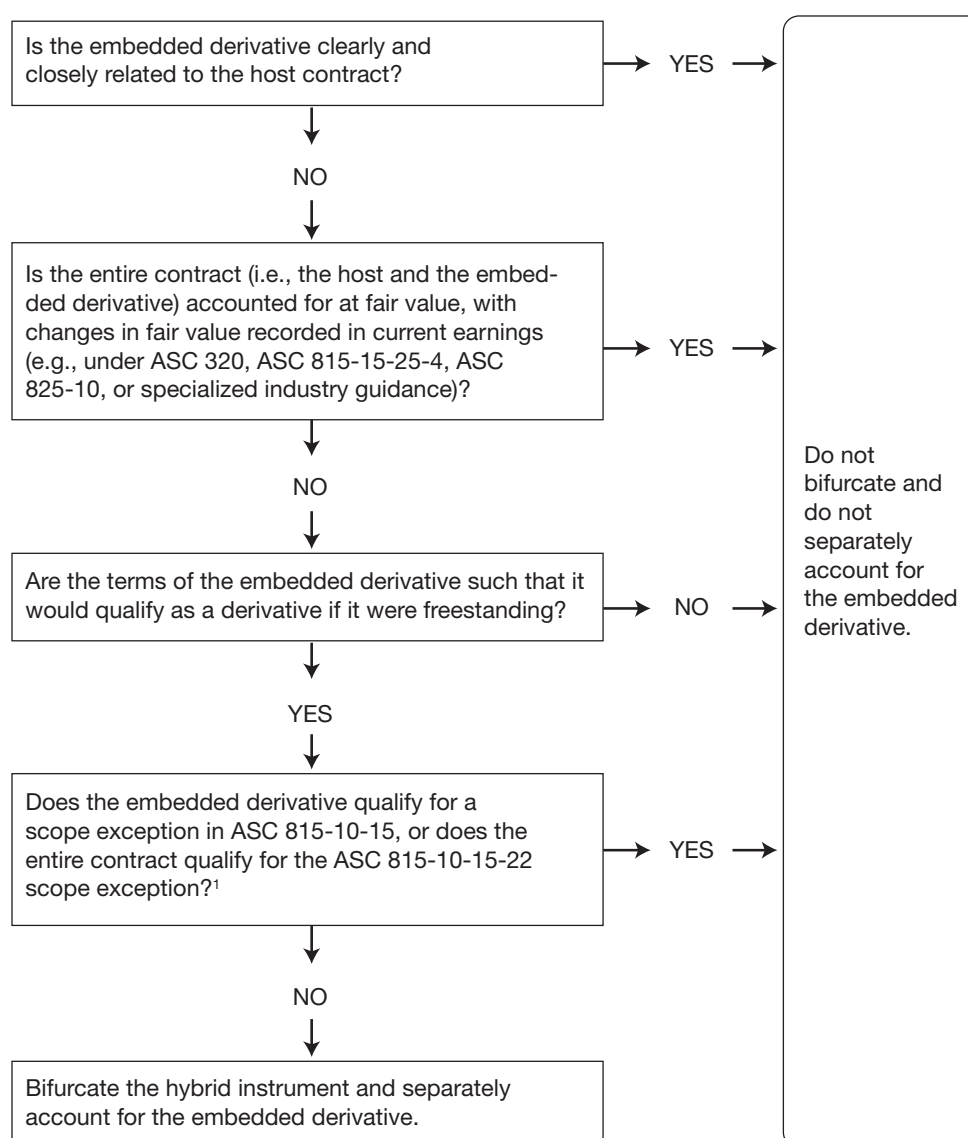
Questions have arisen relating to the application exception in ASC 815-15-15-10 and the level of effort one party to a contract must employ to determine the functional currency of its counterparty. For example, it is generally clear that in a sales contract involving a British seller and an Indian buyer, payment denominated in either British pounds or Indian rupees would be denominated in the functional currency of one of the counterparties. However, if payment is required in a third currency (for example, in U.S. dollars), it is not clear whether that third currency is the functional currency of either party to the contract.

ASC 815-15-15-11 clarifies that this determination should be made “based on available information and reasonable assumptions about the counterparty; representations from the counterparty are not required.” ASC 815-15-55-213 through

55-215 provides a case study illustrating this determination. ASC 830-10-55-5 also provides guidance on economic factors that should be considered when determining the functional currency of an entity. These include indicators relating to cash flows, sales prices, sales market, expenses, financing, and intra-entity transactions and arrangements. Therefore, an entity should not necessarily rely on a single indicator such as the currency in which the counterparty's sales prices are denominated. Further, this list is not all-inclusive and entities should consider all relevant available information in attempting to determine the functional currency of a counterparty.

Refer also to DH 3.9, Question Nos. 3-17, 3-18, 3-19 and 3-28.

Exhibit 3-2: Decision Tree for Determining Whether or Not to Bifurcate a Hybrid Instrument and Separately Account for the Embedded Derivative



¹ In certain circumstances, the host element will qualify for a scope exception, however potential embedded derivatives would still need to be assessed to determine if bifurcation and separate accounting is required (e.g., insurance contracts). For additional details, see DH 3.6.2 and DH 3.10, Question Nos. 3-21, 3-22, 3-23, 3-24, 3-25, and 3-26.

3.3 Other Considerations

3.3.1 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 to the contract might reach different conclusions.

For example, if an investor holds debt securities that are convertible into shares of the debtor's common stock, the investor must separate the embedded derivative from the host contract, provided that the conversion option would be subject to the requirements of ASC 815 if it were a freestanding derivative. The issuer, however, may not be required to bifurcate the convertible debt instrument into a conversion option and debt host because ASC 815-10-15-74(a) excludes contracts from the scope of ASC 815 that are indexed to the issuer's own stock and classified in its stockholders' equity. If the debt instrument is convertible into a third party's common stock, neither the investor nor the issuer would qualify for the scope exception.

Exhibit 3-3 illustrates how the embedded derivative model applies to a number of common instruments for which the *clearly and closely related* criterion differs between the issuer and investor.

Refer also to DH 3.9, Question No. 3-4.

Exhibit 3-3: Examples of Hybrid Instruments With Asymmetrical Accounting

Contract	Bifurcated by Issuer?	Bifurcated by Holder?
Debt hosts (Refer to DH 3.4.3 regarding application of the ASC 815-10-15-74(a) scope exception.)		
Convertible debt (not otherwise measured at fair value through earnings) with an option to convert the debt into the common stock of the issuer that is readily convertible to cash	Maybe. The scope exception in ASC 815-10-15-74(a) may apply if a separate instrument with the same terms as the conversion option would be indexed only to the issuer's own stock and classified in stockholders' equity.	Yes. The scope exception in ASC 815-10-15-74(a) would not apply, as the conversion option is not indexed to the holder's own stock. Because an equity underlying is not <i>clearly and closely related</i> to a debt host, the hybrid instrument should be bifurcated.
Debt (not otherwise measured at fair value through earnings) exchangeable into the common stock of an unrelated entity that is readily convertible to cash	Yes. The scope exception in ASC 815-10-15-74(a) would not apply, as the conversion option is not indexed to the issuer's own stock. Because an equity underlying is not <i>clearly and closely related</i> to a debt host, the hybrid instrument should be bifurcated.	Yes. The scope exception in ASC 815-10-15-74(a) would not apply, as the conversion option is not indexed to the holder's own stock. Because an equity underlying is not <i>clearly and closely related</i> to a debt host, the hybrid instrument should be bifurcated.

(continued)

Contract	Bifurcated by Issuer?	Bifurcated by Holder?
Insurance hosts (Refer to DH 2 regarding application of the ASC 815-10-15-52 and ASC 815-10-15-67 scope exceptions for insurance contracts.)		
Equity-indexed life insurance (not otherwise measured at fair value through earnings) with a surrender option	Yes. This contract links term-life coverage with an investment feature. The surrender feature provides the policyholder with a contingent equity return that is not <i>clearly and closely related</i> to the host contract as described in ASC 815-15-55-75.	Maybe. This contract links term-life coverage with an investment feature. The surrender feature provides the policyholder with a contingent equity return that is not <i>clearly and closely related</i> to the host contract. However, if the contract is within the scope of ASC 325-30, then the contract is not subject to the guidance in ASC 815.

3.3.2 Timing and Frequency of Assessment

The analysis of whether an embedded derivative is *clearly and closely related* to its host contract must generally be performed either on the date that the hybrid instrument is issued or on the date that the reporting entity acquires the instrument. Therefore, in performing this analysis, an investor that acquires a hybrid instrument in the secondary market or in a business combination could potentially reach a conclusion that is different from the conclusions reached by both the issuer and the original investor, since the three parties may perform their respective analyses on different dates and under potentially different market conditions. For example, as it relates to the leverage tests required in ASC 815-15-25-26 when assessing an interest rate host with embedded interest rate features, the acquirer of a hybrid instrument in the secondary market at a premium or discount may reach a different conclusion than would the initial investor of the instrument at par. 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 (i.e., each reporting period). Specifically, ASC 815-10-15-118 states that “The evaluation of whether a market mechanism exists shall be performed at inception and on an ongoing basis throughout a contract’s life.” This is illustrated in Example 4, Case A at ASC 815-10-55-86 which concludes that it is possible for a freestanding contract to initially be a derivative and then later cease to be one, or vice versa. 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 bifurcation assessment must 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.

The conclusion that the embedded derivative assessment is an ongoing assessment that must be performed each reporting period was affirmed at ASC 815-15-35-4 which states that “If an embedded conversion option in a convertible debt

instrument no longer meets the bifurcation criteria in this Subtopic, an issuer shall account for the previously bifurcated conversion option by reclassifying the carrying amount of the liability for the conversion option (that is, its fair value on the date of reclassification) to shareholders' equity" (refer to DH 3.7.2).

There are a number of instances that highlight the need to reassess the embedded derivatives in a hybrid instrument, including the following:

- A public offering of equity instruments 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 pursuant to ASC 815-40.
- A hybrid instrument may be legally modified in a manner that triggers a new basis event.

3.3.3 Multiple Derivative Features

The bifurcation analysis for a hybrid instrument often becomes more complex when it involves more than one embedded derivative. ASC 815-15-25-7 states that "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."

PwC Observation: *Clearly and closely related* features that are not bifurcated may have an impact on the valuation of the embedded features that are bifurcated and accounted for separately. When embedded derivative features are separated from a hybrid instrument, the sum of value of the bifurcated features and the remaining instrument should equal the value of the hybrid instrument as a whole.

However, if one or more of the embedded derivative features are *clearly and closely related* to the economic characteristics and risks of the host contract, those features should not be included in the compound embedded derivative instrument that is removed from the hybrid instrument and accounted for separately. Rather, the host contract and the embedded features remaining should be accounted for based on generally accepted accounting principles applicable to similar host contracts of that type.

PwC Observation: The guidance in ASC 815-15-25-7 describes that multiple embedded derivatives that are not *clearly and closely related* to the host contract should be separated from the hybrid instrument, but it does not address the more difficult question of how to evaluate each embedded derivative independently or as a group to determine if they are *clearly and closely related* to the host contract. We believe based on its reference to "more than one embedded derivative feature

(continued)

that would *individually* warrant separate accounting” each embedded derivative should generally be analyzed separately. However, we understand that there may be circumstances where it may be reasonable to analyze multiple embedded derivatives together. Regardless of the approach taken we believe that (1) contemporaneous documentation of the method selected and the factors considered in electing that method and (2) consistent application of that method over time would be prudent.

At the 2006 AICPA National Conference on Current SEC and PCAOB Developments, the SEC staff noted instances in which registrants incorrectly applied this guidance when determining the fair values of embedded derivatives that required separate accounting. Based on the accounting requirement to separate any embedded derivatives requiring bifurcation as a single compound derivative, the SEC staff believes that those features should be measured at fair value in a single valuation model. The staff noted instances in which registrants derived separate fair value measurements for each embedded derivative component and added them together for accounting purposes. The staff believes not only that this method is inconsistent with ASC 815-15-25-7, but also that it may produce an inaccurate valuation result, since multiple derivatives within a single hybrid instrument likely affect each other's fair values.

3.4 Debt Hosts

Generally, embedded derivatives in debt host contracts are not *clearly and closely related* if they introduce risks that are atypical of debt instruments or if the return that investors may receive is positively or negatively 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 debt hosts, the focus should be on determining whether the economic characteristics and risks of the embedded derivative have features unrelated to interest rates (such as equity-like or commodity-like features), or if the characteristics of the derivative are related to interest rates, whether the features involve leverage or change in the opposite direction as interest rates (e.g., an inverse floater). For example, debt instruments that are linked to an equity or commodity index contain an embedded derivative that is not *clearly and closely related* to its host because equity and commodity features are economically dissimilar to the interest yield on a debt instrument.

3.4.1 Common Embedded Features in Debt Hosts

The most common type of hosts are debt hosts. Generally, an embedded derivative is *clearly and closely related* to a debt host if it is:

- a non-leveraged interest rate or index,
- a non-leveraged index of inflation,
- the creditworthiness of the debtor, or
- an issuer-exercisable call or a holder-exercisable put compliant with the provisions of ASC 815-15-25-26 and ASC 815-15-25-42.

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

- interest rate floors, caps, and collars,
- exceptions for certain securitized interest in prepayable assets (see DH 3.4.5.2 for further discussion),
- call and put options (see DH 3.4.2 for further discussion),
- term extending options,
- credit sensitive payments,
- commodity-indexed interest or principal payments,
- equity-indexed interest payments,
- inflation-indexed interest payments, and
- convertible debt (see DH 3.4.3 for further discussion).

Refer to the cases in Example 13 beginning at ASC 815-15-55-165 and the examples in DH 3.10 of this Guide illustrating the application of this guidance.

Refer also to DH 3.9, Question Nos. 3-3, 3-4, 3-6, 3-7, 3-8, 3-9 and 3-10.

3.4.1.1 Interest-Bearing Host Contracts With Interest Rate Underlyings

Sometimes, the analysis of whether an embedded feature is *clearly and closely related* to a host contract will be straightforward, but often it will not. ASC 815-15-25-26 (as updated by the Technical Corrections to Various Topics released in ASU 2010-08) describes one complex area as “an embedded derivative in which the only underlying is an interest rate or interest rate index...that alters net interest payments that otherwise would be paid or received on an interest-bearing host contract....” When an interest feature alters the contractual interest on the host contract, it may not be considered *clearly and closely related* even though both the embedded derivative and the host contract both have interest rate underlyings. The best example is a debt host that provides a return that is positively or negatively leveraged (i.e., favorably or unfavorably impacted by the embedded derivative) to a significant degree.

Therefore, in applying the criterion in ASC 815-15-25-1(a) for features where interest rates are the sole underlyings, such an embedded derivative may fail the *clearly and closely related* criterion if, pursuant to ASC 815-15-25-26, there is any possibility under the contract terms that:

- a. The hybrid instrument can contractually be settled in such a way that the investor (the holder or the creditor) would not recover substantially all of its initial recorded investment (that is, the embedded derivative contains a provision that permits any possibility whatsoever that the investor's [the holder's or the creditor's] undiscounted net cash inflows over the life of the instrument would not recover substantially all of its initial recorded investment in the hybrid instrument under its contractual terms).**

or

b. The embedded derivative meets both of the following conditions:

- 1. There is a possible future interest rate scenario (even though it may be remote) under which the embedded derivative would at least double the investor's initial rate of return on the host contract (that is, the embedded derivative contains a provision that could under any possibility whatsoever at least double the investor's initial rate of return on the host contract).**
- 2. For any of the possible interest rate scenarios under which the investor's initial rate of return on the host contract would be doubled (as discussed in (b)(1)), the embedded derivative would at the same time result in a rate of return that is at least twice what otherwise would be the then-current market return (under the relevant future interest rate scenario) for a contract that has the same terms as the host contract and that involves a debtor with a credit quality similar to the issuer's credit quality at inception.**

This provision is intended to include those embedded derivatives that cause the hybrid instrument to perform less like a pure interest-bearing instrument and more like a derivative (e.g., hybrid instruments that have either significant negative or significant positive leverage).

The analysis required by ASC 815-15-25-26 is driven off of the recorded basis of the instrument. Therefore, one should be careful when considering instruments issued in transactions with multiple elements, such as debt issued with warrants. In these circumstances the analysis should be performed after proceeds have been allocated to the individual transactions pursuant to ASC 470-20.

The provisions of ASC 815-15-25-26(a) apply only to situations in which the investor could be forced by the terms of a hybrid instrument to accept settlement at an amount that causes the investor not to recover substantially all of its initial recorded investment. As noted in ASC 815-15-25-29 and illustrated in Example 10 at ASC 815-15-55-128, provisions which allow the investor to choose to accept a settlement that is substantially less than its initial investment do not conflict with ASC 815-15-25-26(a).

PwC Observation: When analyzing the criterion in ASC 815-15-25-26(a), the term *substantially all* is not defined in ASC 815. However, based on other accounting literature, we believe *substantially all* means approximately 90 percent of the investment. As discussed later in an observation within DH 3.4.2, the 90 percent rule of thumb should not be used as a bright line in assessing *substantially all*.

In order to determine whether the criteria in ASC 815-15-25-26(b) (often referred to as the “double-double test”) have been fulfilled, an entity must first determine the initial rate of return on the host contract, which is not specifically defined in ASC 815. However, it is important to remember that ASC 815-15-25-25 prohibits introducing terms into the debt host (e.g., fixed-rate, floating-rate, or zero-coupon rate) that conflict with those present in the hybrid instrument itself. The initial rate of return on the host contract is not defined in ASC 815, and as such, there are questions that often arise about how to evaluate this criterion. Additionally, the conditions in ASC 815-15-25-26(b) do not apply to an embedded call option in a hybrid instrument containing a debt host contract if the right to accelerate the settlement of the debt can be exercised only by the debtor as discussed in ASC 815-15-25-37 through 25-38.

PwC Observation: When performing the “double-double test,” the initial rate of return used is determined for the host contract, not the hybrid instrument. The host’s initial rate of return may differ from the hybrid’s initial rate of return as the yield on the hybrid may be impacted by the existence of the embedded derivative.

Generally, the initial rate of return of the host contract would be the hypothetical rate of return for the hybrid instrument at its inception if the embedded derivative(s) being evaluated under ASC 815-15-25-26 (i.e., those with an interest rate or interest rate index) were removed. This determination will be impacted by whether or not the host contract is determined to be a fixed-rate, floating-rate, or zero-coupon instrument.

Lastly, in accordance with ASC 815-15-25-28, embedded derivatives that alter net interest payments on interest-bearing host contracts based on changes in underlyings that are not interest-related (e.g., stock price indexes or equity conversions) is not addressed in ASC 815-15-25-26. Generally such underlyings would not likely be considered to be *clearly and closely related* to an interest bearing host contract.

PwC Observation: The provisions in ASC 815-15-25-26 are complex to apply. Therefore the conclusions reached when applying the specific provisions of ASC 815-15-25-26 should be consistent with its underlying principle of identifying significant negative or significant positive leverage. In making this assessment, entities may need to consult with valuation specialists, their investment bankers or their lenders.

Refer also to DH 3.9, Question Nos. 3-3, 3-6, 3-9 and 3-10.

ASC 815-15-25-26(b)(2) requires that all scenarios that violate the ASC 815-15-25-26(b)(1) criterion be evaluated to determine if they also violate the ASC 815-15-25-26(b)(2) criterion.

In applying *clearly and closely related* criterion (ASC 815-15-25-1(a)) to embedded interest rate derivatives, all possible future interest rate scenarios must be evaluated to determine whether *one or more scenarios* violate the criteria in ASC 815-15-25-26. Therefore, if *any* scenario violates both criteria, then the embedded derivative is not considered *clearly and closely related* to the host contract.

Refer to ASC 815-15-25 and DH 3.10 for examples of how to apply the *clearly and closely related* criterion to different hybrid debt instruments.

Exhibit 3-2 presents a decision tree for determining whether a hybrid instrument must be bifurcated and the embedded derivative accounted for separately under ASC 815.

Also, refer to PwC’s *Guide to Accounting for Financing Transactions—What You Need to Know about Debt, Equity and the Instruments in Between* (FG), FG 3.2.5 for further guidance on the analysis of embedded interest rate derivatives.

3.4.2 Callable and Puttable Debt

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. Put and call features are often considered *clearly and closely related* to debt hosts. However, puts and calls embedded within debt instruments that are (1) issued at a discount or premium or (2) puttable or callable under some formulaic arrangement that yields an amount other than the par or accreted value may not be considered *clearly and closely related* to the debt host if they violate the criteria in ASC 815-15-25-26 discussed above in DH 3.4.1.

ASC 815-15-25-40 through 25-43 provide guidance on how to determine whether a call or put is *clearly and closely related* to the debt host including instances when the option is only contingently exercisable. This entails a four-step process requiring the determination of whether (1) the payoff upon settlement is adjusted based on changes in an index (rather than being simply the repayment of principal at par and accrued interest), (2) the payoff is indexed to an underlying other than market interest rates or the obligor's creditworthiness, (3) the debt involves a substantial premium or discount, and (4) the call or put is contingently exercisable. For calls and puts as well as contingently exercisable calls and puts to be considered *clearly and closely related*, they can be indexed only to interest rates or credit risk, not some extraneous event or factor.

In February 2010, the FASB issued ASU 2010-08, Technical Corrections to Various Topics, which amended the guidance for callable and puttable debt instruments. The amendments are effective for fiscal years beginning after December 15, 2009 and should be applied to outstanding contracts. The revised guidance clarifies that the analysis under ASC 815-15-25-26 is only required under step 3 of ASC 815-15-25-42 if the instrument does not have a dual underlying, that is, its underlying is only interest rates. As a result of the ASU 2010-08 technical corrections, ASC 815-15-25-26 is no longer applicable to contingent calls or puts if the underlying is not solely interest related (i.e., changes of control typically involve credit underlyings as well).

If the put or call is not *clearly and closely related* to the debt host, the feature still may not require bifurcation if it would not meet the definition of a derivative if freestanding. Upon implementation of ASC 815, many issuers and holders of nonpublic debt instruments did not bifurcate hybrid instruments with embedded put and call options because they believed the embedded put and call options did not meet the net settlement criterion of the definition of a derivative. These parties believed that when the delivery of cash by the issuer of the debt, in exchange for their debt instrument was the only means to settle the embedded derivative, it would constitute gross physical settlement. However, ASC 815-10-15-107 clarifies that the settlement of a put or call in either publicly or nonpublicly traded debt instruments meets the net settlement criterion because neither party is required to deliver an asset that is associated with the underlying. The liability of the issuer (asset of the investor) is extinguished as opposed to being "delivered." Refer also to DH 3.9, Question No. 3-8.

See FG 3.1 and 3.2 for further guidance on put and call options embedded in debt instruments.

For call or put options that are considered contingent and the contingency is not interest rate related (but still considered *clearly and closely related*), determination of whether a significant premium or discount is important.

PwC Observation: Whether a substantial premium or discount exists requires judgment. Industry practice has defined substantial to mean a 10 percent difference between the issue proceeds and the cost to redeem under the provision in question (i.e., debt issued at 90 percent of par and puttable at 100 percent of par or issued at 102 percent of par and puttable at 112 percent of par). However this threshold is not a safe harbor and should also be qualitatively assessed depending on the facts and circumstances associated with each hybrid instrument to determine whether or not the contingency would produce a substantial premium or discount. For example, because the 10 percent threshold should not be viewed as a safe harbor, if a contingent call is probable of occurring and is material to a company if bifurcated although quantitatively the difference between the issuance proceeds and the amounts to be paid to redeem the debt is less than the general 10 percent threshold then judgment should be applied to determine if a 10 percent threshold is appropriate in the given circumstance.

3.4.3 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). The debt may also contain other embedded derivatives (e.g., puts and calls, contingent interest, make-whole provisions, or other interest features). Refer to DH 3.3.3 regarding multiple derivative features embedded in a single hybrid instrument.

As discussed in DH 2, ASC 815 provides scope exceptions for freestanding and embedded derivative instruments that may otherwise require separate accounting. ASC 815-10-15-74(a) specifies that if an embedded conversion option (or other embedded derivative feature) is (1) indexed to the reporting entity's own stock and (2) would be classified in shareholders' equity if it were a freestanding derivative, then the conversion option (or other embedded feature) would be excluded from the scope of ASC 815. Therefore, no bifurcation from the debt host would be necessary by the issuer. To assess whether or not the conversion option is indexed to the company's own stock, ASC 815-40-15-5 through 15-8 must be considered. To assess whether or not the conversion option would be classified as shareholders' equity if it were freestanding, ASC 815-40 must be considered. In addition to the discussion below, see FG7.1 for further guidance on accounting for convertible debt instruments.

3.4.3.1 Indexed to the Company's Own Stock

ASC 815-40-15-5 through 15-8 provides guidance in following a two step approach for evaluating whether an embedded feature is considered indexed to a company's own stock:

Step 1: Evaluate the instrument's contingent exercise provisions, if any.

Step 2: Evaluate the instrument's settlement provisions.

Under the first step of the model, any contingent provision that permits, accelerates, extends or eliminates the holder's ability to exercise the embedded feature must be evaluated. If the exercise contingency is based on (1) an observable market, other than the market for the issuer's stock, or (2) an observable index, other than one measured solely by reference to the issuer's own operations, then the presence of the exercise contingency precludes the feature from being considered indexed to an entity's own

stock. For example, if a conversion feature becomes exercisable only if the S&P 500 increases 10 percent, the contingency would fail this step and preclude the feature from being considered indexed to the entity's own stock. However, if the feature became exercisable only if the entity's stock price increased 10 percent, it would pass the first step.

For those instruments that pass the first step, the second step of the model requires an entity to analyze the settlement terms of the embedded feature. If the settlement amount equals the difference between the fair value of a fixed number of the entity's equity shares and a fixed monetary amount or a fixed amount of a debt instrument issued by that entity, the feature would be considered indexed to the entity's own stock. Additionally, if the feature's strike price or the number of shares used to calculate the settlement amount are not fixed, the embedded feature would still be considered indexed to the entity's own stock if the only variables that could affect the settlement amount would also be variables that are typically used to determine the fair value of a "fixed-for-fixed" forward or option on equity shares. Therefore, variables such as the term of the instrument, expected dividends, stock borrow costs, interest rates, the entity's credit spread, stock price volatility, and the ability to maintain a standard hedge position could all impact the settlement amount of an embedded feature without violating the second step of the model. However, if the settlement calculation incorporates variables other than those noted above, or if it contains a leverage factor that increases the feature's exposure to the variables used to determine the fair value of a "fixed-for-fixed" forward or option on equity shares, then the feature would not be considered indexed to the entity's own stock.

The strike price or number of shares used to calculate the settlement amount cannot be considered fixed if the terms of the embedded feature provide for *any* potential adjustment, regardless of the probability of the adjustment being made or whether the entity can control the adjustment. "Anti-dilution" provisions that are designed to prevent a holder's position from being diluted should not prevent an embedded derivative feature from being considered indexed to an entity's own stock. Adjustments for events such as the occurrence of a stock split, rights offering, dividend, or a spin-off would typically be assumptions in the fair value of a "fixed-for-fixed" forward or option on equity shares and would thus be addressed by the analysis required by the second step of the model. Adjustments due to issuances of an entity's shares for an amount below their current fair value, or repurchases of an entity's shares for an amount that exceeds the current fair value of those shares, also meet the criteria of ASC 815-40-15-7 if they were designed to offset the dilution caused by such off-market transactions, and not to create additional leverage with the adjustment.

However, certain settlement adjustments that may also be referred to as "anti-dilution provisions" in many equity-linked instruments, do *not* meet the criteria of ASC 815-40-15-7. For example, there may be provisions that require a reduction in a feature's strike price as a result of a subsequent at-market issuance of shares below the feature's original strike price or as a result of the subsequent issuance of another equity-linked instrument with a lower strike price. The issuance of shares for an amount equal to the current market price of those shares would not dilute the holders of outstanding shares and equity-linked instruments and therefore any settlement adjustments related to such events should not be considered as having met the criteria of ASC 815-40-15-7. These provisions give the investors a level of protection that is not afforded typical holders of outstanding shares and are not based on inputs to the fair value of a "fixed-for-fixed" forward or option. As a result, features with settlement adjustments that provide protection against share price declines cannot qualify as being indexed to an entity's own stock. They meet the definition of a derivative under ASC 815, and will likely require bifurcation.

PwC Observation: In theory, all convertible debt instruments could be viewed as being “dual-indexed” because a fixed rate debt instrument is tendered to exercise the option. However, based on the explicit reference in ASC 815-15-25-51 to the applicability of the ASC 815-10-15-74(a) scope exception, practice considers the conversion option to be solely indexed to equity unless another non-equity related index is present. This is also consistent with the guidance prescribed in ASC 815-40 for considering Contracts in Entity’s Own Equity.

It should be noted that in accordance with ASC 815-40-15-5C an embedded feature where the payoff to the counterparty is based, in whole or in part, on the stock of a consolidated subsidiary (instead of the parent), would not be precluded from being considered indexed to the entity’s own stock in the consolidated financial statements of the parent if the subsidiary is a substantive entity. If the subsidiary is not a substantive entity, the instrument or embedded feature shall not be considered indexed to the entity’s own stock. Judgment should be applied in determining whether a subsidiary is substantial.

Refer also to DH 3.9, Question No. 3-5.

3.4.3.2 Classified as Shareholders’ Equity if Freestanding

When determining if an embedded equity feature would be classified as equity or a liability if it were freestanding, ASC 815-15-25-14 notes that ASC 480-10, *Distinguishing Liabilities from Equity*, applies to freestanding instruments only and should not be considered when applying the ASC 815-10-15-74(a) scope exception to embedded derivatives. Therefore, ASC 815-40 is the appropriate model to apply and prescribes different rules for determining the balance sheet classification of conventional and non-conventional convertible debt.

Conventional Convertible Debt

The hybrid instrument is considered *conventional* convertible debt if the holder may realize the value of the conversion option only by exercising the option and receiving either the entire proceeds in a fixed number of shares or the equivalent amount of cash at the discretion of the issuer. Debt that is convertible into a fixed number of shares in which the investor will receive the issuer’s choice of an all share or all cash settlement of the entire value of the debt is consistent with *conventional* convertible debt, while debt that is convertible into a floating number of shares (or a number of shares that is based on a pre-specified formula, which may result in a floating number of shares) or in which the investor has the choice of a cash settlement of the value of the conversion feature is more likely *nonconventional*.

ASC 815-40-25-41 through 25-42 identify the following types of instruments that could be considered *conventional* convertible debt:

- instruments for which conversion into a fixed number of shares is contingent on a future event,
- instruments that provide the holder with an option to convert into a fixed number of shares (or equivalent amount of cash at the discretion of the issuer) for which the ability to exercise the option is based on the passage of time or a contingent event,
- preferred stock with a mandatory redemption date if the economic characteristics indicate that the instrument is more akin to debt than equity (considering the guidance in ASC 815-15-25-17), and

- Instruments for which the conversion ratio may be adjusted due only to standard anti-dilution provisions.

Standard anti-dilution provisions result in adjustments to the conversion ratio only in the event of an “equity restructuring” transaction, as defined in the Master Glossary contained in the FASB codification. Standard anti-dilution provisions provide for an adjustment to the conversion ratio in equity restructuring transactions affecting all equity interests that are designed to maintain the value of the conversion option. Although standard anti-dilution clauses as defined are commonly incorporated into agreements, often times non-standard clauses are incorporated that would result in the debt being considered non-conventional.

If the convertible debt is considered *conventional*, the issuer would need to consider only the settlement alternatives pursuant to ASC 815-40-25-4 (i.e., who controls the settlement and whether the settlement will be in shares or cash) to determine whether the embedded conversion option should be classified as equity. If the convertible debt is considered *nonconventional*, the issuer must also consider ASC 815-40-25-10 to determine the appropriate classification for the conversion option (and any other attached or embedded features, such as warrants). Refer to ASC 815-40-55-11, 815-40-55-13, and 480-10-55-63 for illustrative guidance as applicable to certain embedded and freestanding instruments.

ASC 815-40 is a control-based model. It includes a list of specific criteria that a derivative indexed to a company’s own stock must meet in order to be classified in stockholders’ equity. The criteria are intended to point out situations in which net cash settlement could be forced upon the issuer. If net cash settlement could be forced upon the issuer in *any* circumstance (regardless of likelihood), except for (1) liquidation or (2) a change in control in which the company’s shareholders also receive cash, equity classification would be inappropriate. Compliance with the criteria is often a legal determination and may require assistance of legal counsel interpreting the provisions of the indenture agreement and related contracts. The probability of these events occurring is not a relevant consideration.

PwC Observation: All relevant facts and circumstances should be considered when considering situations in which net cash settlement could be forced upon the issuer. This is consistent with the views of the SEC staff in Accounting Series Release No. 268, Presentation in Financial Statements of “Redeemable Preferred Stocks” (ASC 480-10-S99-3A). In ASR 268 the SEC staff notes that a call option embedded in a preferred security would instead be evaluated as a put option where the preferred security holders control a majority of the votes of the board of directors. Although settlement may appear to be in the control of the company, in this example, an investor who also may be a controlling shareholder could force net cash settlement.

In many indenture agreements (or related registration right agreements), clauses that would require the issuer to pay a cash penalty or other liquidating damages for failure to register the underlying shares exist. Such cash penalty features may appear to violate the requirements for equity classification in ASC 815-40 and, if so, would result in separation of the embedded conversion option from the debt host. However, as discussed in ASC 815-40-25-43, registration payment arrangements should be accounted for separately and are not considered in the evaluation of an embedded conversion option for possible bifurcation. Such arrangements are explicitly scoped out of ASC 815 and instead should be accounted for under ASC 825-20.

It is important to note that classification of the conversion option (and any other embedded feature) under ASC 815-40 must be reassessed at each balance sheet date. If the embedded derivative being evaluated fails to meet the criteria in ASC 815-40 at any future date, then the scope exception in ASC 815-10-15-74(a) may no longer be met and the embedded derivative may require bifurcation from the date that the criteria in ASC 815-40 are no longer met. This circumstance is common when a new convertible debt or preferred stock instrument is issued and that new instrument may result in the requirement to issue equity in the future with no cap on the number of shares to be delivered upon conversion. As a result of the issuance of the new security, earlier issued securities that heretofore met the requirements of ASC 815-40 may no longer meet those requirements, since from the date of the new issuance, the issuer may no longer be able to conclude that it has sufficient authorized and unissued shares available to settle all of its contracts. The extent of the impact on these other instruments will depend on the terms of those instruments, as well as the company's policy for evaluating the sequencing of its instruments that may be settled in shares of stock as discussed in ASC 815-40-35-12.

With regard to convertible securities with beneficial conversion features or contingently adjustable conversion ratios, the terms of an embedded conversion option must be analyzed to determine whether the option requires bifurcation and separate accounting under ASC 815-15 before ASC 470-20, *Debt with Conversion and Other Options*, is applied. If the conversion option does require bifurcation under ASC 815, then evaluation of whether the conversion option in the hybrid instrument includes a beneficial conversion feature is not required. However, if the conversion option does not require bifurcation under ASC 815-15, and is not remeasured at fair value with changes in fair value reported in earnings as they occur (e.g., pursuant to fair value election), then the convertible hybrid instrument must be evaluated under ASC 470-20 for the identification of a possible beneficial conversion feature, unless the debt is accounted for under the Cash Conversion Subsections of ASC 470-20. See FG 7.3 for further guidance on beneficial conversion features.

The Cash Conversion Subsections of ASC 470-20 provide guidance for certain types of convertible debt instruments. However, this guidance does not affect the issuer's assessment of whether an embedded derivative needs to be accounted for separately under ASC 815. ASC 815 must be applied first to determine whether there is an embedded derivative that should be accounted for separately. If the embedded conversion option is required to be separated from the liability component of the convertible debt instrument under ASC 815, the entire instrument is not within the scope of the Cash Conversion Subsections of ASC 470-20. If the embedded conversion option is not required to be separated, but another embedded derivative exists that required separation, that embedded derivative must be separated from the liability component and accounted for under ASC 815. The amount recorded for the equity component (embedded conversion option) would be unaffected by the separation of the embedded derivative from the liability component. See ARM 5280.3 and FG 7 for further guidance on applying the provisions of the Cash Conversion Subsections of ASC 470-20.

3.4.4 SEC Views on Freestanding and Embedded Conversion Features and Share Settled Features

At the 2005 AICPA National Conference on Current SEC and PCAOB Developments, the SEC staff expressed significant concern about the incorrect classification of warrants and embedded conversion features. Of particular concern are features included in convertible debt instruments and convertible preferred stock with a

stated redemption date (requiring cash settlement of the preferred stock). The SEC staff views these securities as debt hosts for purposes of evaluating the embedded features under ASC 815-15. Registrants have, in some instances, failed to analyze the conversion feature under ASC 815-40 in the belief that the conversion feature was *conventional*. Certain features that are commonly included in convertible debt and convertible preferred stock with a stated redemption date allow the conversion price to be reset upon a future equity sale or upon the company's failure to register or maintain an effective registration statement for the securities into which the debt or preferred stock may be converted. Similarly, some features allow the conversion price to be based on the company's average share price (or a percentage thereof). Because these features are not considered standard anti-dilution features, the number of shares that might be issued is not fixed and these and other similar embedded features are not considered *conventional* conversion options.

At the 2006 AICPA National Conference on Current SEC and PCAOB Developments, the SEC staff highlighted that they have identified certain contracts that, when settled in common shares, legally require net-share or physical settlement only in registered shares. This may result in liability classification under ASC 815-40, because the company cannot control the ultimate outcome of the registration process. Specifically, ASC 815-40 presumes a registration could fail, which would force a company into a situation where it would have to net-cash settle the contract. Therefore, registrants should carefully consider the laws covering their securities offerings and consider the need to address this issue when performing their ASC 815-40 analysis. Two alternatives may exist that would remove the assumption of net-cash settlement: (i) if the instrument involves the delivery of shares that are registered at the inception of the instrument, with no further filing or registration requirements; and (ii) if the contract includes an explicit provision that states that the issuer cannot be required to net-cash settle the contract in the event that there are an insufficient number of shares available.

At the 2007 AICPA National Conference on Current SEC and PCAOB Developments, the SEC staff highlighted that the contractual terms of derivative transactions involving an entity's own stock are documented in a transaction confirmation, which describes the terms of the transaction and always refer to one or more International Swaps and Derivatives Association ("ISDA") agreements, which contain the remaining terms of the contract. As a result, in order to determine the appropriate balance sheet classification, management must perform a thorough analysis of the agreement to ensure that (1) the contract is indexed solely to the company's stock and (2) the agreement cannot compel the company to net-cash-settle the contract. Equity classification is precluded if an entity does not control the ability to share-settle the contract. The SEC staff understands that many ISDA agreements contain provisions that may allow the counterparty to net-cash settle the contract upon the occurrence of events outside the entity's control. However, provisions in the transaction confirmation may override the net-cash settlement requirement and instead allow the entity to share-settle. Absent the overriding provisions in the transaction confirmation, however, the contract would not meet the requirements for equity classification.

At the 2009 AICPA National Conference on Current SEC and PCAOB Developments, the Staff noted that control is a key consideration when assessing whether contracts on a company's own stock and redeemable equity shares should be classified as a liability or as equity. The staff has received several questions regarding who must have power to decide how an instrument is settled to determine whether

the company is in control. In general, the staff expects that control would rest with those tasked with management or governance (e.g., the board of directors, general partner). However, the staff noted that there may be situations in which control by the governance structure of the entity may be insufficient to determine that a settlement option is within the company's control. A thorough analysis of the instrument's features, including how those features interact with each other should be performed. The SEC staff provided an example whereby a class of preferred shareholders can take control of the board upon failure to pay dividends and by exercising a preexisting embedded call option on their preferred stock. Unless there was a provision that makes the call inoperable when the preferred shareholders are in control, the shares would be classified in temporary equity because the combination of the contingent control right and the call could be used in the same manner as a put option by the preferred shareholders.

At the 2010 AICPA National Conference on Current SEC and PCAOB Developments, the Corp Fin staff provided an overview of issues they are seeing in the determination of whether an instrument (or embedded feature) is indexed to an entity's own stock and whether liability or equity classification is appropriate. For a derivative instrument to be classified as equity by a company, among other requirements, the instrument must be solely indexed to the company's own stock. The staff discussed a specific example related to warrants and how an entity should evaluate the instrument's settlement provisions to determine if it is indexed to the entity's own stock. A warrant may be considered to be indexed to an entity's own stock only when the adjustments to its settlement provisions are based on inputs to models used to value instruments for a fixed amount of shares with a fixed strike price. In the example discussed by the staff, a warrant's strike price would be adjusted when the company issued equity to the market at a price below the strike price ("down-round" provisions). There is explicit guidance on this type of feature indicating that this is not solely indexed to the entity's own stock and thus equity classification would not be appropriate. The staff highlighted that entities should evaluate all settlement provisions to understand and consider any variability in the settlement price or shares prior to concluding if the instrument is indexed to the entity's own stock and classified as equity.

Refer also to DH 3.9, Question No. 3-29.

3.4.5 Beneficial Interests in Securitizations

Beneficial interests are defined in the Master Glossary as: "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, such as securities, notes, or commercial paper or unfunded agreements such as guarantees or commitments. Examples of beneficial interests in securitizations include mortgage-backed securities (MBS), asset-backed securities, credit-linked notes, collateralized debt

obligations, and IOs or POs. Companies that are subject to the beneficial interest guidance include those that:

- Invest in or hold MBSs;
- Invest in or hold hybrid financial instruments;
- Provide financial guarantees on certain financial instruments;
- Retain or invest in beneficial interests arising from securitization transactions;
- Invest in or hold IOs or POs; or
- Issue the above instruments.

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. 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.

Assets and liabilities recorded as part of transactions that meet the requirements and are accounted for as sales under ASC 860, *Transfers and Servicing* should be accounted for under existing generally accepted accounting principles. For example, debt securities and residual interests resulting from the transfer of financial assets are required to be accounted for under ASC 320-10, *Investments—Debt and Equity Securities* and ASC 325-40, *Beneficial Interests in Securitized Financial Assets*, while derivatives paid or received are required to be accounted for under ASC 815.

3.4.5.1 Accounting for Derivatives Embedded in Beneficial Interests

ASC 815-10-15-11 requires that beneficial interests in securitized financial assets be analyzed to determine whether they are freestanding derivatives in their entirety, or whether they are hybrid financial instruments that contain embedded derivatives that would require bifurcation.

ASC 815-15-25-12 requires that such a determination be based on an analysis of the contractual terms of the beneficial interest, which, in turn, requires an understanding of the nature and amount of assets, liabilities, and other financial instruments that compose the entire securitization transaction. The analysis also requires that sufficient information about the payoff structure and the payment priority of the instrument be obtained to determine whether the beneficial interest contains an embedded derivative.

If the beneficial interest meets the definition of a derivative in its entirety under ASC 815-10-15-83, and does not meet any scope exception under ASC 815-10-15-13, it must be accounted for as a derivative under ASC 815. It should be initially recorded at its fair value and be subsequently remeasured at fair value each reporting period, with changes in fair value recognized in earnings.

PwC Observation: When evaluating whether beneficial interests in securitizations meet the definition of derivatives in their entirety, entities have found it challenging to interpret the phrase “an initial net investment that is smaller than would be required for other types of contracts that would be expected to have a similar

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response to changes in market factors” which is part of the definition of a derivative. This is especially true for retained interests, such as residual interests, because their initial net investment is a fair value that is based upon estimates of prepayment and default risk. As such, the initial net investment may be low, although there is a possibility that the entity will subsequently recover its investment many times over, depending upon the actual experience of the portfolio of securitized assets. Therefore, this determination will require careful consideration.

When a beneficial interest is not a freestanding derivative in its entirety, it must be evaluated to determine if there is an embedded derivative that would be separated from the host contract and accounted for as a derivative.

PwC Observation: In an evaluation of the *clearly and closely related* criterion in ASC 815-15-25-1(a), the determination of whether beneficial interests contain embedded derivatives is arduous, because the contractual terms of many beneficial interests might not explicitly acknowledge the presence of embedded derivatives (i.e., if a beneficial interest does not introduce new risks that the underlying securitization vehicle assets do not already possess). The evaluation of embedded credit derivative features differs from other risks as outlined in DH 3.4.5.2.

Common potential embedded derivative within a securitized interest include the following. This list is not intended to be all-inclusive, however, it includes some frequently identified potential embedded derivatives found in securitized interests that require additional analysis.

- 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 (CDO) structures.
- Basis risk may exist when the interest payments of the assets of a securitization entity are 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 4 percent fixed spread). In the absence of other purchased derivatives, such as those that perfectly offset the impact of basis swaps (e.g., a purchased interest rate swap that pays the adjustable mortgage rate and receives LIBOR plus a 4 percent fixed spread), an embedded derivative implicit in the contractual terms of the securitization structure may exist.
- Notional mismatches creating basis risk between the balances of assets and liabilities of the trust and derivatives the trust enters into may occur as the underlying mortgage loans pre-pay.
- Foreign exchange risk may also arise as a result of differences in the foreign exchange rates associated with the underlying collateral assets and beneficial interests issued.

PwC Observation: A common feature included in interests of MBS is the ability of the servicer to call the interest once the number of underlying loans falls below a pre-specified number. For example, a call option that allows the servicer to call the MBS when the number of outstanding loans is reduced to below 200. This option can only be exercised by the servicer or issuer of the MBS. ASC 815-15-25-37 through 15-39 states that an option that only provides the issuer of the debt host contract 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 815-15-25-40 as the number of loans underlying the MBS will eventually reduce to below 200 over the term of the security. As a result, the event of the number of loans being reduced to below 200 would not be considered to be a contingent event. As a result, this option would not need to be assessed under the embedded derivative guidance in ASC 815-15 unless the instrument was purchased at a significant premium above the redemption price under ASC 815-15-25-26 as described below.

Interest rate and prepayment features are the most common “classes” of embedded derivatives in investments in securitized financial assets.

If there is any potential shortfall of cash flows, no matter how remote, that will be generated by the assets and derivatives held by the trust in funding the payment of the beneficial interests, excluding certain credit losses, the beneficial interest would contain an embedded derivative feature that would require further evaluation. A shortfall may occur if the contractual cash flows from the financial instruments within the vehicle (excluding certain credit losses) could be insufficient to fund the payments to the beneficial interest holders. Therefore, for embedded features with interest rate only underlyings, an analysis under ASC 815-15-25-26(a) would be required to determine whether the cash flow shortfall could have the effect of resulting in the investor not recovering substantially all of its initial recorded investment. Similarly, application of ASC 815-15-25-26(b) requires that the cash flows from beneficial interests be analyzed for positive leverage (i.e., doubling of the initial and the then-market rates of return).

For example, in an “inverse floater” transaction, a special purpose entity (SPE) 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. Conceptually, 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). There is an interest rate risk resulting from the basis difference between the liabilities issued by the SPE (i.e., floating rate beneficial interests) and the assets held by the SPE (i.e., fixed rate non-prepayable loans). As a result, if the floating rate rises, it is possible that the cash flows generated by the financial assets and the derivative features could potentially not support the terms of the beneficial interests. Therefore, the beneficial interests (Class A and B) would contain an embedded feature that would have to be analyzed under ASC 815-15-25-1 and ASC 815-15-25-26 to determine whether bifurcation is required.

Any potential shortfall in cash (other than due to certain credit losses) or positive leverage, regardless of amount or probability, is required to be considered in an evaluation of an embedded derivative feature under ASC 815-15-25-1, and if interest related, under ASC 815-15-25-26 to determine whether it requires separation. Therefore, no matter how remote, all potential cash outcomes should be considered

in a determination of whether the potential for a shortfall in cash or positive leverage exists.

The analysis required by ASC 815-15-25-26 is based on the recorded basis of the instrument. When investors purchase prepayable securitized interests at a substantial premium, it becomes more likely that the securities contain an embedded derivative(s) that would be required to be accounted for separately. As the instrument was acquired at a premium, the hybrid financial instrument may often be contractually settled in a way that the investor would not recover *substantially all* of its initial recorded investment.

For example, consider a scenario in which an investor purchases an agency asset-backed security with a par amount of \$100 for \$115. Since the mortgage loans underlying the security are prepayable at par (\$100), there is a scenario whereby the investor would be contractually required to accept \$100, or approximately 87 percent of its initial recorded investment, if the borrowers on the mortgage loans owned by the securitization entity elected to prepay their mortgages on the day after the purchase of the asset-backed security. Consistent with the guidance in ASC 815-15-25-26(a), consideration of the probability that the borrowers will elect to prepay the mortgage loans on the next day is irrelevant to the analysis. To the extent that the hybrid instrument may be settled in such a manner, causing the investor not to cover *substantially all* of its initially recorded investment, the prepayment risk would represent an embedded derivative that would be required to be accounted for separately.

If the underlying assets are not prepayable, a scenario could still exist that would result in the investor not receiving *substantially all* of its initial recorded investment depending on what the premium related to and how the interest paid on the asset was analyzed. For example, if the investor paid \$115 for a securitized interest with a remaining term of 4 years, par value of \$100 and an interest rate of 7 percent (when market rates for instruments of this credit type are 2 percent), one view is that the investor would not receive substantially all of its initial net investment of \$115. The investor would receive a return of 87 percent based on the receipt at par of \$100 in 42 years ($\$100 / \$115 = 87\%$). Our view, however, is that a portion of the premium paid of \$15 relates to the investment's interest rate of 7 percent being higher than current market rates for similar investments. A comparable current market rate of return for the investment at the time the investor purchased the interest is only 2 percent. As a result, 5 percent of the interest earned during the life of the investment can be attributed to the investor's return **of** the investment instead of a return **on** investment. Therefore, when a premium is paid on a non-prepayable securitized interest, an analysis should be performed to determine how much, if any, of the interest earned on the investment should be attributed to a return **of** investment, and if so, if the investor will receive *substantially all* of its return after considering the appropriate amount of interest as a return **of** investment. Refer to DH 3.10 for examples of how to apply the *clearly and closely related* criterion to beneficial interests in securitized assets.

Refer also to DH 3.9, Question No. 3-15.

3.4.5.2 Embedded Credit Derivatives

On March 5, 2010, the FASB issued Accounting Standards Update 2010-11, *Scope Exception Related to Embedded Credit Derivatives*, which amends and clarifies the accounting for credit derivatives embedded in beneficial interests in securitized

financial assets. This amended guidance is effective the first day of an entity's first fiscal quarter beginning after June 15, 2010.

The ASU introduces a new approach to evaluating embedded credit derivatives for bifurcation. Prior to the adoption of this guidance, investors and issuers would continue to apply the guidance discussed in DH 3.4.5.1 for any embedded credit derivative feature.

Among other changes, the ASU:

- Eliminates the derivative scope exception for most credit derivative features embedded in beneficial interests in securitized financial assets previously codified in ASC 815-15-15-8.
- Clarifies that the derivative scope exception related to subordination in ASC 815-15-15-9 applies only to the embedded credit derivative features created by the transfer of credit risk between tranches as a result of subordination. Entities are not exempted from evaluation of other derivatives embedded in the interest, including instances in which the beneficial interest has an embedded derivative feature relating to another type of risk (e.g., interest rate risk) or another type of credit risk.
- Clarifies that an interest in a tranche of securitized financial instruments that may require the holder to make future payments would not qualify for the subordination scope exception and would either be a derivative in its entirety or contain an embedded credit derivative requiring bifurcation.
- Illustrates the application of the *clearly and closely related* criterion for beneficial interests in synthetic CDOs and requires either bifurcation or the election of the fair value option. However, the ASU does not provide any principle or any specific guidance on how interests in securitized financial assets should be bifurcated.
- Allows entities to elect the fair value option for any beneficial interest in securitized financial assets upon adoption of the ASU.

The most significant change in the ASU is the removal of the scope exception in ASC 815-15-15-8 that was most often applied to embedded credit derivatives in beneficial interests in securitized financial assets. With the removal of the scope exception, entities are required to evaluate credit derivative features embedded in beneficial interests in securitized financial assets for bifurcation, including whether a feature meets the definition of a derivative and whether it is *clearly and closely related* to the host contract.

PwC Observation: The determination of the embedded derivative and host contract was heavily debated during the board's deliberations of the ASU. Ultimately, the board decided not to broadly address the application of the *clearly and closely related* criterion for beneficial interests in securitized financial assets. Accordingly, we believe that entities should continue to perform their embedded derivative analyses based on both the contractual terms of the interest in securitized financial assets and the entity's activities. Such 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, in accordance with ASC 815-15-25-12 and 25-13.

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However, as it relates to credit risk, entities are first required to look into the securitization vehicle to identify whether the vehicle contains any credit derivatives. The basis for conclusions of the ASU explains that, if a new credit risk is added to a beneficial interest by a written credit derivative in the securitization structure, the related embedded credit derivative feature is not *clearly and closely related* to the host contract. This will impact synthetic collateralized debt obligations and other similar structures that use written credit derivatives to introduce credit risk that is not present in the assets of the vehicle.

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, where the special-purpose entity holds a portfolio of loans that commingle different credit risks. Such vehicles may have embedded derivatives related to non-credit risks which may require bifurcation under other applicable literature.

See DH 10 for a discussion of the required disclosures for sellers of credit derivatives.

See DH 11 for a discussion of the transition guidance associated with this ASU.

Refer also to DH 3.9, Question Nos. 3-11, 3-12, 3-13, and 3-14.

3.4.5.3 Application Exception for Beneficial Interests in Prepayable Securitized Assets

Questions have arisen as to whether prepayment options in the underlying securitization assets or the allocation of prepayment risk among different classes of beneficial interests create embedded derivatives that would fail the criteria in ASC 815-15-25-26. Because an evaluation of the cash flows in the securitization vehicle is required to determine if leverage exists, when leverage is found, an embedded derivative in the beneficial interest is deemed to exist that would require further evaluation. That is, although the beneficial interests themselves are not prepayable by the issuer or investor—because the prepayable assets in the securitization vehicle subject the investor to prepayment risk—an analysis for potential bifurcation of deemed embedded derivatives that exist in the beneficial interest is required.

ASC 815-15-25-33 exempts certain beneficial interests from the ASC 815-15-25-26(b) leverage tests in an effort to resolve some of the accounting complexity. The exception would be applicable only to embedded derivatives that are tied to prepayment risk of the underlying prepayable financial assets, subject to meeting both of the following two 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.

However, criterion (b) is not applicable to securitized interests that:

1. Were issued before June 30, 2007, and
2. Only include embedded derivatives, other than an embedded derivative that results solely from the embedded call options in the underlying financial assets, that have extremely remote possibility of having greater than a trivial fair value at any time during the instruments' life (for example, an embedded derivative that only has value when an interest rate index reaches an extremely remote level).

For securitized interests issued after June 30, 2007, the investor would have to apply criterion (b) to meet the scope exception irrespective of whether the other embedded derivative(s) has an extremely remote possibility of having greater than a trivial fair value at any time during the instrument's life.

For example, securitized interests issued after June 30, 2007, that are acquired at a discount and have embedded derivatives that required separate accounting must apply the embedded derivative provisions even if the non-prepayment embedded derivatives do not have greater than a trivial fair value at any time during the instrument's life.

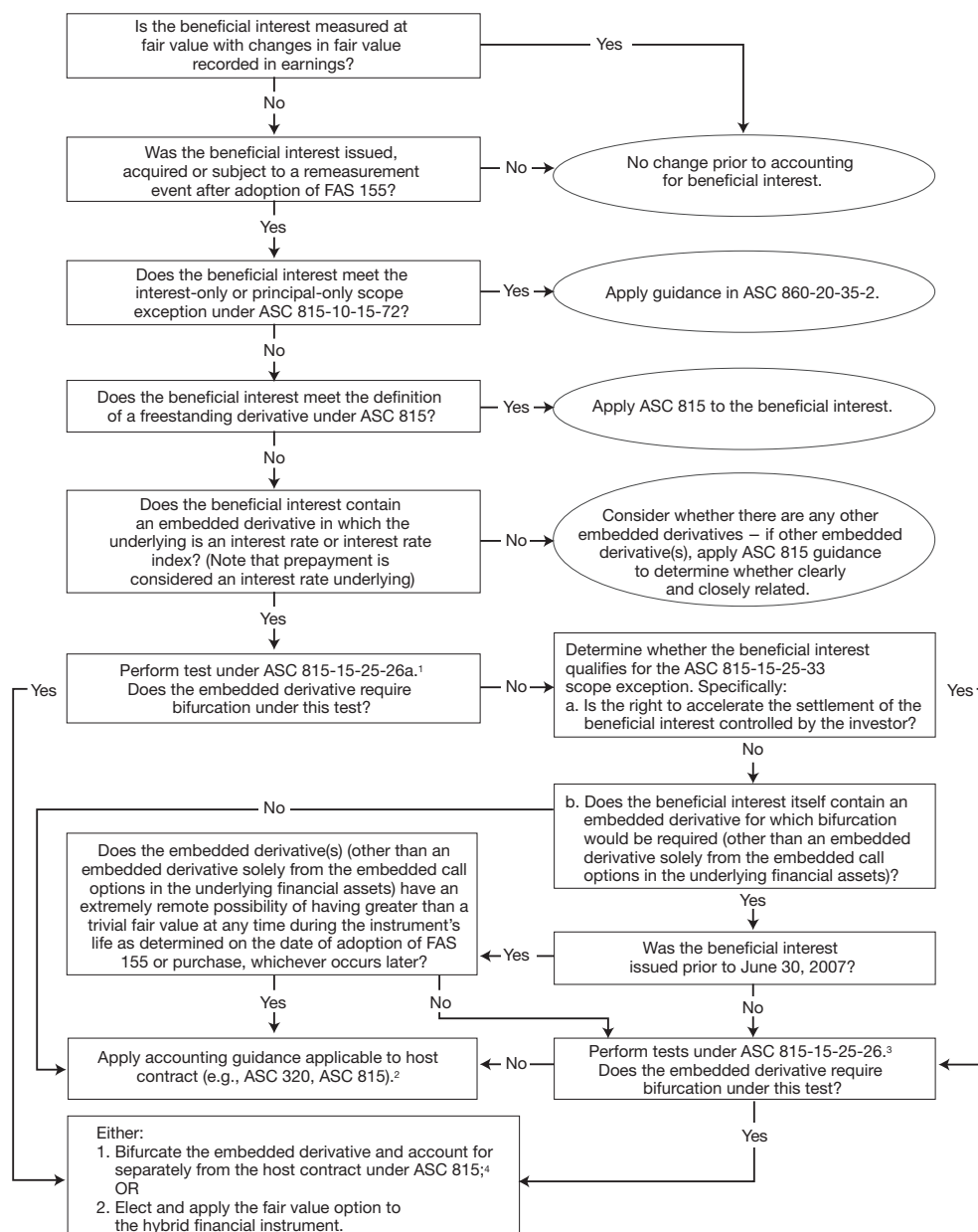
Judgment is needed to determine when an embedded derivative, other than an embedded derivative resulting solely from the embedded call options in the underlying pre-payable financial assets, has more than an extremely remote possibility of having greater than a trivial fair value over the life of the instrument. Determining whether an item is extremely remote or trivial will depend on the specific facts and circumstances. In assessing whether an embedded derivative has a trivial fair value, factors that could be considered include: the fair value of the embedded derivative relative to the total fair value of the securitized interest, the current fair value of the embedded derivative, and the potential variability of the fair value of the embedded derivative over its life.

A summary of the requirements for securities depending on when they were issued and purchased is included in the table below.

Timing of Issuance and Purchase of Security	Accounting Assessment Required
Security purchased prior to the adoption date of FAS 155 (required to be adopted January 1, 2007, for calendar year companies)	These securities will be grandfathered and will not require the same assessment under ASC 815-15-25-26(b).
Security purchased between adoption date of FAS 155 and June 30, 2007	The embedded prepayment risk on these securities will not require an assessment under ASC 815-15-25-26(b) if (1) the right to accelerate the settlement of the securitized interest cannot be controlled by the investor and (2) the securitized interests only include embedded derivatives that have extremely remote possibility of having greater than a trivial fair value at any time during the instruments' life.
Security issued prior to June 30, 2007, and purchased after June 30, 2007	The embedded prepayment risk on these securities will not require an assessment under ASC 815-15-25-26(b) if (1) the right to accelerate the settlement of the securitized interest cannot be controlled by the investor and (2) the securitized interests only include embedded derivatives that have extremely remote possibility of having greater than a trivial fair value at any time during the instruments' life.
Security issued after June 30, 2007	The embedded prepayment risk on these securities will not require an assessment under ASC 815-15-25-26(b) if (1) the right to accelerate the settlement of the securitized interest cannot be controlled by the investor and (2) 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. An entity can elect the fair value option for the securities instead of accounting for the embedded derivatives that require bifurcation separately.

The decision tree below can be used as an overview of the process to be followed in applying ASC 815 to beneficial interests in securitizations. Refer to DH 11 regarding transition provisions. Refer to DH 3.10 for examples of how to apply the *clearly and closely related* criterion to beneficial interests in prepayable securitized assets.

Exhibit 3-4: Decision Tree for Application of ASC 815 to Beneficial Interests in Securitizations



¹ The tests required under ASC 815-15-25-26 should be performed for each embedded derivative in which the underlying is an interest rate or interest rate index.

² ASC 860 requires that IOs, retained interests held by the transferor, loans, other receivables, or other financial assets that can be contractually prepaid or otherwise settled in such a way that the holder would not recover substantially all of its recorded investment, except for instruments that are within the scope of ASC 815, shall be subsequently measured like investments in debt securities under ASC 320-10. Examples of financial assets that are subject to prepayment risk include MBSS, collateralized mortgage obligations, real estate mortgage investment conduit interests, securitized receivables, ABSs purchased at a substantial premium and held during a period of declining interest rates, and high-rate debt instruments purchased at a substantial premium.

(continued)

³ The tests in ASC 815-15-25-26(b) must include consideration of the effect of the prepayment risk in the underlying financial assets.

⁴ The embedded prepayment call option and the other embedded derivatives requiring bifurcation should be bifurcated as a compound derivative.

Refer to Example 11 beginning at ASC 815-15-55-137 and DH 3.10 for examples of how to apply the *clearly and closely related* criterion to beneficial interests.

3.5 Equity Hosts

As previously stated, each embedded derivative is compared with its host contract to determine if bifurcation of the hybrid instrument into its host contract and embedded derivative would be required. Therefore, in order 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 bifurcation conclusion. For example, a conversion feature in preferred stock deemed to have an equity host may not be separated by the investor, because the conversion option may be *clearly and closely related* to the equity host contract. In contrast, a conversion feature in preferred stock deemed to have 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.

ASC 815-15-25-16 and 25-17 provide limited guidance on determining whether the host contract associated with such an instrument is a debt host or an equity host. This guidance describes only the more clear cut examples of an instrument with a host that is more akin to debt (i.e., cumulative fixed-rate preferred stock that has a mandatory redemption feature) and an instrument with a host that is more akin to equity (i.e., cumulative participating perpetual preferred stock). For instruments that are in between, the determination of the host contract can be highly judgmental. Therefore, the holder or investor must carefully weigh the debt-like and equity-like features of the instrument to determine whether it is more akin to an equity instrument or a debt instrument.

3.5.1 SEC's Views on Determining Debt vs. Equity Hosts

The SEC staff has stated its belief that this determination should not ignore any of the stated or implied terms and features of the hybrid financial instrument, including other potential derivative features. In making this evaluation, the SEC staff believes that the existence or omission of any single term or feature is not necessarily determinative. Although the consideration of an individual term may be weighted more heavily in the evaluation, judgment is required based on an evaluation of all relevant terms and features. The SEC staff cited as an example that the fact that a preferred stock instrument without a mandatory redemption feature would be classified as temporary equity under ASC 815-10-S99-3 is not determinative that the host contract is more akin to equity than debt.

PwC Observation: Although it may not be immediately apparent, the SEC staff is objecting to the use of the *clean approach* to determining the host contract. Under this approach, all of the embedded derivative features are removed from the hybrid instrument and the determination of the host contract is based on an evaluation of

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the remaining features of the instrument. In the case of preferred stock, use of this approach would generally result in the determination of an equity host contract in all circumstances other than when the instrument is required to be redeemed in the future. Based on the SEC staff's announcement, registrants will no longer be able to apply the *clean approach* and will have to undertake an analysis of the instrument inclusive of its embedded derivative features to determine the nature of the host contract.

Neither ASC 815 nor the SEC staff has provided a scale by which to measure the relative weight of the various debt and equity features often found in these instruments. Therefore, the determination of the nature of a host contract related to a hybrid instrument issued in the form of shares will continue to be a highly judgmental area.

In Remarks before the 2006 AICPA National Conference on Current SEC and PCAOB Developments, the SEC staff noted that there are certain attributes that the staff would consider should be a part of the analysis performed to determine the host. These attributes included (but should not be limited to):

- whether there are any redemption provisions in the instrument;
- the nature of the returns (stated rate or participating);
- whether the returns are mandatory or discretionary;
- whether there are any voting rights;
- whether there are any collateral requirements;
- whether the preferred stockholders participate in the residual;
- whether they have a preference in liquidation; and
- whether the preferred stockholders have creditor rights (i.e. the right to force bankruptcy).

Not one of these factors alone is determinative of the nature of the host, and therefore judgment is required in making the host determination.

3.5.2 Calls and Puts on Equity Hosts

Put features allow the equity holder to require the issuer to reacquire the equity instrument for cash or other assets, and call features allow the issuer to reacquire the equity instrument.

As discussed in ASC 815-15-25-20, put and call features are typically not considered *clearly and closely related* to equity hosts and would require bifurcation by the holder unless the hybrid instrument is remeasured at fair value through earnings) or a similar instrument would not meet the definition of a derivative.

For the issuer, in evaluating 815-15-25-1(c), if the scope exception in ASC 815-10-15-74(a) (the feature would be classified in stockholders' equity) is met, then bifurcation would not be necessary. For example, a purchased call option that enables the issuer of an equity instrument (such as common stock) to reacquire that equity instrument may meet this exception. Thus, if the call option were embedded in the related equity instrument, it would not be separated from the host contract by the issuer.

3.6 Other Host Contracts

3.6.1 Executory Contract Hosts

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 the following:

- 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).

However, if an executory contract in its entirety meets the definition of a derivative, the contract generally would not be assessed under ASC 815-15-25-1 to determine whether the hybrid instrument requires bifurcation but, rather, must be accounted for as a freestanding derivative under ASC 815. As discussed in DH 2, executory contracts should be evaluated under ASC 815-10-15-83 to determine if they meet the definition of a derivative. If an executory contract such as a purchase-and-sale agreement meets the definition of a derivative in its entirety, the parties to the contract may elect to assess the contract under the normal purchases and normal sales scope exception in ASC 815-10-15-22. Alternatively, the parties to the contract could account for it as a freestanding derivative. However, executory contracts often do not contain net settlement provisions and therefore may not meet the definition of derivatives in their entirety. In such instances, executory contracts must still be evaluated for embedded features (e.g., caps, and floors) that may result in bifurcation of the hybrid instrument.

ASC 815-15-25-19 and Example 6 at ASC 815-15-55-114 clarify that the economic characteristics of a price cap and/or floor in a purchase contract are *clearly and closely related* to the purchase contract if the price cap and/or floor is indexed to purchase price of the asset that is subject to the purchase contract. 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*.

3.6.2 Insurance Hosts

Complex insurance products continue to be developed and marketed. A number of these insurance contracts may contain embedded derivatives. As discussed in DH 2, ASC 815-10-15-52 provides a scope exception for an insurance contract “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.” Similar to other host contracts, if an insurance policy embeds a derivative instrument within an insurance contract, the hybrid instrument may require bifurcation 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.

In accordance with the scope exception provided in ASC 815-10-15-67, an investment in a life insurance contract that falls within the scope of ASC 325-30 should follow the guidance in ASC 325-30, *Investments in Insurance Contracts*, even if the insurance contract includes embedded derivative-like provisions that would otherwise have to be accounted for separately under ASC 815. Such insurance contracts include corporate-owned life insurance (COLI), bank-owned life insurance (BOLI), and life settlement contracts. The ASC 815-10-15-67 provision is an outright exception for investments in life insurance 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 issuer's (insurer's) accounting.

Refer also to DH 3.9, Question Nos. 3-21, 3-22, 3-23, 3-24, 3-25, and 3-26.

3.6.3 Lease Hosts

The approach for determining whether an embedded derivative is *clearly and closely related* to a lease host is similar to the approach that is used for a debt host. As discussed in ASC 815-15-25-21 through 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. Refer to further discussion in DH 3.4.1.1.

For leases, the ASC 815-10-15-59 scope exception is often invoked to prevent bifurcation. For example, if an operating lease requires lease payments that vary based on sales by the lessee (e.g., rent payable at a base of \$10,000 plus 3 percent of the lessee's sales each month), no bifurcation of the hybrid instrument would be required. This is because the embedded feature in the lease qualifies on a stand-alone 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)(2) scope exception on a stand-alone basis because the settlement is based upon the leased asset, which is a non-financial asset of one of the parties. The same would apply to more complex lease arrangements, such as an operating lease with a terminal-rental-adjustment clause indexed to the specific asset under lease, assuming the lease is not exchange traded and the subject of the lease is a non-financial asset or liability of one of the parties that is not *readily convertible to cash* as discussed in ASC 815-10-15-119.

Refer also to DH 3.9, Question No. 3-27.

3.7 Accounting Considerations for Hybrid Instruments

In accordance with ASC 815-15-25-4, an entity may elect to account for an entire hybrid financial instrument at fair value (see DH 3.7.3 for further discussion). If such an election is not made, the embedded derivative must be removed (“bifurcated”) from the host contract and accounted for separately under ASC 815 if all of the criteria in ASC 815-15-25-1 are met.

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 host contracts of that type. 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 an 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.

3.7.1 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 bifurcation is required. The FASB staff concluded that the embedded derivative should be recorded on the balance sheet at its inception fair value and that the carrying value assigned to the host contract should represent 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 will be no immediate earnings impact associated with the initial recognition and measurement of an embedded derivative that is bifurcated from a hybrid instrument.

When separating an embedded forward derivative (i.e., a non-option derivative) from the host contract, ASC 815-15-30-4 states (as illustrated in Example 12 beginning at ASC 815-15-55-160) 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.

However, if the embedded instrument is an option, ASC 815-15-30-6, prescribes that the embedded option-based derivative can have a value other than zero at the inception of the contract. Accordingly, the terms of the 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. For a debt host contract, this would require an additional debt discount or premium to be recorded that is equal to the initial fair value of the bifurcated option.

Exhibit 3-5 illustrates the provisions of ASC 815-15-30-4, 30-5 and 30-6 that relate to the bifurcation of hybrid instruments containing option-based and non-option-based embedded derivatives.

Exhibit 3-5: 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 is generally equal to zero at inception.
	815-15-30-5	At acquisition, subsequent to inception	Holder	Terms should be set such that fair value would have generally equaled 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.

Refer to DH 3.10 for an example of the journal entries required in the bifurcation of a hybrid instrument.

3.7.2 Conversion Options No Longer Requiring Bifurcation

As discussed above, embedded conversion options may be required to be bifurcated and accounted for separately from the debt host instrument when certain criteria are met. Subsequently, circumstances may change that may result in bifurcation no longer being required. For example, if at issuance of a convertible debt instrument the issuer does not have sufficient shares authorized to satisfy the conversion option in publicly traded shares, the conversion option would be classified as a liability pursuant to ASC 815-40 and would require bifurcation under ASC 815. If, subsequently, the issuer of the debt instrument authorizes sufficient shares to satisfy the conversion option, the balance sheet classification under ASC 815-40 would change to equity, thereby possibly qualifying for the ASC 815-10-15-74(a) scope exception (provided the other requirements for equity classification in ASC 815-40 are met). The accounting for such a change in circumstances is as follows:

- Per ASC 815-15-35-4, the carrying value of the conversion option (its fair value at the reclassification date) should be reclassified to shareholders' equity once the requirement for bifurcation under ASC 815 is no longer met. Any discount on the debt instrument recognized when the conversion option was bifurcated should continue to be amortized.
- If a holder exercises a conversion option that has been previously reclassified to shareholder's equity pursuant to the guidance in ASC 815-15-35-4, the issuer shall, in accordance with ASC 815-15-40-1, recognize any unamortized discount remaining at the date of conversion immediately as interest expense.
- Per ASC 815-15-40-4, if a debt instrument with a conversion option that has been previously reclassified to shareholder's equity pursuant to the guidance in ASC 815-15-35-4 is extinguished for cash (or other assets) prior to its contractual

maturity date, the issuer shall allocate a portion of the reacquisition price to equity based on the fair value of the conversion option at the extinguishment date, and the remaining reacquisition price shall be allocated to the extinguishment of the debt instrument to determine the amount of gain or loss. This guidance for the subsequent conversion or settlement of the debt instruments in question is analogous to the guidance in ASC 470-20, *Debt with Conversion and Other Options*, for redemption of debt having a beneficial conversion option.

ASC 815-15-50-3 requires issuers to disclose (1) a description of the principal changes causing the embedded conversion option to no longer require bifurcation pursuant to ASC 815-15 and (2) the amount of the liability for the conversion option to be reclassified to stockholders' equity.

3.7.3 Fair Value Option (FVO) for Hybrid Instruments

The FVO for financial instruments is generally available under ASC 825-10, subject to certain limitations. For additional details relating to electing the FVO in ASC 825-10, see PwC's *A Global Guide to Accounting for Fair Value Measurements: Application of the U.S. GAAP and IFRS Standards* (FV), FV 6. In addition to the FVO under ASC 825-10, ASC 815-15-25 provides an instrument-by-instrument fair value election for hybrid financial instruments. Under either FVO, the hybrid financial instrument would be carried at fair value with the entire change in fair value recognized currently in earnings.

The FVO within ASC 815 is applicable only to a *hybrid financial instrument*, which is an instrument with both a host contract and embedded derivative that 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 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, value-added tax, sales tax receivables, servicing rights, and legal settlements. The Board also decided to exclude the types of hosts described in ASC 825-10-15-5, even though some of the hosts described in that paragraph might represent financial instruments. In addition, the FVO is available only for hybrid financial instruments that would be recognized on the balance sheet under generally accepted accounting principles. For example, the FVO would not be available for an operating lease containing an embedded derivative in the minimum lease payments. Minimum lease payments to be received under operating leases represent an unrecognized financial asset.

Therefore, any hybrid financial instrument (not solely beneficial interests) included within the scope of ASC 815-15-25 that contains an embedded derivative that requires bifurcation from the host contract could be accounted for by using one of the following methods:

- Bifurcate the embedded derivative and measure it at fair value under ASC 815. The change in fair value of the derivative is recognized currently in earnings. The accounting for the host contract is based on generally accepted accounting principles applicable to similar instruments that do not contain embedded derivatives (e.g., ASC 320-10, *Investments—Debt and Equity Securities*); or
- 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 (only for hybrid financial instruments with an embedded derivative that would otherwise require separation). 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. A remeasurement event is an event other than the recognition of an other-than-temporary impairment that requires the financial instrument to be remeasured at fair value at the date of the event but does not require that the financial instrument be subsequently remeasured at fair value through current period earnings. Business combinations and significant modifications of debt under ASC 470-50 are examples of remeasurement events, whereas the remeasurement of a security classified as available-for-sale under ASC 320-10 to fair value at each reporting date is not a remeasurement event under ASC 815-15-25. Other examples of remeasurement events include the preparation of liquidation basis financial statements as contemplated in AICPA Statement of Position 93-3, *Rescission of Accounting Principles Board Statements* (SOP 93-3), and ASC 942-810-45-2 (Liquidating Banks), and fresh-start reporting for companies emerging from bankruptcy as contemplated in AICPA Statement of Position 90-7, *Financial Reporting by Entities in Reorganization Under the Bankruptcy Code* (SOP 90-7).

Election of the FVO requires *concurrent* documentation. Concurrent generally means at the date of issuance, acquisition, or other remeasurement event. The documentation should explain why the financial instrument is a hybrid instrument that contains an embedded derivative requiring bifurcation and therefore qualifies for the FVO. Entities should consider establishing a policy for adopting the FVO for similar or specified instruments that contain embedded derivatives requiring bifurcation, and establish documentation standards.

Refer also to DH 3.9, Question Nos. 3-1 and 3-16.

3.8 Transition Guidance

See DH 11 for transition guidance.

3.8.1 Embedded Derivatives Grandfathered at Adoption of ASC 815

See DH 11.2.3 of the Guide for the applicable transition provisions.

3.9 Questions and Interpretive Responses

Hybrids Accounted for at Fair Value

Question No. 3-1: Is bifurcation of a hybrid instrument required for a derivative embedded in another instrument if (1) that instrument is accounted for on a mark-to-market basis and (2) changes in the instrument's fair value are recorded in earnings (e.g., a security classified as trading under ASC 320-10, subject to a fair value option under ASC 815-15-25 or ASC 825-10, or applying special industry accounting)?

PwC Interpretive Response: No. Embedded derivatives within hybrid instruments that are measured at fair value, with changes in fair value reported in earnings, must not be bifurcated. The Board believes that no benefit is achieved from separating an embedded derivative from the host contract if both instruments are remeasured at fair value with changes in fair value reported in earnings (since an entity would already be applying fair-value accounting to the hybrid instrument that combines the host contract and the derivative).

Note, however, certain disclosure requirements for embedded credit derivatives may still be required as discussed further in DH 10.3.2.6.

Bifurcation

Question No. 3-2: Is bifurcation discretionary? That is, may an entity elect to separate an embedded derivative from the host contract if ASC 815-15 does not require bifurcation?

PwC Interpretive Response: No. The Board decided that the bifurcation of hybrid instruments containing embedded derivatives should not be discretionary. Specifically, ASC 815-15-25-1 states that bifurcation is required “if and only if all” of the specified criteria are met. Accordingly, an entity may not separate an embedded derivative instrument from its host contract unless ASC 815-15 requires bifurcation. However, an entity may be allowed to apply the fair value option to the hybrid instrument under ASC 815-15-25 if an embedded derivative is identified that would otherwise require bifurcation or under ASC 825-10 if the hybrid instrument is within its scope.

Debt With Caps and Floors

Question No. 3-3: If a variable-rate debt instrument contains an interest rate floor or cap, such that the interest rate could never fall below or exceed a specified level, would the issuer be required to separate the interest rate floor or cap from the debt instrument?

PwC Interpretive Response: Probably not. ASC 815-15-25-32 clarifies that interest rate caps and floors are typically considered *clearly and closely related* to a debt host contract. However, determining whether any cap or floor is considered *clearly and closely related* depends on the analysis required in ASC 815-15-25-26, which applies to all embedded derivatives in which the underlying is an interest rate or interest rate index that alters net interest payments that otherwise would be paid or received on an interest-bearing host contract. If the provisions of either ASC 815-15-25-26(a) or (b) are met, then the interest rate floor or cap must be separated from the debt instrument. In applying this guidance, caps typically are still considered *clearly and closely related* to a debt host contract, whereas floors are generally considered *clearly and closely related* to a debt host contract unless they are issued deeply in the money.

Convertible Debt

Question No. 3-4: If an entity issues a debt security that is convertible into its own common stock, which is readily convertible to cash, would the conversion option have to be separated from the debt host contract by (1) the holder of the security and (2) the issuer of the debt security?

PwC Interpretive Response: Convertible debt is a hybrid instrument composed of two components: (1) a debt instrument and (2) a conversion feature (i.e., a written call option (from the issuer’s perspective) on an equity instrument). The bifurcation analysis of such instruments by the holder and the issuer may yield different conclusions due to the application of the ASC 815-10-15-74(a) scope exception.

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Holder's analysis – For the holder of a convertible debt security, the economic characteristics and risks of the embedded derivative (i.e., the equity-conversion feature) in this situation are not *clearly and closely related* to the economic characteristics and risks of the debt host. The conversion option would not qualify for the ASC 815-10-15-74(a) scope exception if freestanding, as the common stock is not indexed to the holder's own stock. Therefore, assuming the hybrid instrument is not being carried at fair value with changes recognized in current period earnings (under the ASC 320-10, *Investments—Debt and Equity Securities*, trading category, ASC 815-15-25, ASC 825-10, *Financial Instruments*, fair value option, or specialized industry accounting), the holder of the convertible debt security must separate the conversion option from the host contract.

Issuer's Analysis – The issuer's analysis of the convertible debt would be identical to the holder's as noted above, except that the ASC 815-10-15-74(a) scope exception might apply. Therefore, if after applying ASC 815-40 the issuer concludes that the embedded conversion option is indexed solely to the reporting entity's own stock and would be classified in stockholders' equity if it were a freestanding derivative, it would be excluded from the scope of ASC 815 and thus, need not be separated from the debt host contract and accounted for separately.

Question No. 3-5: Company P, a public company, has issued convertible debt and has a subsidiary, Company S, which is also a public company. Under the terms of the convertible debt instrument, upon conversion the holder will receive either stock of the parent (Company P) or stock of the subsidiary (Company S) at Company P's discretion.

The value that the holder will receive in Company P's or Company S's stock (i.e., the conversion value) is indexed solely to the stock price of Company S, and the ability to satisfy the conversion in parent shares is merely a settlement mechanism and does not affect the value transfer. Does this embedded conversion feature meet the ASC 815-10-15-74(a) scope exception and therefore not require bifurcation from its debt host for the issuer?

PwC Interpretive Response: It depends. At issue is whether or not the exchange-traded stock of a consolidated subsidiary qualifies as the issuer's stock for the purposes of applying the ASC 815-10-15-74(a) scope exception. ASC 815-40-15-5C states that "freestanding financial instruments (and embedded features) for which the payoff to the counterparty is based, in whole or in part, on the stock of a consolidated subsidiary are not precluded from being considered indexed to the entity's own stock in the consolidated financial statements of the parent if the subsidiary is a substantive entity. If the subsidiary is not a substantive entity, the instrument or embedded feature shall not be considered indexed to the entity's own stock. If the subsidiary is considered to be a substantive entity, the guidance beginning in paragraph 815-40-15-5 shall be applied to determine whether the freestanding financial instrument (or an embedded feature) is indexed to the entity's own stock and shall be considered in conjunction with other applicable GAAP (for example, this Subtopic) in determining the classification of the freestanding financial instrument (or an embedded feature) in the financial statements of the entity." Therefore the settlement in the stock of the subsidiary,

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assuming subsidiary is substantive, would not preclude application of the ASC 815-10-15-74(a) scope exception. Accordingly, the embedded conversion option would be considered indexed to its own stock because the value of the conversion feature is the value of the subsidiary's stock.

The second criterion required to qualify for the ASC 815-10-15-74(a) scope exception is that the conversion option would be classified in equity of the issuer if freestanding. Under both settlement alternatives, the key criterion in ASC 815-40-25-26 through 25-27 requires that a contract contain an explicit limit on the number of shares to be delivered in a share settlement. Given that the company has indexed the potential value that the holder will receive to the subsidiary stock and could settle that value with parent shares, at issue is whether the potential number of shares required for this settlement alternative is indeterminate. For example, if Company S's share price rises, while Company P's share price falls, then the number of Company P shares required for delivery could be extremely high, possibly indeterminate. Without a maximum cap on the number of Company P shares that Company P could deliver, classification of the conversion feature in stockholders' equity would not be permitted if this was the only settlement alternative. However, if Company P concludes that all of the provisions of ASC 815-40 would be met under the settlement method of delivering subsidiary shares, including having enough subsidiary shares to meet the authorized shares requirement, the option to deliver subsidiary shares would meet the criteria for being classified in stockholders' equity. This is because the option to deliver either Company P's shares or Company S's shares upon conversion is at Company P's discretion. As long as one of these alternatives meets the ASC 815-40 criteria, Company P could not be forced to pay cash, and the embedded conversion option would meet the ASC 815-10-15-74(a) scope exception for the issuer. Therefore, the embedded conversion option would not be bifurcated by the issuer under the provisions of ASC 815.

Debt With Commodity-Price Indexation

Question No. 3-6: If a derivative is embedded in debt such that the interest payments on the debt are indexed to the price of silver (or some other metal or commodity index) and 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 Interpretive 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 in this situation would not, from an economic standpoint, 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 period earnings (e.g., fair value option or specialized industry accounting) 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.

Debt With Leverage-Adjusted Principal

Question No. 3-7: A company has issued 10-year inflation-linked bonds that pay interest semiannually. The interest on the bonds is set at a fixed rate. The principal amount on the bonds is indexed to a leverage-adjusted Consumer Price Index (CPI) (the “leverage inflation feature”). For example, at the end of each semiannual period, the principal amount on the securities will adjust based on 1.5 times the published CPI for a specific period. The interest payment is calculated by multiplying the adjusted principal by the annualized interest rate. When the securities mature, the issuer pays the greater of the original or adjusted principal.

The leveraged inflation feature is an embedded derivative because its explicit terms affect some of the cash flows required by the contract in a manner similar to a derivative. ASC 815 requires separation of an embedded derivative from the host contract (i.e., the bonds) when all three criteria in ASC 815-15-25-1 are met.

Under ASC 815-15-25-1(a), are the economic characteristics and risks of the leveraged inflation feature considered *clearly and closely related* to the economic characteristics and risks of the host contract? For purposes of applying the *clearly and closely related* criterion, may the criteria in ASC 815-15-25-26 be considered in the analysis?

PwC Interpretive Response: No. The economic characteristics and risks of the leveraged inflation feature are not considered *clearly and closely related* to the economic characteristics and risks of the host contract.

ASC 815-15-25-50 states that:

The interest rate and the rate of inflation in the economic environment for the currency in which a debt instrument is denominated shall be considered to be clearly and closely related. Thus, nonleveraged inflation-indexed contracts (debt instruments, capitalized lease obligations, pension obligations, and so forth) shall not have the inflation-related embedded derivative separated from the host contract.

This guidance applies to hybrid instruments that have either their principal amounts or periodic interest payments referenced to an inflation index (see Case N at ASC 815-15-55-202 and 55-203 for how the guidance is applied to principal payments). The conclusion, however, that an inflation provision is considered *clearly and closely related* to a host debt instrument only applies to nonleveraged inflation provisions.

Further, since an inflation rate is not an interest rate, we believe when evaluating the *clearly and closely related* criterion for a leveraged inflation feature, a company may not consider the criteria in ASC 815-15-25-26 as support for a position that bifurcation is not required.

The remaining criteria in ASC 815-15-25-1 need to be evaluated to determine whether the leveraged inflation feature should be separated from the bonds. Given that the cash payments related to the adjusted principal amounts can be considered a form of net settlement, we would expect these features to generally require bifurcation and separate accounting.

Debt With Puts, Calls, and Term-Extending Options

Question No. 3-8: Assume that an investor purchases two bonds: Bond A and Bond B. Bond A has a stated maturity of ten years, but the investor can put it back to the issuer at par after three years. Bond B has a stated maturity of three years, but after three years the investor can extend the maturity to ten years (i.e., seven more years) at the same initial interest rate (i.e., neither the interest rate nor the credit spread are reset to the then-current market interest rate). Both bonds are issued by the same issuer at par and have a coupon rate of 6 percent. Assume also that the following two scenarios exist at the end of three years:

Scenario 1: For the issuer, the interest rate for seven-year debt is at 8 percent. The investor will put Bond A back to the issuer and reinvest the par amount of the bond at 8 percent. The investor will not extend the maturity of Bond B and instead will reinvest the principal at 8 percent.

Scenario 2: For the issuer, the interest rate for seven-year debt is at 4 percent. The investor will not put Bond A back to the issuer and instead will continue to receive 6 percent for the next seven years. The investor will extend the term of Bond B and continue to receive 6 percent for the next seven years.

Would the embedded derivative in Bond A be treated the same way as the embedded derivative in Bond B?

PwC Interpretive Response: It depends. Although in both scenarios the issuer and investor are in the same economic position with respect to either Bond A or Bond B, ASC 815 potentially prescribes a different treatment for each bond. An analysis of ASC 815-15-25-37 through 25-40 would indicate that Bond A should not be bifurcated, because calls and puts in debt hosts are generally *clearly and closely related* to the host contract, unless they meet the conditions in ASC 815-15-25-42 or ASC 815-15-25-26.

ASC 815-15-25-44 would indicate that the term-extending option in Bond B is potentially not *clearly and closely related* to the debt host, because its interest rate and credit spread are not reset to the then-current market interest rate when the option is exercised. However, as clarified in ASC 815-15-25-45, only term-extending options in debt hosts that cause an investor to potentially not recover substantially all of its recorded investment (i.e., lose principal) would be considered not *clearly and closely related*. This is because ASC 815-15-25-44 infers that it was written to prevent the ability to circumvent the requirement of ASC 815-15-25-26(a). The term extension option is within the control of the investor, thus they could not be forced into a term extension where (on a present value basis) they would not be recovering substantially all of their initial net investment. Therefore, we would conclude that the term-extending option embedded in Bond B is *clearly and closely related*. For other than debt hosts, ASC 815-15-25-45 requires an analysis of ASC 815-15-25-1.

Notwithstanding the guidance in ASC 815-15-25-44 through 25-45, often term-extending options will not meet the definition of derivatives if freestanding pursuant to ASC 815-15-25-1(c), as they often fail to have the characteristic of net settlement under ASC 815-10-15-83(c). Additionally from the perspective of the issuer of the loan agreement a term extending option where only the issuer/borrower has the right to extend the agreement would be considered a loan

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commitment and meet the scope exception for loan commitments as described in ASC 815-10-15-69 through 15-71. Therefore, many term-extending options will not require bifurcation, even though they may not be *clearly and closely related* to their host contracts as a freestanding instrument with the same terms would not meet the definition of a derivative or be eligible for a scope exception.

Question No. 3-9: If a put or call option that is embedded in a debt instrument contains provisions that do not accelerate the repayment of principal on the debt instrument but instead require a cash settlement equal to the fair value of the option on the date of exercise, is the put or call option *clearly and closely related* to the debt instrument?

PwC Interpretive Response: No. ASC 815-15-25-41 addresses a settlement of a derivative instrument that does not involve the repayment of principal, stating that such a feature would not be *clearly and closely related* to the debt host contract. Therefore, if the remaining criteria in ASC 815-15-25-1 are met, bifurcation of the hybrid instrument would be required.

Non-Benchmark Variable Rate Debt

Question No. 3-10: A borrower is looking to take speculative positions on basis risks between two points on the yield curve. Do the following three structures contain embedded derivatives that would result in bifurcation of the hybrid instruments?

- Structure 1: A borrower obtains a loan for a five-year term, which pays interest equal to the rolling average of 1-month LIBOR interest rates over the prior 12 months and resets every month.
- Structure 2: A borrower obtains a loan for a five-year term with an interest rate that resets every 3 months based on the five-year Constant Maturity Swap (CMS) index, less a constant spread.
- Structure 3: An entity enters into a five-year note that has an interest rate based on the ten-year Constant Maturity Treasury (CMT) index, which resets every 90 days.

PwC Interpretive Response: Likely yes. A full analysis of ASC 815-15-25-26(b) would need to be performed to determine if the hybrid instruments would require bifurcation. This analysis might be performed for each structure as follows:

In Structure 1, the debt instrument is indexed to the LIBOR curve and has a variable interest rate that resets monthly. The host contract can be viewed as a five-year loan with a rate of one-month LIBOR that resets every month. Assume at inception the interest rate for one-month LIBOR is 2 percent and the twelve-month rolling average of one-month LIBOR interest rates is also 2 percent.

Because the interest rate on the loan is an average of twelve one-month LIBOR rates, the interest rate on the loan will lag the movement in one-month LIBOR. Over the term of the loan, it is possible that one-month LIBOR interest rates could

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rise to 6 percent and eventually the rate on the loan would reach 6 percent (e.g., if rates remained at 6 percent for a period of twelve months). If suddenly one-month LIBOR interest rates over a two-month period then dropped to 2 percent, there could be a scenario in which the rate on the loan would still be approximately 5.3 percent, which would be twice the initial rate of return of the host contract of 2 percent while at the same time twice the then current one-month LIBOR market rate of 2 percent. Based on an analysis of ASC 815-15-25-26(b), this twelve-month moving average feature would not be *clearly and closely related* to the debt host. Assuming the other criteria in ASC 815-15-25-1 are met, the embedded derivative (i.e., an interest rate swap) would have to be accounted for separately under ASC 815.

In Structure 2, the CMS index is essentially the indicated rate in effect at any point in time for the five-year point on the LIBOR swap curve. Because the debt instrument is indexed based on the LIBOR curve and has a variable interest rate that resets quarterly, the host contract may be considered to be a five-year loan with an interest rate based on three-month LIBOR that resets every three months. If the yield curve steepens sharply whereby the short-end of the LIBOR curve drops to 1 percent while the mid to long-end of the LIBOR curve increases to 10 percent or more, there could be a scenario in which the interest rate on the loan would be double the investor's initial rate of return and at the same time be twice the then market rate of return of the host contract. Based on an analysis of ASC 815-15-25-26(b), it would appear that the CMS index feature would not be *clearly and closely related* to the debt host. Assuming the other criteria in ASC 815-15-25-1 are met, the embedded derivative (i.e., an interest rate swap) would have to be accounted for separately under ASC 815.

In Structure 3, the host contract is a five-year debt instrument with a rate that resets every 90 days. Because the yield curve that the ten-year CMT index is based on may be flatter or steeper than the 90 day CMT index, there is a possibility that the investor will double their initial rate of return and the embedded derivative could also result in a return that is twice the then-current market return. Some have argued that the embedded derivative in Structure 3 does not meet the ASC 815-15-25-26(b) criterion by citing Case C at ASC 815-15-55-176 through 55-178 as being analogous. Case C has a very similar instrument (i.e., a delevered floater) but clearly indicates that "there appears to be no possibility of the embedded derivative increasing the investor's rate of return on the host contract to an amount that is at least double the initial rate of return on the host contract [see paragraph 815-15-25-26(b)]." Thus, based on the specific facts in Case C, the FASB believed it was not possible for the investor to double its initial rate of return. However, in Scenario 3, there is a possibility of the investor doubling its initial rate of return while at the same time doubling the then-current rate of return. Therefore, the CMT index feature would not be *clearly and closely related* to the debt host, and assuming the other criteria in ASC 815-15-25-1 are met, the embedded derivative (i.e., an interest rate swap) would have to be accounted for separately under ASC 815.

Cash Collateralized Debt Obligation (CDO)

Question No. 3-11: A cash collateralized debt obligation (CDO) is a product in which an entity holding debt securities issues notes to third parties. The receipt of principal on the notes is based on the performance of the debt securities held by the entity. Under ASC 815-15, does the note contain an embedded credit derivative that requires bifurcation?

PwC Interpretive Response: It depends, based on the specific facts and circumstances of the financing arrangement. ASC 815-15-15-9 states that credit concentrations in subordinated interests should not be recognized as embedded derivatives. Consequently many cash CDOs will not contain an embedded credit derivative under the model described above, because the principal repayment of a beneficial interest is directly linked to the loans held by the entity (i.e., repayment is based on the credit risk of the loans held by the entity). Companies should carefully analyze the specific facts and circumstances of their arrangements to determine whether an embedded credit derivative that requires bifurcation exists. In addition, an assessment would need to be performed for other embedded derivatives, such as interest and prepayment risk.

Synthetic CDO With a Credit Default Swap

Question No. 3-12: A synthetic CDO is a product whereby an entity holding highly rated financial instruments, such as U.S. Treasury securities, writes a credit default swap (CDS) and issues notes to third parties. The receipt of principal and interest on the notes is based on the performance of the CDS (and the underlying collateral). Under ASC 815-15, does the synthetic CDO note contain an embedded derivative that requires bifurcation?

PwC Interpretive Response: Yes. Upon adoption of the provisions of ASU 2010-11, investors in, and issuers of, beneficial interests in a synthetic CDO structure that do not account for such instrument at fair value through earnings will be required to either bifurcate an embedded credit derivative or elect the fair value option unless such instruments qualify under “grandfathered” provision (see DH 11.2.3). ASU 2010-11 introduced a new approach to evaluating embedded credit derivatives that requires beneficial interests to be bifurcated when the securitization vehicle writes a credit derivative. This embedded credit derivative would always be considered to be not *clearly and closely related* and thus would require bifurcation.

Prior to the Adoption of ASU 2010-11, it would depend on the specific facts and circumstances of the financing arrangement. ASC 815-15-15-9 (prior to the amendment of ASU 2010-11) states that credit concentrations in subordinated interests should not be recognized as embedded derivatives. Many synthetic CDOs will not contain an embedded derivative under the previous model because the principal repayment of the beneficial interest is indirectly linked to the CDS held by the trust. The economic profile of the cash CDO in the previous question can be created with highly rated collateral and a CDS. Because a cash CDO and a synthetic CDO share similar credit risks, under the previous model the analysis should be consistent. However, companies should carefully analyze the specific facts and circumstances of their arrangements to determine whether an embedded derivative exists that requires bifurcation. In addition, an assessment would need to be performed for other embedded derivatives, such as interest and prepayment risk.

Question No. 3-13: If, for example, the entity in the case of a synthetic CDO holds \$100 of highly rated collateral, writes a CDS with a notional amount of \$20 on referenced credits, and issues notes with a notional amount of \$100, does the answer to the previous question change depending on the size of the CDO and thus the leverage in the entity?

PwC Interpretive Response: No. Bifurcation would be required in this case (after the adoption of ASU 2010-11) unless such instruments qualify for “grandfathered” provisions (see DH 11.2.3). The extent of synthetic credit is not relevant to the analysis. See Case AA in ASC 815-15-55-226C and Case AB in ASC 815-15-55-226D which illustrate similar examples.

Credit Linked Note

Question No. 3-14: A guarantor provides a financial guarantee contract guaranteeing the payment of principal and interest of a credit-linked note (CLN) subject to ASC 815. If there is a credit event requiring payment on a CDS, which would ordinarily impact the payment of principal and interest on the CLN, 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 Interpretive Response: A CLN issued as part of a synthetic securitization would contain an embedded derivatives requiring bifurcation. Thus, the financial guarantee contract would be providing coverage on a derivative instrument. Accordingly, the financial guarantee contract would not be eligible for the exception in ASC 815-10-15-58 and would be subject to 815.

Other Implementation Questions

Question No. 3-15: A master trust in the context of a credit card or other revolving asset securitization is a trust that on an ongoing basis would continue acquiring receivables and issuing securities based thereon. In a revolving structure that utilizes a master trust that uses proceeds from the underlying assets to purchase new assets, would the beneficial interests issued following the purchase of new assets be subject to ASC 815?

PwC Interpretive Response: It would depend on facts and circumstances. For example, in the case of a master trust with commingled underlying assets, the transfer of new assets may replenish the assets supporting the existing residual beneficial interests and generate new residual beneficial interests, thereby impacting all residual beneficial interests. In a master trust where the underlying assets are separated into silos, the transfer of new assets may result in new beneficial interests being created and not affect beneficial interests previously issued. In the first example, all beneficial interests would be considered new financial instruments subject to ASC 815, whereas in the second example, only the incremental beneficial interests would be considered new financial instruments subject to ASC 815.

Question No. 3-16: 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 Interpretive Response: No. ASC 815-15-25-6 scopes out those hybrid financial instruments described in ASC 825-10-50-8 which include:

- Employers' and plans' obligations for pension benefits, other postretirement benefits, including health care and life insurance benefits; post employment benefits; employee stock option and stock purchase plans; and other forms of deferred compensation arrangements (see ASC 710; ASC 712; ASC 715; ASC 718; and ASC 960);
- Substantively extinguished debt subject to the disclosure requirements of ASC 405-20;
- Insurance contracts, other than financial guarantees and investment contracts, as discussed in ASC 944-20;
- Lease contracts as defined in ASC 840 (a contingent obligation arising out of a cancelled lease and a guarantee of a third-party lease obligation are not lease contracts and are included in the scope);
- Warranty obligations and rights;
- Unconditional purchase obligations as defined in ASC 440-10-50-2;
- Investments accounted for under the equity method in accordance with the requirements of ASC 323;
- Noncontrolling interests in consolidated subsidiaries;
- Equity investments in consolidated subsidiaries; and
- Equity instruments issued by the entity and classified in stockholders' equity in the statement of financial position.

Refer to ASC 825-10 regarding additional instruments for which a FVO is available.

Foreign Currency Instruments

Question No. 3-17: A dual-currency bond is a bond that provides for the repayment of principal in the entity's functional currency and the periodic interest payments in a foreign currency (or vice versa). Assume that a U.S. entity (with the USD as its functional currency) issues a dual-currency bond (principal is paid in USD, interest paid in a foreign currency). Would such a bond contain an embedded derivative, and, if so, would the provisions of ASC 815 require that the U.S. entity separate the derivative from the host contract?

PwC Interpretive Response: No. Although this instrument can be viewed as containing an embedded foreign-currency swap that converts the U.S. dollar interest payments to a foreign-currency basis, the embedded derivative should not be separated. ASC 815-15-55-209 through 55-210 provides that an embedded derivative that converts a financial instrument's principal payments, interest payments, or both into a foreign currency should not be separated from the host contract and considered a derivative for purposes of applying ASC 815. This is because remeasurement of the foreign exchange component is required.

Question No. 3-18: Does a debt security with interest-payment provisions that are linked to changes in foreign-currency exchange rates contain an embedded derivative that must be separated from the host contract under ASC 815? For example, a company (with the U.S. dollar as its functional currency) issues three-year U.S.-dollar-denominated debt securities at par. Quarterly interest payments are computed based on a formula that is linked to changes in the U.S. dollar/Japanese-yen exchange rate, but would not be considered yen denominated.

PwC Interpretive Response: Yes. The formula for computing the interest payable on this debt security represents an embedded derivative (a forward-exchange contract) that must be separated and accounted for under ASC 815. Since the interest payments are not denominated in a foreign currency but, rather, are simply indexed to one, the debt does not qualify for the scope exception in ASC 815-15-15-10.

Question No. 3-19: Assume that a U.S. dollar parent company has a French subsidiary that uses the euro as its functional currency. The subsidiary enters into a lease with a Canadian company that requires lease payments in U.S. dollars. The Canadian company's functional currency is the Canadian dollar. The parent guarantees the lease and that is their only investment in the lease. In this situation, is a guarantor a substantial party to the contract?

PwC Interpretive Response: No. The lease contains an embedded derivative that converts euro lease payments to U.S. dollars. In this example the substantial parties to the lease are the lessor and lessee. The guarantor is not a substantial party to the contract and therefore the functional currency of a guarantor is not relevant to the application of ASC 815-15-15-10(b) and the U.S. dollar is not the functional or local currency of any substantial party to the lease. In addition, this type of transaction is not one where the U.S. dollar is the only currency used in international transactions. The embedded foreign currency swap is not *clearly and closely related* to the lease host. Therefore, assuming the remaining ASC 815-15-25-1 criteria are met, the embedded foreign exchange derivative should be separated from the host contract and accounted for separately as a derivative by both the lessor and the lessee.

Question No. 3-20: Would a contract (that does not qualify for normal purchase and normal sales scope exception) for the purchase of an actively traded commodity with terms specifying that payment is to be made in a currency other than the functional currency of either party require bifurcation?

PwC Interpretive Response: No. The commodity contract in its entirety meets the definition of a derivative because the commodity is actively traded, it is considered *readily convertible to cash* and it does not qualify for an exception. Even though (1) the contract's purchase price is denominated in a currency other than the functional currency of either party to the contract and (2) the contract does not qualify for the normal purchases and normal sales scope exception, ASC 815 does not allow separation of a derivative from another derivative. Because the contract meets the definition of a derivative in its entirety, it must be carried at fair value, with changes reporting in current period earnings.

Traditional Life Insurance

Question No. 3-21: Would the following instruments require bifurcation: (1) a traditional whole life insurance contract in which insurance may be kept in force for a person's entire life or (2) 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 Interpretive Response: No. The death-benefit component of the contracts requires that payment be based on an insurable event that is eligible for the scope exception in ASC 815-10-15-52. The cash-surrender-value component of the contract 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 that 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, similar to those described in the Interpretive Response to Question No. 3-22 below, may have embedded derivatives requiring bifurcation.

Variable-Annuity Products

Question No. 3-22: Would a traditional variable-annuity product require bifurcation if it contains a provision stating that benefit payments will vary according to the investment experience of the separate accounts in which the amounts that are paid to provide for the annuity are allocated?

PwC Interpretive Response: No. The traditional variable annuity component of the product, as described in ASC 815-15-55-54 and 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 25-4. However, variable-annuity products may contain non-traditional features, such as guaranteed minimum accumulation benefits and guaranteed minimum withdrawal benefits. 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 host contract would continue to be accounted for under existing insurance accounting guidance.

Equity-Indexed Annuity

Question No. 3-23: Would an equity-indexed annuity contract require bifurcation?

PwC Interpretive 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, subject to passing the criteria in ASC 815-15-25-26 after consideration of ASC 815-15-25-37. However, the contingent equity-return feature is not *clearly and closely related* to the debt host; therefore, the embedded equity derivative must be separated from the host contract.

Property and Casualty Insurance

Question No. 3-24: Would 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 require bifurcation?

PwC Interpretive 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, the entire contract may be a derivative or may contain embedded derivatives that would require separate accounting.

Disaster Bonds

Question No. 3-25: Would a disaster bond with a payment feature that is contingent on specific insurable losses of the issuer require bifurcation and separate accounting as an embedded derivative? Would the answer change for a disaster bond with a payment feature indexed to industry loss experience, which is measured as if it were a dollar-based index?

PwC Interpretive Response: No, the disaster bond with a payment feature that is contingent on specific insurable losses would not require bifurcation and separate accounting as an embedded 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 to yes if the payment feature is indexed to industry loss experience. Then the payment feature would not be contingent on insurable losses of the issuer. It would therefore not be *clearly and closely related* and would not qualify for the ASC 815-10-15-52 scope exception. Therefore, the embedded derivative must be separated from the host contract if the other criteria of ASC 815-15-25-1 are met.

ModCo Arrangements

Question No. 3-26: Would 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 that is 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) require bifurcation?

PwC Interpretive 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. During deliberation of this guidance, certain constituents suggested that ModCo arrangements are insurance contracts and therefore should be exempt from ASC 815 under the ASC 815-10-15-52 exception. The FASB staff pointed out that as described in ASC 815-10-15-54, even insurance contracts can have embedded derivatives that need to be bifurcated. ASC 815-15-55-108 notes that whether one considers the host contract to be an insurance contract or the ModCo receivable/payable component of the arrangement, the embedded derivative provisions of ASC 815 are still applicable, and bifurcation will be required if the other criteria in ASC 815-15-25-1 are met.

Leases With Extension Options, Purchase Options, and Residual-Value Guarantees

Question No. 3-27: A lessee enters into a five-year agreement to lease equipment that has a fair value of \$100,000. The lease requires payment of \$20,000 per year for the five year period. At the end of the lease term, the lessee has the option to:

- Return the equipment or
- Purchase the equipment for \$20,000 (which is *not* considered a bargain) or
- Extend the lease for an additional two years for \$12,000 per year (an amount specified in the original lease and not renegotiated at the end of the original five-year lease term; this, too, is not considered a bargain).

Scenario A – No residual-value guarantee – The lease qualifies as a capital lease because the lease term is assumed to be 75 percent or more of the estimated economic life of the leased asset. The lessee would initially record the lease obligation and the related asset at \$80,000, the present value of the minimum lease payments. At the end of the five-year lease term, the amount recorded for both the asset and the related liability would be zero.

Scenario B – Lessee provides lessor with residual-value guarantee – The lease qualifies as a capital lease because the present value of the minimum lease payments, including the residual-value guarantee, equals or exceeds 90 percent of the fair value of the leased asset at the inception of the lease. The lessee would initially record the lease obligation and the related asset at the present value of the minimum lease payments, which includes the residual-value guarantee's stipulated amount (i.e., the strike price). Assume that there is a residual-value guarantee of \$20,000. Assume also that the present value of the lease payments is \$80,000 and that the present value of the residual-value guarantee is \$15,000. The total obligation, therefore, is \$95,000. At the end of the five-year lease term, both the asset and the

liability (of \$95,000) would be reduced to the gross amount of the residual-value guarantee (i.e., \$20,000).

Scenario C – For the lessee, the lease does not qualify as a capital lease, and thus it is considered an operating lease. The lessee would record the rental expense of the operating lease on a straight-line basis over the lease term. No asset or liability would be recorded for the lease (except for prepaid or deferred rent, which is assumed to be zero).

Accounting Issues

- Is either the purchase option or the renewal option in each scenario an embedded derivative that should be separated from the lease contract?
- Is the residual-value guarantee (in scenario B) an embedded derivative that should be separated from the lease contract?
- Is the residual-value insurance (in scenario C) a derivative?

PwC Interpretive Response: *Purchase Option* The purchase option does not qualify as a derivative in any of the three scenarios described above. That is because the purchase option does not meet the definition of a derivative (as required by ASC 815-15-25-1(c)) due to the fact that it does not contain a net-settlement provision. An analysis of the net-settlement provisions in ASC 815 is as follows:

- In order to exercise the option, the lessee must pay the purchase price in cash, and the lessor 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* (assuming there is no active market for the equipment being leased).

PwC Interpretive Response: *Option to Extend the Lease* The application of the *clearly and closely related* criterion to capital lease contracts is similar to the application used for debt hosts. ASC 815-15-25-44 states, in part:

An embedded derivative that...unilaterally enables one party to extend significantly the remaining term to maturity...is not clearly and closely related to the interest rate on a debt instrument unless the interest rate is concurrently reset to the approximate current market rate for the extended term and the debt instrument initially involved no significant discount. Thus, if there is no reset of interest rates, the embedded derivative is not clearly and closely related to the host contract.

Some may contend that although a capital lease is not technically debt, it is sometimes viewed as being equivalent to debt for accounting and disclosure purposes. The interest rate is either the lessee's incremental borrowing rate or the rate implicit in the lease, which is not reset at the end of year 5.

PwC Interpretive Response: Scenarios A and C. We believe that the right to extend the lease if there is no residual-value guarantee differs from the right to extend debt. The right to extend a lease is not a right to borrow money at a fixed interest rate, as would be the case with debt; rather, the right to extend a lease is the right to use a used nonfinancial asset for an additional period. Under ASC 840-10, this extension does not represent a modification of the existing lease. Instead, the extension qualifies as a new lease, since the asset and liability (if either exists) that the lessee records on its books are amortized to zero by the end of the original lease term. The extension option in this case does not meet the definition of a derivative as required by ASC 815-15-25-1(c), because it represents simply the right to execute a new lease and does not contain a net-settlement provision. Rather, the term-extending option is similar to the purchase option since it represents the right to acquire a usage right, which is not *readily convertible to cash*.

PwC Interpretive Response: Scenario B. Capital leases with residual-value guarantees and extension options that are provided by the lessee fall under the provisions of ASC 840-30-35-6 through 35-8.

As noted ASC 840-30-35-8, the option to extend a lease if the lessee has provided the lessor with a residual-value guarantee does not represent a new lease and is instead merely a modification of the liability. Therefore, some may contend that the option to extend a lease is analogous to the option to extend debt, which is an embedded derivative for both the lessee and the lessor and should not be considered *clearly and closely related*, according to the guidance in ASC 815-15-25-44. However, the guidance in ASC 815-15-25-44 relating to term-extending options in debt hosts should not be applied by analogy to non-debt host contracts as explicitly stated in ASC 815-15-25-45. Because ASC 815 defines lease hosts separately from debt hosts, we believe that ASC 815-15-25-44 does not apply. Evaluation of ASC 815-15-25-1 shows that the lease-extension option in the example does not satisfy the ASC 815-15-25-1(c) requirement that a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative, because the option to extend does not contain a net-settlement provision. This is because the exercise of a term extending option is tantamount to delivering a new lease that is not readily convertible to cash in the amount of the liability. One may also analogize to the ASC 815-10-15-69 scope exception related to loan commitments, because an option that grants the holder with the unilateral ability to extend a financing arrangement is similar in nature to a loan commitment.

Residual-Value Guarantee—A residual-value guarantee may meet the definition of a derivative because under ASC 815-10-15-83 it (1) has an underlying and a notional amount, (2) requires no initial net investment, and (3) calls for net settlement, in that the lessor receives a net payment representing the difference between the value of the leased asset and the stipulated residual-value amount. However, ASC 815-10-15-80 states that a residual-value guarantee that is subject to the provisions of ASC 840 should be accounted for in accordance with ASC 840 rather than ASC 815.

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However, ASC 460 requires guarantors to recognize, at the inception of the guarantee, a liability for the obligation undertaken in issuing the guarantee. ASC 460-10-15-7(b) excludes from its scope entirely any residual value guarantee in a lease that is accounted for as a capital lease. In addition, ASC 460-10-25-1 provides an exception to the initial recognition and initial measurement requirements for a guarantee accounted for as a derivative under ASC 815. Thus, guarantees issued by the lessee for a lease accounted for as an operating lease that are not derivatives under ASC 815 would be subject to the initial recognition, initial measurement, and disclosure requirements of ASC 460, while guarantees issued by a lessee accounted for as a capital lease would not be subject to any of the requirements of ASC 460.

Change in Functional Currency

Question No. 3-28: Company A has a subsidiary in a country in which the local currency is neither the euro nor the U.S. dollar (USD). The subsidiary's functional currency has been the USD. As of December 31, 20xx, Company A concluded that changes in the subsidiary's operations resulted in a change to its functional currency from the USD to the Euro. Prior to December 31, 20xx, the subsidiary entered into contracts to purchase raw materials. Some of these contracts are denominated in USD and others are denominated in Euros. The counterparties to the contracts are in countries in which the local and functional currencies are neither the Euro nor the USD. Neither Company A's subsidiary nor the counterparties to the contracts operate in highly inflationary economies. Additionally, the price of the raw materials is not routinely denominated in international commerce in the USD or the Euro.

At the inception of the raw material contracts, it was determined that the contracts contained embedded derivative features. The USD-denominated contracts qualified for the scope exception in ASC 815-15-15-10 as the contract payment was denominated in the subsidiary's functional currency and the embedded feature were not required to be accounted for separately. The Euro-denominated contracts did not qualify for this scope exception and the embedded derivative features were separated from the contracts and accounted for as derivative instruments.

Now that the functional currency has changed from the USD to the Euro, must Company A re-assess its existing raw material contracts to determine if the embedded derivative features need to be separated from the contracts?

PwC Interpretive 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 that it would be required to re-assess the contracts under ASC 815-15-15-10.

Warrants Sold in a Registered Offering

Question No. 3-29: A company issued 1,000,000 shares of its common stock and 1,000,000 common warrants in a registered unit offering to the public for total proceeds of \$4,500,000. Each unit is comprised of 1 share of common stock and 1 detachable warrant. The detachable warrant gives the investor the right to purchase 1 share of the Company's common stock at a strike price of \$5.00 per share and expire in 5 years if not exercised.

The warrant agreement provides that the warrants are exercisable at any time after issuance and the Company "... shall use its best efforts to cause the registration statement to remain effective until the shares underlying the warrants have been sold or may be sold without restriction." Additionally, while the warrants are outstanding, the Company is required to periodically file a "current prospectus" and deliver it to the warrant holders in connection with any exercise of the warrants. Initially, the Company may be able to use the prospectus that was declared effective for the unit offering, however, over time, the initial prospectus will have to be updated to disclose additional information or to provide updated financial data.

The warrant agreement does not specify how the contract would be settled in the event the Company is unable to deliver registered shares nor does it specify any circumstances under which net cash settlement of the contract would be permitted or required.

What impact does the fact that the warrants were issued in a registered offering have on the Company's assessment of the warrant classification under paragraphs ASC 815-40-25-11 through 25-16?

PwC Interpretive Response: Section 5 of the Securities Act of 1933 requires all offers and sales of securities to be registered unless the offer and sale associated with the transaction is "exempt" from registration. As the unit offering was a registered offering, Securities Law requires registered shares to be delivered upon exercise of the warrant unless there is an exemption from registration. It is unlikely that there will be an exemption available to the Company for the sale of the shares underlying the warrants as the warrants were sold in a registered offering. In addition, the fact that the warrant agreement does not explicitly state that registered shares must be delivered does not change the requirement under the law to deliver registered shares if there is no exemption from registration.

The basic principle of ASC 815-40-25-11 through 25-16 is that the event or actions necessary to deliver registered shares are not controlled by the company. Therefore, *except where a contract provides for delivery of shares at settlement that were registered at inception of the contract and there are no further timely filing or registration requirements after inception of the contract*, the presumption is that the contract will be net-cash settled.

Therefore, because, (1) the Company has further filing obligations to maintain effectiveness, (2) there is likely no exemption from registration, and (3) the warrant agreement does not specify how the warrants would be settled in the event the

(continued)

Company is unable to deliver registered shares, net-cash settlement is presumed and the warrant contract must be classified as a liability at fair value and changes in fair value are reflected each period through earnings.

However, the Company can enter in an amendment that states that in the event the Company does not have an effective registration statement, there is no circumstance that would require the Company to net cash settle the warrants. In this case, the SEC staff has stated that they would not object to a conclusion that the warrants are not be required to be classified as liabilities under ASC 815-40-25-14 through 25-15. The equity classification would only be available from the amendment date and the gains or losses recorded during the period the warrants were classified as a liability would not be reversed.

The proper application of ASC 815-40-25-11 through 25-16 requires an understanding of Securities Law; accordingly, the Company's legal counsel should also be involved in the determination of whether the Company is required to deliver registered shares.

3.10 Examples

FASB Examples Illustrating the Application of ASC 815-15-25-26

The following examples illustrating the application of ASC 815-15-25-26 were prepared by the FASB staff as part of the Board's deliberations on ASC 815-15-25-26. These examples were originally posted to the FASB's Web site and have been reproduced here to provide insights about how the FASB staff envisions ASC 815-15-25-26 should be applied.

Variable-Rate Debt With a Floor

An investor holds a bond with a coupon rate of interest that varies with changes in an interest rate index. If the variable rate decreases below a specified rate, the bond pays a specified rate.

Background: The investor receives LIBOR; however, if LIBOR falls below 5 percent at any reset date, the investor receives 5 percent. A bond could have been issued at par by the entity without an embedded floor at LIBOR plus 2 percent. At the date of issuance, LIBOR is 4 percent. The bonds are issued at par, and the investor paid par.

ASC 815-15-25-26 Application: There are no contractual provisions that would allow the debt to be settled such that the investor would not recover substantially all of its initial recorded investment; consequently, the provisions of ASC 815-15-25-26(a) are not met. To apply the provisions of ASC 815-15-25-26(b), it must be noted that debt without a floor could have been issued at par for LIBOR plus 2 percent. An analysis must be performed to determine whether the embedded derivative (which provides a minimum return of 5 percent to the investor) could at least double the investor's initial rate of return on the host contract—which was 6 percent (LIBOR plus 2 percent)—in each of the possible interest rate environments. The following table summarizes the

potential LIBOR rates and the return to the investor, with the effects of the embedded floor for the hybrid instrument:

Potential LIBOR Rates	Effects of Floor on Hybrid
0.00%–0.99%	Return of 5%
1.00%–1.99%	Return of 5%
2.00%–2.99%	Return of 5%
3.00%–3.99%	Return of 5%
4.00%–4.99%	Return of 5%
5.00%–5.99%	None
6.00%–6.99%	None
7.00%–above	None

When LIBOR is 0.00 to 4.99 percent, the embedded floor provides the holder of the hybrid with a return of 5 percent, and since 5 percent is not double the investor's initial rate of return on the host contract, which was 6 percent, the provisions of ASC 815-15-25-26(b) are not met. Because the provisions of ASC 815-15-25-26 are not met, the embedded floor is considered *clearly and closely related* to the debt host. Therefore the embedded derivative should not be separated from the host contract even though in a falling interest rate environment, the hybrid instrument may have a return to the investor that is a significant amount above the then-current market return of the host contract. That is, if LIBOR were to decrease to 0.25 percent, the embedded floor provision of the hybrid would return 5 percent to the investor, which is more than double the then-current market return for of 2.25 percent (LIBOR plus 2 percent) for the host contract.

Range Floater

An investor holds a bond with a coupon rate that depends on the number of days that a reference rate stays within a pre-established collar; otherwise, the bond pays 0 percent interest or a below-market rate.

Background: The investor receives 8 percent on each day LIBOR is 3 to 3.99 percent. The coupon will be 0 percent for each day that LIBOR is outside the range. A variable-rate bond could have been issued at par by the entity without a collar at LIBOR plus 1 percent. At the date of issuance, LIBOR is 3 percent. The bonds are issued at par, and the investor paid par.

ASC 815-15-25-26 Application: There are no contractual provisions that would allow the debt to be settled such that the investor would not recover substantially all of its initial recorded investment; consequently, the provisions of ASC 815-15-25-26(a) are not met. To apply the provisions of ASC 815-15-25-26(b), it must be noted that debt without a collar could have been issued at par for LIBOR plus 1 percent; consequently, the initial rate of return on the host contract is LIBOR plus 1 percent. An analysis must be performed to determine whether the embedded derivative could at least double the investor's initial rate of return on the host contract—which was 4 percent (LIBOR plus 1 percent)—in each of the possible interest rate environments.

The following table summarizes the potential LIBOR rates and the return to the investor, with the effects of the embedded collar for the hybrid instrument:

Potential LIBOR Rates	Effects of Collar on Hybrid
0.00%–0.99%	Return of 0%
1.00%–1.99%	Return of 0%
2.00%–2.99%	Return of 0%
3.00%–3.99%	Return of 8%
4.00%–4.99%	Return of 0%
5.00%–5.99%	Return of 0%
6.00%–6.99%	Return of 0%
7.00%–above	Return of 0%

When LIBOR is 3 to 3.99 percent, the embedded collar provides the holder with a return of 8 percent, and since 8 percent is double the investor's initial rate of return on the host contract, which was 4 percent, the provisions of the first part of ASC 815-15-25-26(b) are met. To apply the provisions of the second part of ASC 815-15-25-26(b), an analysis must be performed to determine whether the embedded derivative results in a rate of return that is at least twice what would otherwise be the then-current market return for the host contract when LIBOR is 3.00 to 3.99 percent. The following table summarizes those potential LIBOR rates, the return on the hypothetical host contract, and the return to the investor, with the effects of the embedded collar for the hybrid instrument:

Potential LIBOR Rates	Return on Host	Effects of Collar on Hybrid
3.00%	4.00%	8.00%
3.01%	4.01%	8.00%
3.02%	4.02%	8.00%
3.03%	4.03%	8.00%
3.04%	4.04%	8.00%
3.05%	4.05%	8.00%
3.06%	4.06%	8.00%
3.07%–3.99%	4.07%–4.99%	8.00%

When LIBOR is at 3 percent, the return on the hybrid is 8 percent, which is twice the initial rate of return on the host contract of 4 percent. Since the hybrid provides a return of 8 percent when LIBOR is 3 percent, the embedded derivative provides a return that could be twice the then-current market return for the host. As a result, the provisions of ASC 815-15-25-26(b) are met. Because the provisions of ASC 815-15-25-26(b) are met, the embedded collar is not considered *clearly and closely related* to the debt host.

Variable-Rate Debt With a Cap

An investor holds a bond with a coupon rate of interest that varies with changes in an interest rate index. If the variable rate increases above a specified rate, the bond pays a specified rate.

Background: The investor receives LIBOR; however, if LIBOR is at or above 10 percent at any reset date, the investor receives 12 percent. A variable-rate bond could have been issued at par by the entity without a cap at LIBOR minus 2 percent.

At the date of issuance, LIBOR is 8 percent. The bonds are issued at par, and the investor paid par.

ASC 815-15-25-26 Application: There are no contractual provisions that would allow the debt to be settled such that the investor would not recover substantially all of its initial recorded investment; consequently, the provisions of ASC 815-15-25-26(a) are not met. To apply the provisions of ASC 815-15-25-26(b), it must be noted that debt without a cap could have been issued at par for LIBOR minus 2 percent; consequently, the initial rate of return on the host contract is LIBOR minus 2 percent. An analysis must be performed to determine whether the embedded derivative could at least double the investor's initial rate of return on the host contract—which was 6 percent (LIBOR minus 2 percent)—in each of the possible interest rate environments. The following summarizes the potential LIBOR rates and the return to the investor, with the effects of the embedded cap for the hybrid instrument:

Potential LIBOR Rates	Effects of Cap on Hybrid
0.00%–0.99%	None
1.00%–1.99%	None
2.00%–2.99%	None
3.00%–3.99%	None
4.00%–4.99%	None
5.00%–5.99%	None
6.00%–6.99%	None
7.00%–7.99%	None
8.00%–8.99%	None
9.00%–9.99%	None
10.00%–10.99%	Return of 12%
11.00%–11.99%	Return of 12%
12.00%–12.99%	Return of 12%
13.00%–13.99%	Return of 12%
14.00% and above	Return of 12%

When LIBOR is at or above 10 percent, the embedded cap provides the holder with a return of 12 percent, and since 12 percent is double the investor's initial rate of return on the host contract—which was 6 percent—the provisions of the first part of ASC 815-15-25-26(b) are met. To apply the provisions of the second part of ASC 815-15-25-26(b), an analysis must be performed to determine whether the embedded derivative results in a rate of return that is at least twice what would otherwise be the then-current market return for the host contract when LIBOR is at or above 10 percent. The following table summarizes those potential LIBOR rates, the return on the hypothetical host contract, and the return to the investor, with the effects of the embedded cap for the hybrid instrument:

Potential LIBOR Rates	Return on Host	Effects of Cap on Hybrid
10.00%–10.99%	8.00%–8.99%	12.00%
11.00%–11.99%	9.00%–9.99%	12.00%
12.00%–12.99%	10.00%–10.99%	12.00%
13.00%–13.99%	11.00%–11.99%	12.00%
14.00% and above	12.00% and above	12.00%

As can be seen in the above analysis, when LIBOR is at or above 10 percent, the embedded derivative does not provide a return that is at least twice the then-current market return for the host. (For example, when LIBOR is at 10 percent, the return on the hybrid instrument is 12 percent, and the return on the host contract would have been 8 percent. Since the hybrid provides a return of 12 percent when LIBOR is 10 percent and since the host contract would have provided a return of 8 percent, the embedded derivative does not provide a return that is at least twice the then-current market return for the host.) As a result, the provisions of ASC 815-15-25-26(b) are not met. Because the provisions of ASC 815-15-25-1(a) and ASC 815-15-25-26(b) are not met, the embedded cap is considered *clearly and closely related* to the debt host.

Bifurcation Journal Entries for the Issuer of a Hybrid Debt Instrument

On January 1, 20X8, a crude-oil-producing company (called ABC Company) issues a one-year \$10,000,000 crude oil knock-in note that guarantees the repayment of the principal and has a 1 percent coupon (0.5% paid semiannually) plus a potential additional return if crude oil prices increase over specified levels. Assume that the contingent payment feature is not separable from the note. In this situation, the note should be viewed as combining an interest-bearing instrument with a written-option contract. Because the written-option contract is indexed to the price of crude oil (and not to interest rates), it is not *clearly and closely related* to a fixed-rate note. Therefore, the embedded written-option contract should be separated from the host contract and accounted for separately. Assume the following based on information the company obtained from its investment advisers:

	1/1/20X8
Fair value of a plain-vanilla fixed-rate note (6.235 percent yield per annum to maturity)	\$ 9,500,000
Fair value of crude oil written option (all time value)	500,000
Total fair value of crude oil knock-in note	\$10,000,000

Assume that on June 30, 20X8, crude oil prices have not increased over specified levels and the option's fair value (time value) is \$200,000.¹

Application of ASC 815

ASC 815-15-25-1 requires that an embedded derivative be separated from the host contract and accounted for separately as a derivative instrument on ABC Company's balance sheet at fair value with subsequent changes in its fair value reported in current-period earnings. The bifurcation process results in a debt discount that is amortized over the debt term as a yield adjustment (i.e., as a part of interest expense).

¹ The fair value of \$200,000 was determined by management through (i) the use of an option pricing model and (ii) guidance provided by its investment adviser that deals in derivative contracts. The assumptions that management applied in the option pricing model are not presented for purposes of this analysis.

Assume that, at the option's maturity, it has an intrinsic value of \$1,000,000. The issuer will pay a total interest of \$1,100,000 (\$100,000 per coupon plus \$1,000,000 for increases in crude oil prices). The following journal entries will be made:

Accounting Entries	Debit	Credit
January 1, 20X8		
1. Cash	\$10,000,000	
Debt		\$ 9,500,000
Written option		500,000
(To record the issuance of the crude oil knock-in note and written option)		
June 30, 20X8		
2. Interest expense	246,163	
Debt		246,163
(To record the amortization of the debt discount)		
3. Written option	300,000	
Gain on written option		300,000
(To record the change in the fair value of the written option)		
4. Interest expense	50,000	
Interest payable		50,000
(To accrue the coupon interest payable)		
December 31, 20X8		
5. Interest expense	253,837	
Debt		253,837
(To record the amortization of the debt discount)		
6. Written option	200,000	
Loss on written option	800,000	
Interest payable		1,000,000
(To record the interest payable that is attributable to the option feature)		
7. Interest expense	50,000	
Interest pay		50,000
(To accrue the coupon interest payable)		
January 1, 20X9		
8. Debt	10,000,000	
Interest payable	1,100,000	
Cash		11,100,000
(To record the settlement of the debt and the written option)		

PwC Observation: Even though ABC Company may have issued the knock-in note with the contingent payout as a hedge of future sales of crude oil, a written option would not qualify for hedge accounting unless it met the requirements for a fair value hedge or a cash flow hedge.

FASB Examples Illustrating the Application of ASC 815-15-25-42

The following examples illustrating the application of ASC 815-15-25-42 (updated for the technical corrections released in ASU 2010-08) are included in ASC 815-15-55-13 and have been reproduced here to provide insights about how the FASB staff envisions that the guidance should be applied.

Example	Indexed Payoff? (Steps 1 and 2)	Substantial Discount or Premium? (Step 3)	Contingently Exercisable? (Step 4)	Embedded Option <i>Clearly and Closely Related</i> ?
1. Debt that is issued at a substantial discount is callable at any time during its 10-year term. If the debt is called, the investor receives the par value of the debt plus any unpaid and accrued interest.	No.	Yes.	No.	The embedded call option is <i>clearly and closely related</i> to the debt host contract because the payoff is not indexed and the call option is not contingently exercisable.
2. Debt that is issued at par is callable at any time during its term. If the debt is called, the investor receives the greater of the par value of the debt or the market value of 100,000 shares of XYZ common stock (an unrelated entity).	Yes, based on an equity price.	N/A. Analysis not required.	N/A. Analysis not required.	The embedded call option is <i>not clearly and closely related</i> to the debt host contract because the payoff is indexed to an equity price.
3. Debt that is issued at par is puttable if the Standard and Poor's S&P 500 Index increases by at least 20 percent. If the debt is put, the investor receives the par amount of the debt adjusted for the percentage increase in the S&P 500.	Yes, based on an equity index (S&P 500).	N/A. Analysis not required.	N/A. Analysis not required.	The embedded put option is <i>not clearly and closely related</i> to the debt host contract because the payoff is indexed to an equity price.
4. Debt that is issued at a substantial discount is puttable at par if London Interbank Offered Rate (LIBOR) either increases or decreases by 150 basis points.	No.	Yes.	Yes, contingent on a movement of LIBOR of at least 150 basis points.	The put option is <i>not clearly and closely related</i> to the debt host contract because the debt was issued at a substantial discount and the put option is contingently exercisable.

(continued)

Example	Indexed Payoff? (Steps 1 and 2)	Substantial Discount or Premium? (Step 3)	Contingently Exercisable? (Step 4)	Embedded Option <i>Clearly and Closely Related?</i>
5. Debt that is issued at a substantial discount is puttable at par in the event of a change in control.	No.	Yes.	Yes, contingent on a change in control.	The put option is <i>not clearly and closely related</i> to the debt host contract because the debt was issued at a substantial discount and the put option is contingently exercisable.
6. Zero coupon debt is issued at a substantial discount and is callable in the event of a change in control. If the debt is called, the issuer pays the accreted value (calculated per amortization table based on the effective interest rate method).	No.	Yes.	Yes, contingent on a change in control, but since the debt is callable at accreted value, the call option does not accelerate the repayment of principal.	The call option is <i>clearly and closely related</i> to the debt host contract. Although the debt was issued at a substantial discount and the call option is contingently exercisable, the call option does not accelerate the repayment of principal because the debt is callable at the accreted value.
7. Debt that is issued at par is puttable at par in the event that the issuer has an initial public offering.	No.	No.	N/A. Analysis not required.	The embedded put option is <i>clearly and closely related</i> to the debt host contract because the debt was issued at par (not at a substantial discount) and is puttable at par. Paragraph 815-15-25-26 does not apply.
8. Debt that is issued at par is puttable if the price of the common stock of Entity XYZ (an entity unrelated to the issuer or investor) changes by 20 percent. If the debt is put, the investor will be repaid based on the value of Entity XYZ's common stock.	Yes, based on an equity price (price of Entity XYZ's common stock).	N/A. Analysis not required.	N/A. Analysis not required.	The embedded put option is <i>not clearly and closely related</i> to the debt host contract because the payoff is indexed to an equity price.
9. Debt is issued at a slight discount and is puttable if interest rates move 200 basis points. If the debt is put, the investor will be repaid based on the S&P 500.	Yes, based on an equity index (S&P 500).	N/A. Analysis not required.	N/A. Analysis not required.	The embedded put option is <i>not clearly and closely related</i> to the debt host contract because the payoff is based on an equity index.

FASB Examples Illustrating the Application of Embedded Derivative Model to Embedded Derivatives in Securitized Financial Assets

The following examples illustrating the application of the embedded derivative model to securitized financial assets have been reproduced here from ASC 815-15-55-222 through 55-226A to provide insights about how the FASB staff envisions that the guidance should be applied.

Example	Application of This Guidance
Assume a dollar-denominated variable-rate interest is issued by a special-purpose entity that holds yen-denominated variable-rate bonds and a cross-currency swap to pay yen and receive dollars.	If the variable rate reflects a current market rate and the notional amounts of the bonds and the swap correspond to the notional amount of the interests issued, the dollar-denominated variable-rate interest would not have an embedded derivative requiring bifurcation because the terms of the beneficial interest do not indicate an embedded derivative and the financial instruments held by the entity provide the necessary cash flows.
Assume a variable-rate interest is issued by a special-purpose entity that holds fixed-rate bonds and a pay-fixed, receive-variable interest rate swap.	The variable-rate interest would <i>not</i> have an embedded derivative requiring bifurcation because the terms of the beneficial interest do not indicate an embedded derivative and the financial instruments held by the entity provide the necessary cash flows. However, if the notional amounts of the fixed-rate bonds and the variable interest rate swap do not match, the variable-rate interest would have to be evaluated for an embedded derivative under ASC 815-15-25-26 because the financial instruments held by the entity might not provide the necessary cash flows.
Assume a special-purpose entity that holds nonprepayable fixed-rate bonds issues all of the following three tranches: (a) A senior, variable-rate financial instrument (with a limited exposure to credit losses on the fixed-rate bonds), (b) A subordinated financial instrument that is entitled to 90 percent of the difference between the fixed rate received from the bonds and the variable rate paid to the senior financial instrument (with a limited exposure to credit losses on the fixed-rate bonds), and (c) A residual financial instrument that is entitled to the remainder of the fixed-rate payment from the bonds after any credit losses on the fixed-rate bonds.	Each of the three tranches would be a hybrid financial instrument with an embedded interest rate derivative feature that requires bifurcation analysis under ASC 815-10-15-11 and ASC 815-15-25 because the terms are variable rate even though the entity does not hold assets that bear a variable rate. This analysis considers the structure as a whole including the related liabilities. The embedded interest rate derivative feature in the senior, variable-rate financial instrument is considered to be <i>clearly and closely related</i> to the host contract. With respect to the subordinated financial instrument and the residual financial instrument, there could be a shortfall of cash flow after the senior interest holders are paid, due to adverse changes in interest rates, and the investor in either the subordinated interest or the residual interest might not recover substantially all of its initial recorded investment in the interest; thus, the embedded interest rate derivative feature is considered to be not <i>clearly and closely related</i> to the host contract. Therefore, the embedded interest rate derivative should be separated from the host contract and accounted for in accordance with the provisions of ASC 815-15. ASC 815-15-15-9 is not relevant because risk features other than credit risk are present in the beneficial interests that require application of ASC 815-10-15-11 and ASC 815-15-25.

(continued)

Example**Application of This Guidance**

Assume a special-purpose entity that holds prepayable fixed-rate loans issues all of the following three tranches: (a) A senior, fixed-rate financial instrument that is entitled to receive fixed-rate interest payments and all the prepayments and repayments of principal amounts received from the debtors (with a limited exposure to credit losses on the fixed-rate loans), (b) A subordinated, fixed-rate financial instrument that is entitled to receive fixed-rate interest payments and the prepayments and repayments of principal amounts received from the debtors only after the holders of the senior financial instrument have been paid in full (with a limited exposure to credit losses on the fixed-rate loans), and (c) A residual financial instrument that is entitled to the remainder of the fixed-rate interest payments from the loans and the prepayments and repayments of principal amounts received from the debtors only after the holders of both the senior financial instrument and the subordinated financial instrument have been paid in full. All credit losses on the fixed-rate loans are absorbed first by the holders of the residual financial instrument.

Each of the three tranches would be a hybrid financial instrument with an embedded derivative feature. Because the embedded derivative feature involves only the transfer of credit risk that is only in the form of subordination of one financial instrument to another (assuming that the investor did not pay a significant premium for the interest in the tranche), the scope exception in ASC 815-15-15-9 applies, and the embedded credit derivative feature existing in the tranches would not be subject to the application of ASC 815-10-15-11 and ASC 815-15-25.

Examples Illustrating the Application of Embedded Derivative Model to Prepayable Financial Assets

The following examples illustrate the application of the guidance in ASC 815-15-25-26(b) to specific securitized interests in prepayable financial assets. As discussed in ASC 815-15-55-138, the examples do not provide discussion of the requirements of paragraphs 815-15-25-1 and 815-15-25-26(a), however, an analysis of these paragraphs would be needed to determine whether the instruments meet the criterion in paragraph 815-15-25-26(b).

The cases have been reproduced here from ASC 815-15-55-139 through 55-159 to provide insights about how the FASB staff envisions that the guidance should be applied.

As discussed in ASC 815-15-55-140, cases A1 through A2 below share the same following assumptions:

- a. A fixed-rate guaranteed single-class mortgage pass-through security is issued.
- b. Both the interest and principal payments are guaranteed by a third party for a fixed market-based guarantee fee, and a servicer receives a market-based servicing fee that is expected to be more than adequate compensation.
- c. Both the guarantee fee and the servicing fee have priority over the payments to the investors.
- d. The investor does not have the right to accelerate the settlement of the securitized interest.

ASC 815-15-55-146 states that cases B1 through B3 share the assumption that an entity securitizes a pool of guaranteed single-class mortgage pass-through securities (each identical to those described in the common assumptions in Case A).

Guidance Reference	Example	Application of the Guidance
Case A1: Guaranteed Single-Class Mortgage Pass-Through Security (ASC 815-15-55-141 through 55-142)	Under the security, the net cash flows received on the underlying fixed-rate, prepayable, single-family mortgage loans are proportionately passed through to the investors.	Paragraph 815-15-25-26(b) does not apply to the guaranteed single-class mortgage pass-through security described in the common assumptions and the details in the Example column. While the priority of the payments to the guarantor and servicer reallocates the cash flows, the example security meets the two criteria in paragraph 815-15-25-26(b).
Case A2: Securitization Trust Includes a Freestanding Derivative Instrument (ASC 815-15-55-143 through 55-144)	Under the security, the underlying prepayable single-family mortgage loans have a variable interest rate. The securitization trust also holds an interest rate swap that is designed to perfectly swap the variable interest rate assets to a fixed interest rate to match the payments on the fixed-rate guaranteed single-class mortgage pass-through security.	Paragraph 815-15-25-26(b) is not applicable to the guaranteed single-class mortgage pass-through security. Because the addition of the freestanding derivative instrument (the interest rate swap) does not create an embedded derivative that requires bifurcation in the guaranteed single-class mortgage pass-through security itself, the example security meets the two criteria in that paragraph. However, if the notional amounts of the securitized loans and the interest rate swap do not match, the fixed-rate securitized interest would have to be evaluated for an embedded derivative because the financial instruments held by the entity might not provide the necessary cash flows.
Case B1: Sequential-Pay Collateralized Mortgage Obligation (ASC 815-15-55-147 through 55-149)	This Case assumes that the principal payments received, including prepayments of principal, on the underlying collateral are not allocated proportionately to all investors (bond holders). Three classes of securities are issued, Class A, Class B, and Class C, which mature sequentially. All three classes participate in interest payments from the underlying collateral, but, initially, only Class A receives principal payments. Class A receives all principal payments, including prepayments of principal, until it is retired.	The analysis of the bonds requires the holder to assess the securitized interest in accordance with the criterion in paragraph 815-15-25-33(b). To determine whether the individual bond classes contain an embedded derivative that requires bifurcation, the investor would have to understand the nature and amount of assets, liabilities, and other financial instruments that compose the entire securitization transaction. The holder should obtain sufficient information about the payoff structure and the payment priority of the interest to determine whether an embedded derivative that requires bifurcation exists. Because the securitized interests (assumed to be identical to those described in Case A) included in the resecuritization do not contain any embedded derivatives and there have been no other changes in the cash flows that create other embedded derivatives that require bifurcation, the criterion in paragraph 815-15-25-33(b) is met.

(continued)

Guidance Reference	Example	Application of the Guidance
	Next, all principal payments are paid to Class B until it is retired, and so on. Additionally, the investor does not have the right to accelerate the settlement of the securitized interest.	Paragraph 815-15-25-26(b) is not applicable to any of the bond classes in the sequential-pay collateralized mortgage obligation. While the prepayment risk in the underlying financial assets is reallocated through the securitization process, concentrating prepayment risk in certain bond classes, all three classes in the Case meet the two criteria in paragraph 815-15-25-33.
Case B2: Planned-Amortization-Class and Companion Collateralized Mortgage Obligation (ASC 815-15-55-150 through 55-152)	Case B assumes that the principal payments received, including prepayments of principal, on the underlying collateral are not allocated proportionately to all investors (bond holders). Two classes of securities are issued, a planned-amortization-class bond and a companion bond. The planned-amortization-class bond is designed to reduce the prepayment risk to investors by transferring prepayment risk to the companion bond. The planned-amortization-class bond offers a fixed principal repayment schedule that will be met if prepayment on the underlying collateral is within a specified range. Additionally, the investor does not have the right to accelerate the settlement of the securitized interest.	The analysis of the bonds requires the holder to assess the securitized interest in accordance with the criterion in paragraph 815-15-25-33(b). To determine whether the individual bond classes contain an embedded derivative that requires bifurcation, the investor would have to understand the nature and amount of assets, liabilities, and other financial instruments that compose the entire securitization transaction. The holder should obtain sufficient information about the payoff structure and the payment priority of the interest to determine whether an embedded derivative that requires bifurcation exists. Because the securitized interests (assumed to be identical to those described in Case A) included in the resecuritization do not contain any embedded derivatives and there have been no other changes in the cash flows that create other embedded derivatives that require bifurcation, the criterion in paragraph 815-15-25-33(b) is met. Paragraph 815-15-25-26(b) is not applicable to either the planned-amortization-class or the companion collateralized mortgage obligation. While the prepayment risk in the underlying prepayable financial assets is reallocated through the securitization process, concentrating prepayment risk in the companion bond, the example securities meet the two criteria in paragraph 815-15-25-33.
Case B3: Interest-Only Strip and Principal-Only Strip (ASC 815-15-55-153 through 55-156)	An interest-only strip and principal-only strip are created by separating the net interest cash flows from the principal cash flows received on a pool of guaranteed single-class mortgage pass-through securities (identical to those described in Case A). The interest cash flows form one bond, which is the interest-only strip. The principal cash flows form the second bond, which	As a result of the guarantee fee and the servicing fee in excess of adequate compensation in the underlying guaranteed single-class mortgage pass-through securities, neither the interest-only strip nor the principal-only strip qualifies for the scope exception in paragraphs 815-10-15-72 through 15-73. The analysis of the interest-only and principal-only strip requires the holder to assess the securitized interest in accordance with the criterion in paragraph 815-15-25-33(b). To determine whether the individual bond classes contain an embedded derivative that requires

(continued)

Guidance Reference	Example	Application of the Guidance
Case C: Inverse Floater Collateralized Mortgage Obligation (ASC 815-15-55-157 through 55-159)	<p>is the principal-only strip. Additionally, the investor does not have the right to accelerate the settlement of the securitized interest.</p>	<p>bifurcation, the investor would have to understand the nature and amount of assets, liabilities, and other financial instruments that compose the entire securitization transaction. The holder should obtain sufficient information about the payoff structure and the payment priority of the interest to determine whether an embedded derivative that requires bifurcation exists. Because the securitized interests (assumed to be identical to those described in Case A) included in the rescritization do not contain any embedded derivatives and there have been no other changes in the cash flows that create other embedded derivatives that require bifurcation, the criterion in paragraph 815-15-25-33(b) is met.</p> <p>Paragraph 815-15-25-26(b) is not applicable to either the interest-only strip or the principal-only strip. While the prepayment risk in the underlying prepayable financial assets is reallocated through the securitization process, concentrating prepayment risk in certain bond classes, both the interest-only strip and principal-only strip in the example meet the two criteria in paragraph 815-15-25-33.</p>
	<p>A collateralized mortgage obligation is issued with a coupon that fluctuates inversely with a referenced rate. The underlying securitized financial assets are fixed-rate, prepayable, single-family mortgage loans. Two classes of securitized interests are issued, one with a coupon based on a referenced rate (for example, the London Interbank Offered Rate [LIBOR]) and the second with a coupon that fluctuates inversely with that same referenced rate (the inverse floater collateralized mortgage obligation). Cash flows received on the underlying collateral are first used to pay a servicer a market-based servicing fee that is expected to be more than adequate compensation. Additionally, the investor does not have the right to accelerate the settlement of the securitized interest.</p>	<p>Paragraph 815-15-25-26(b) would be applicable to the inverse floater. When assessing the conditions in that paragraph, the holder shall consider the effect of prepayment risk. Therefore, the holder may identify both an embedded derivative related to the prepayment risk and an embedded derivative related to the inverse interest rate risk, which would be combined and recorded as one instrument.</p> <p>While the inverse floater collateralized mortgage obligation meets the criterion in paragraph 815-15-25-33(a), the fact that the coupon rate fluctuates inversely with the referenced rate results in the instrument failing the criterion in paragraph 815-15-25-33(b). The inverse floater contains an embedded interest rate derivative that requires bifurcation, and that embedded interest rate derivative does not result solely from the embedded call options in the underlying financial assets. Said another way, the inverse floater meets the conditions of paragraph 815-15-25-26(b) without consideration of the prepayment risk in the underlying mortgage loans.</p>

Chapter 4: Hedging Strategies

Executive Takeaway

- ASC 815, *Derivatives and Hedging*, provides for three types of hedges, which are described briefly below:
 1. **Fair value hedge:** A hedge of the exposure to changes in the fair value of a recognized asset or liability, or of an unrecognized firm commitment, that are attributable to a particular risk;
 2. **Cash flow hedge:** A hedge of the exposure to variability in the cash flows of a recognized asset or liability or of a forecasted transaction, that is attributable to a particular risk;
 3. **Net investment hedge:** A hedge of the exposure to foreign currency risk of a net investment in a foreign operation.
- The four basic risks that an entity may address when designating hedging transactions are market price risk, market interest rate risk, foreign exchange risk, and credit risk.
- If the derivative instrument qualifies as a hedging instrument, the gains or losses will be recognized in earnings and offset by recognition of the effective portion of the hedge as an asset or liability on the balance sheet (for fair value hedges), will be recognized in equity as part of other comprehensive income (for cash flow hedges) to the extent the hedge is effective and later reclassified into earnings when the hedged item impacts earnings, or will be recognized in cumulative translation adjustment (for hedges of net investments) and held there until there is a liquidation or change in interest of the foreign subsidiary.

4.1 Hedging Overview

ASC 815 requires that all derivative instruments within its scope (including embedded derivatives that have been separated from their host contract for accounting purposes) must be recognized and subsequently measured on an entity's balance sheet at fair value in accordance with ASC 820 regardless of whether a derivative instrument is designated as a hedge or is used for a purpose other than hedging. In this respect, ASC 815 standardizes the accounting for all derivative instruments, since synthetic and off-balance-sheet accounting for such instruments is not permitted.

The accounting for changes in the fair value of a derivative instrument for a given period will depend on the intended use of the derivative instrument, as well as whether the derivative instrument qualifies for hedge accounting. If the derivative instrument qualifies as a hedging instrument, the gains or losses will be recognized in earnings and offset by recognition of the effective portion of the hedge as an asset or liability on the balance sheet (for fair value hedges), will be recognized in equity as part of other comprehensive income (for cash flow hedges) to the extent the hedge is effective and later reclassified into earnings when the hedged item impacts earnings, or will be recognized in cumulative translation adjustment (for hedges of net investments) and held there until there is a liquidation or change in interest of the foreign subsidiary.

This chapter provides background on what hedging is and how it works. To give a better understanding of the benefits and limitations of hedging, this chapter includes examples of some of the more common hedging transactions and a few of the more complex hedging strategies. It also provides information about the benefits of certain types of hedges and about certain issues encountered with applying the hedging rules.

ASC 815 provides for three types of hedges, which are described briefly below:

- **Fair value hedge (ASC 815-25):** A hedge of the exposure to changes in the fair value of a recognized asset or liability, or of an unrecognized firm commitment, that are attributable to a particular risk.
- **Cash flow hedge (ASC 815-30):** A hedge of the exposure to variability in the cash flows of a recognized asset or liability, or a forecasted transaction, that is attributable to a particular risk.
- **Net investment hedge (ASC 815-35):** A hedge of the exposure to foreign currency risk of a net investment in a foreign operation.

Companies routinely hedge 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. To align the company's risk management objectives with its accounting and financial reporting, management may want to designate a qualifying transaction as an accounting hedge. The benefit of hedge accounting is reduction in the earnings volatility that would otherwise result from recording changes in fair value of the hedging instrument in the income statement in a period different from the recognition of the effects of the hedged item. In addition, hedging transactions have more flexibility as to income statement classification, because realized and unrealized gains and losses can be split into separate line items in the income statement. Finally, hedge accounting may better align the accounting and reporting of the transaction with management's intent and objective of the transaction. Transactions that serve to mitigate cash flow or fair

value risks but that are not designated as hedging transactions for financial reporting purposes are often referred to as *economic hedges*. Economic hedging is discussed in DH 4.9 of this chapter.

4.2 Risks Eligible for Hedging Transactions

The Board limited risks available for designation within hedging transactions to four basic risks. It did so to focus on risks that have a determinable or predictable effect on the fair value of an asset or liability or the cash flows of a future transaction. The Board reasoned that price changes associated with other risks may not have that same direct relationship.

The four basic risks companies may address when designating hedging transactions are market price risk, market interest rate risk, foreign exchange risk, and credit risk. These risks represent a change in fair values or cash flows that could affect reported earnings, which is a requirement for all hedge accounting relationships except forecasted foreign currency intercompany transactions.

- **Market price risk:** The risk of a change in earnings due to either the market price movement of the entire hedged item or the overall cash flows stemming from changes in market conditions.
- **Market interest rate risk:** The risk that movements in market interest rates may affect either the right to receive or obligation to transfer cash or other financial instruments in the future, or the fair value of that right (or obligation) embodied in a financial asset or liability.
- **Foreign exchange risk:** The risk that changes in foreign exchange rates may affect the fair value of certain hedged items or the functional currency cash flows of the hedged items of an entity.
- **Credit risk:** The risk that a counterparty will fail to perform according to the terms of a financial asset or firm commitment contract. Credit risk affects the fair value of a financial asset, the financial component of a firm commitment, and the related cash flows.

PwC Observation: In practice, credit risk has proved to be difficult for 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 and the basis difference between the credit risk in the derivative market and the credit spread of the hedged item may not be reliably measurable. 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.

4.2.1 Financial Assets and Liabilities

Financial assets and liabilities—and their related cash flows—may be hedged for any one or a combination of the four risks identified above, such as both the interest rate risk and foreign exchange risk components of a debt instrument (that is not denominated in the functional currency of the issuer).

The specified risk identified in a financial asset or liability may be isolated and designated as the hedged risk in a hedging transaction if the hedging derivative

instrument is highly effective in offsetting the changes in fair value or cash flows of the hedged item attributable to the hedged risk.

4.2.2 Nonfinancial Assets and Liabilities

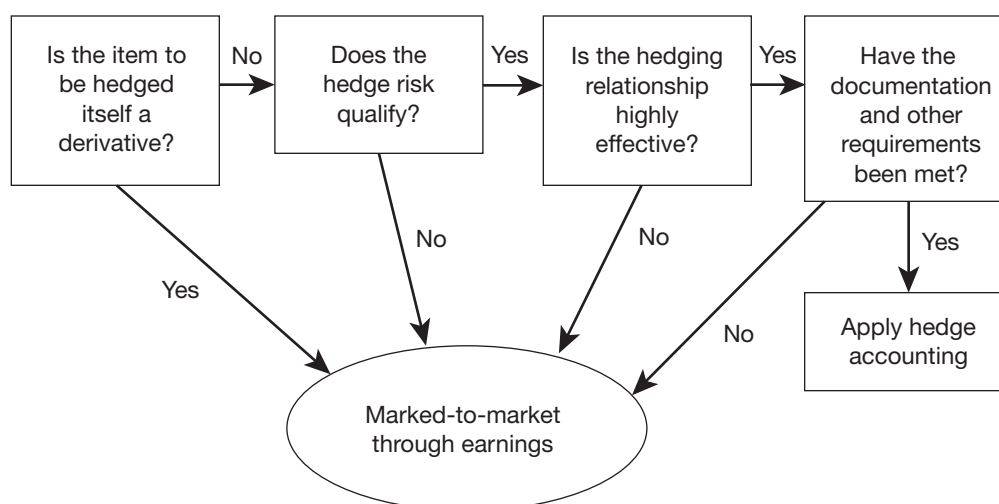
Fair value and cash flow hedge accounting for hedges of nonfinancial assets and liabilities (other than recognized loan servicing rights and nonfinancial firm commitments with financial components) is permitted only for hedges of the risk of changes in the market price of the entire hedged item in a fair value hedge or the entire asset to be acquired or sold in a hedged forecasted transaction, with one exception. The risk of changes in the functional-currency-equivalent cash flows attributable to changes in foreign exchange rates may be separately hedged in a cash flow hedge of the forecasted purchase or sale of a nonfinancial item. ASC 815 does not permit the market price risk of only a principal ingredient or other component of a nonfinancial hedged item to be designated as the risk being hedged because changes in the price of an ingredient or component of a nonfinancial item generally do not have a predictable, separately measurable effect on the price of the item that is comparable to the effect of, say, a change in market interest rates on the price of a bond.

4.3 Hedging Criteria

Qualifying for the requirements of hedge accounting is more fully described in DH 5 through DH 7. The following is a high-level summary of the key criteria for evaluating whether a contract will qualify for hedge accounting.

- *Nature of the hedging transaction.* The hedging transaction must qualify and be designated as a valid fair value, cash flow, or foreign currency hedge. The risk management objective and strategy must be identified and documented, including identification of the hedging instrument; the hedged item or transaction and nature of the risk being hedged; and how the hedging instrument will be effective in hedging the identified exposure.
- *Earnings exposure.* For a fair value hedge, the hedged item presents an exposure to changes in fair value attributable to the hedged risk that could affect reported earnings (except for not-for-profit organizations that issue a statement of performance). For a cash flow hedge, the forecasted transaction is a transaction with a party external to the reporting entity (except as permitted by ASC 815-20-25-61 through 25-65 for intercompany foreign currency hedge transactions) and presents an exposure to variations in cash flows for the hedged risk that could affect reported earnings.
- *Assessment of hedge effectiveness.* Hedge effectiveness must be assessed at the time of hedge designation, and a conclusion that the hedging transaction is expected to be highly effective in offsetting changes in the fair value or cash flows attributable to the hedged risk at inception and throughout the term of the hedge must be supported. Periodic support of hedge effectiveness on a prospective and retrospective basis must be assessed and documented at each financial reporting date and at least quarterly. Ineffectiveness, if present, should be calculated and recorded through earnings each reporting period.
- *Documentation and ongoing effectiveness assessment.* A qualifying hedging transaction requires compliance with the rigorous documentation requirements that must be performed at the inception of the hedging relationship and at least quarterly, on an ongoing basis. Key terms of the hedging relationship must be specified, and the results of the effectiveness assessment must be documented.

The flowchart below provides a high-level depiction of the process of designation:



4.4 Hedging Assets and Liabilities

If the conditions for hedge accounting are met, a derivative may be designated as a hedge of (i) the exposure to changes in the fair value of a recognized asset or liability that are attributable to a particular risk (fair value hedge) or (ii) the exposure to variability in the cash flows of a recognized asset or liability attributable to a particular risk (cash flow hedge).

ASC 815-20-25-43(c)(3) (regarding a fair value hedge) and ASC 815-20-25-15(d) and 25-15(e) (regarding a cash flow hedge) state that the hedged item cannot be an asset or liability that is remeasured with changes in the fair value reported currently in earnings (or a forecasted acquisition of an asset or incurrence of a liability that subsequently will be similarly remeasured at fair value). ASC 815 does not require special accounting for the hedged items referred to above, 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.

Entities that enter into fair value hedging transactions of recognized assets are generally seeking to protect against an exposure to loss of value of their investments (e.g., debt and equity securities or loans receivable) or their inventories. Similarly, fair value hedging transactions involving liabilities are generally intended to protect against exposure to changes in the fair value of debt-related obligations.

Cash flow hedges of forecasted transactions associated with recognized assets and liabilities generally relate to management of exposures to changes in variable-rate investment income, payments on variable-rate debt obligations and forecasted purchases, or sales of recognized assets or liabilities (e.g., forecasted sale of inventory).

Following is a discussion, including summarized examples, of hedging transactions of recognized assets and liabilities.

4.4.1 Investments

An entity that is holding investments may wish to reduce its exposure to changes in the fair value of or future cash flows from its investments through a hedging

transaction. Due to the special accounting rules under ASC 320 applicable to securities treated as available-for-sale and held-to-maturity, the application of hedge accounting is different from that for other investments.

- **Available-for-sale:** For hedging transactions of securities classified as available-for-sale, the investment is reported at fair value. The change in the fair value of the investment attributable to the hedged risk is not recorded in other comprehensive income but, rather, is recorded in the income statement and is offset by the change in the fair value of the derivative hedging instrument to the extent effective. Differences in the changes in fair value of the hedged item (attributable to the designated hedged risk) and the hedging instrument are reflected in the income statement for the period. In the absence of any other-than-temporary impairment, changes in fair value of the available-for-sale security attributable to factors other than the hedged risk are recorded in other comprehensive income.
- **Held-to-maturity:** ASC 815-20-25-43(c)(2) and ASC 815-20-25-43(d)(2) prohibit hedge accounting for interest rate risk associated with a debt security classified as held-to-maturity. This limitation is due to the Board's belief that hedge accounting of interest rate risk would be inconsistent with the decision to classify a security as held-to-maturity, which implies that future decisions about continuing to hold the security will not be impacted by market interest rates and are thus not relevant to the security. However, hedge accounting is permitted for credit risk on held-to-maturity securities.

The hedge of an available-for-sale security presents the hedging entity with a choice of risks to hedge. It can hedge any of the four risks applicable to the security or a combination thereof because it is a financial instrument. An entity may elect to hedge the market interest rate risk only if the security is a fixed-rate instrument or a floating-rate instrument indexed to a benchmark interest rate. In the U.S., the benchmark interest rates are either U.S. Treasury rates or LIBOR. The Board believes it is important to limit the ways in which to calculate the change in value of a hedged item attributable to interest rate risk and therefore created the concept of benchmark interest rates to ensure that only the most liquid rates are used to measure the effective portion of the hedge.

Example of Hedging Transaction: Fair Value Hedge of Available-for-Sale Security

Assume a company invests in a debt security with a par value of \$10,000,000 and classifies the security as available-for-sale. The company determines that changes to the fair value of the security are expected to be attributable primarily to changes in the benchmark interest rate (U.S. Treasury interest rate in this example). Specifically, the company is exposed to the risk that an increase in the benchmark rate would result in a decrease in the fair value of the investment security. To protect against this exposure, the company enters into futures contracts to sell \$10,000,000 notional amount of U.S. Treasury notes at a fixed price with settlement occurring on the final day of the period during which the company requires protection. The futures contracts entitle and obligate the company to a financial settlement that it expects will be highly effective in offsetting the changes to the fair value of the investment security attributable to the designated risk being hedged. Since the futures contracts can be designated as the hedging instrument in a fair value hedge of the available-for-sale security, the changes in fair value of the futures contracts and the changes in fair value of the available-for-sale security attributable to movements in U.S. Treasury interest rates will be recognized in earnings in the same period.

Refer to Example 5-2 in DH 5 for a summary of hedge documentation and the impact in the accounting records.

4.4.2 Inventory

Production companies and users of commodities may need to manage their exposure to the price of purchasing inputs and to changes in the value of their inventories during the 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. A cash flow hedge can be used by a company forecasting either (i) 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 (ii) the future sale of physical inventory to protect against the risk of changes in the sales price prior to the forecasted sale. The risk identified as being hedged in a hedging transaction involving nonfinancial assets, such as inventory (e.g., a commodity), may only be for overall changes in fair value or cash flows (i.e., market price risk) at the location of the inventory or the location at which the company intends to purchase or sell the inventory. With respect to cash flow hedges of forecasted purchases or sales of inventory, the hedged risk identified may also be the changes in the functional currency cash flows.

A common strategy for protecting against the risk of changes in the price of inventory, both owned and forecasted to be purchased, is by use of forward or futures contracts. However, options, price caps, floors, and collars are also common products for hedging the risk of (i) price increases when forecasting purchases or (ii) price decreases when holding inventory or forecasting sales.

In practice, entities often hedge the market 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 company has a fixed-price sales commitment or the marketplace is too competitive to allow for the pass through of material cost increases. Entities often hedge the market 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. Given that there is an opportunity to hedge the variability in either forecasted purchases or sales of inventory, many entities do not find a need to enter into fair value hedges of their existing inventories. However, in those circumstances where an entity has commodity inventories on hand but cannot adequately forecast the timing of their sale, it may be appropriate to consider entering into a fair value hedge.

Refer to Example 5-4 in DH 5 and Examples 6-3 and 6-6 in DH 6 for a summary of hedge documentation and the impact in the accounting records for hedging fair value and forecasted transactions associated with inventory.

4.4.3 Cash Flow Hedges of Debt Obligations and Interest Payments

Cash flow hedges of variable-rate debt continue to be one of the most common hedging strategies observed. One reason these hedges are common is that they give an entity the ability to separate its funding and liquidity management from its interest rate risk management and therefore facilitate optimizing the capital funding process. Second, the overall cost of funding can be reduced because derivative products help better match investors' demand for investment types with the funding needs of issuing entities.

Since in theory each interest payment is its own forecasted transaction, it makes little accounting difference whether the debt is existing or a probable forecasted issuance. Note, however, that most variable-rate debt is prepayable at specified coupon reset dates, and contractual existence is not necessarily persuasive in supporting

whether the interest payments are probable in the future. The complexity of a hedge strategy varies greatly with the terms of the existing or expected underlying debt. Hedges of nonprepayable, benchmark interest rate indexed debt are generally straightforward. Hedges of debt instruments that are amortizing, prepayable by either party, indexed to nonbenchmark rates, or subject to auction processes or that contain other nonstandard features may introduce hedging challenges that must be carefully navigated in order to avoid inadvertent errors in the application of hedge accounting. The following example illustrates the general mechanics of cash flow hedge accounting.

Assume an issuer of prime-rate indexed debt wants to economically fix its interest payments. The company enters into an interest rate swap with terms entitling it to receive variable interest payments and obligating it to make fixed interest payments. The variable leg of the swap and the variable interest rate payable on the debt are based on a prime rate as published by the same bank. Also assume that other critical terms such as interest reset dates and settlement dates match. The hedging relationship does not qualify for the shortcut method because interest payments are not based on a benchmark interest rate (i.e., a published prime rate does not qualify as a benchmark rate). Because all of the critical terms of the interest rate swap and the debt obligation match, the company may support that it expects no ineffectiveness. However, if the critical terms in the instruments differ, even if there is a minor difference, the company should not merely assume that the ineffectiveness identified is immaterial. The company should evaluate the possible impacts under a variety of realistic scenarios that effectively demonstrates that the possible ineffectiveness would be de minimis. This qualitative and quantitative analysis should be performed and contemporaneously documented to support a continuing and reasonable expectation of effectiveness for the hedged relationship. If the known sources of ineffectiveness are de minimis and all other critical terms of the interest rate swap and the debt obligation match, then the issuer can support that it expects no ineffectiveness.

The hedging derivative instrument is recorded at fair value on the balance sheet, with an offsetting entry to other comprehensive income. Ineffectiveness, if any, would be reported as a gain or loss in the income statement. As interest payments are made, the amount necessary to reflect the effective fixed rate is released from accumulated other comprehensive income to earnings.

In an effort to economically fix the interest payments on the debt at the inception of the hedging relationship, companies may also engage in hedging activities related to the 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. In addition, the designated instrument is typically an interest rate swaption or a forward-starting interest rate swap.

For the forecasted issuance of a floating-rate debt instrument, the hedging instrument could technically remain outstanding until the maturity of the debt instrument with the changes in fair value of the hedging instrument (that are effective) recorded in other comprehensive income. However, it is not uncommon to terminate the existing swap and enter into a new swap that exactly matches the debt issued in order to facilitate cash flow hedging under a qualitative assessment method. The interest expense recognized includes the reclassification of the accumulated other comprehensive income and the net amounts accrued in each period; this reflects the economically fixed yield established at the inception of the hedge.

For the forecasted issuance of a fixed-rate debt instrument, the hedging instrument is generally terminated at the debt issuance date because the company will no longer be exposed to cash flow variability subsequent to issuance. Accumulated amounts recorded in accumulated other comprehensive income at that date are then released to earnings in future periods to reflect the difference in the fixed rates economically locked in at the inception of the hedge and 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, such that the issuing entity will receive par value if the hedge is perfectly effective. In future periods, the amortization of the premium or discount on the debt will be offset by the release of a corresponding amount from accumulated other comprehensive income resulting from the hedge.

Refer to Examples 6-1, 6-1a, and 6-2 in DH 6 for examples of hedge documentation and the impact in the accounting records associated with cash flow hedges of variable rate debt and forecasted issuances of fixed-rate debt.

4.4.4 Fair Value Hedges of Debt Instruments

Fair value hedges of existing fixed-rate debt may be achieved using a pay-floating, receive-fixed interest rate swap. The swap economically converts the fixed-rate debt payments to floating and, assuming the floating rate is a market rate for the debt, protects against exposure to increases in the fair value of the debt by economically converting it to a market-based floating rate instrument.

ASC 825-10-05-5, *Fair Value Option*, allows many financial instruments and certain other items to be measured at fair value through earnings including debt instruments. As a result, fair value hedges of debt instruments may not seem necessary. The election of the fair value option for the debt instrument coupled with reporting the swap as a derivative instrument may yield a result similar to hedge accounting without the stringent requirements that accompany hedge treatment (see DH 4.9, Economic Hedging). However, if the fair value option is used, the change in fair value of the debt recorded must be the entire change in value, including any components that are not being hedged (e.g., the credit risk). Reporting changes in the fair value of the debt instrument attributable only to benchmark interest rate changes would not be permitted.

In contrast, an entity may wish to use hedge accounting to avoid volatility in earnings due to its own credit risk and achieve better earnings offset. Assume an entity has a fixed-rate obligation and wishes to hedge its exposure to changes in the fair value of the obligation due to changes in the benchmark interest rate. The entity enters into a receive-fixed, pay-variable interest rate swap, with the variable leg of the swap set to an applicable benchmark rate. Also assume that critical terms are matched with settlements occurring on the same date as those on the debt obligation and a notional amount matching the debt obligation. Assume no prepayment option in either agreement. The entity will support that it expects this hedging relationship to be highly effective. The amounts reported in earnings for the derivative instrument

will be offset by the changes in fair value of the debt instrument attributable to the interest rate movements for the current period.

Refer to Example 5-1 in DH 5 for a summary of hedge documentation and the impact in the accounting records for hedging changes in the fair value of debt under the shortcut method.

4.4.5 Rollover Financing Program

A rollover financing program involves sequential issuances of fixed-rate short-term debt (such as certificates of deposit) over some time period. Entities may choose to hedge the variability of interest payments associated with the rollover of their debt.

A common instrument hedged under the rollover format is commercial paper. Commercial paper is generally issued as a note discounted from its face or par value. When repaid, the investor obtains its interest as the difference between what was paid for the note at issuance and par value at redemption. Because maturity dates on commercial paper typically range from 1 to 270 days, they function very much like dates for variable-rate debt. The debt resets at a reference rate at stipulated intervals and is then fixed until the next reset date.

A LIBOR-based swap is typically used in a commercial paper hedge, and the commercial paper issuer must support the correlation between the rate to be received under the swap agreement (e.g., three-month LIBOR swap rate) and the corresponding rates to be paid on the commercial paper over the term of the hedge. A regression analysis is typically performed to support the expectation that changes in the present value of the floating leg of the swap to be received will be correlated to changes in the present value of the expected cash flows at which commercial paper will be issued in the future. The historical series of commercial paper rates and LIBOR swap rates generally provided support for such correlation. However, the market conditions in 2007 and 2008 showed the absence of correlation between commercial paper rates and LIBOR swap rates in multiple instances. As their hedge effectiveness assessments failed, some companies were required to terminate existing hedge relationships during these years.

Generally, grouping overnight and short-term commercial paper issuances with longer-term commercial paper, such as 90- or 180-day notes, does not qualify as having similar exposure to changes in interest rates and would not be hedged together. However, narrower ranges of expected discount periods may correlate with similar LIBOR reset periods.

Another issue related to rollover financing programs is whether the rollover transactions can be designated in a cash flow hedge of interest rate risk. ASC 815-20-25-43(d) prohibits cash flow hedges of exposure to changes in the benchmark interest rate for variable-rate financial assets and liabilities that are explicitly based on another index. However, the guidance in ASC 815-20-25-17 through 25-19 explains that total proceeds attributable to changes in the benchmark interest rate related to a series of forecasted issuances of fixed-rate debt, such as in a rollover financing program, can be designated as the hedged item in a cash flow hedge of benchmark interest rate, provided that all other requirements of cash flow hedge accounting are met.

Another issue with respect to rollover financing programs relates to whether the future period of the hedge of the short-term debt can be determined. This issue arises because the period each fixed-rate obligation is outstanding varies, and as a result, the timing of the repricing varies. Thus, the strategy does not allow a

clear distinction of the date on or period within which the forecasted transaction is expected to occur. Entities that use a rollover financing program may determine the future period by basing it on (i) the current term structure, (ii) the average maturity of the underlying portfolio of debt, or (iii) management's best estimate of the forecasted transactions.

4.4.6 Auction Rate Securities

Auction rate securities have their coupon determined by means of a Dutch auction typically every 35 days or less. The debt is typically exempt from federal, state, and local taxes, and an issuer structuring a cash flow hedge of forecasted interest payments (consistent with the rollover financing strategy discussed in DH 4.4.5) will enter into a swap contract for which the variable leg pays at a discount to LIBOR, with the discount determined by the value of the expected tax benefit to the investor (e.g., 65 percent of LIBOR assuming a 35 percent tax rate).

In rollover financing strategies, we discussed interest rate risk as qualifying as the hedged risk under ASC 815-20-25-17 through 25-19. Because a commercial paper program is a series of sequential debt issuances, it is not considered a variable-rate liability, and the guidance in ASC 815-20-25-17 through 25-19 applies. In contrast, auction rate securities are long-term, floating-rate debt instruments as noted in ASC 815-20-55-42 which explains that the interest rates on variable-rate financial assets and liabilities that are reset through an auction process are not based on a benchmark interest rate. The "auction rate" established through the bidding process does not provide for transparent separation of interest rate risk and credit risk. Consequently, the designated risk that is being hedged must be the risk of overall variability of cash flows of the auction rate security. However, ASC 815-20-55-43 affirms that an entity may hedge the variability in total cash flows, provided that all of the other criteria for hedging cash flows are met.

If the Dutch auction fails, an analysis must be completed to ensure that the hedging strategy documented at the inception of the hedging relationship is still valid. If the effect of the failed Dutch auction is that the hedged risk no longer exists or that the hedging relationship is no longer effective, hedge accounting should be discontinued for the hedging relationship. See DH 9 for guidance on accounting for discontinued hedges.

4.5 Firm Commitments

A firm commitment is a binding agreement with a third party for which all significant terms are specified (e.g., quantity, price, and timing of the transaction). The price may be expressed either as a currency or as a specified interest rate or effective yield, and the agreement must include a penalty for nonperformance that is sufficient to make performance probable. An unrecognized firm commitment designated and qualifying as the hedged item in a fair value hedge is recognized to the extent of changes in its fair value attributable to the hedged risk.

Firm commitments are generally limited to treatment as the hedged item in fair value hedges. There are two exceptions to this treatment: (1) firm commitments for which payment is fixed in a currency other than the functional currency of the entity (discussed in DH 4.6) and (2) all-in-one hedges (discussed in DH 4.5.1).

As an example, a company may enter into contracts to deliver nonfinancial assets with customers under firm commitments as part of normal business activities, but prefers not to be exposed to the risk of price variability. The company 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 and effective as a hedge, changes in its fair value are recognized on the balance sheet through earnings.

In practice, companies often do not directly hedge a nonfinancial firm commitment, and instead manage the risk it presents through other means. For example, companies that enter into a fixed-price sales contract with a customer may naturally hedge the firm commitment by immediately contracting to purchase their raw material components at a fixed price. Alternatively, companies may choose to hedge the purchase of these components. This is often easier than hedging the firm sales commitment because of the greater availability of derivative instruments for commodities than for a manufactured product.

A financial services company may enter into non-mortgage-loan firm commitments to lend at fixed interest rates to its customers (borrowers). These firm commitments expose the company to interest rate risk associated with the commitment to lend at a fixed interest rate. The financial services company may hedge the interest rate exposure via derivative instruments such as forward-rate agreements, futures, or option contracts. These instruments may be designated as hedges of the company's non-mortgage-loan commitments. Changes in the fair value of the firm commitment attributable to either interest rate risk or total changes in value (depending on the designated risk) are recognized on the balance sheet with changes in fair value recognized through earnings. Similarly, the hedging instrument is reported at fair value, with changes in value reported in earnings.

4.5.1 All-in-One Hedge

A company with a firm commitment for the purchase or sale of inventory may wish to manage the cash flow risk of changing prices prior to the purchase or sale. 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, an exception is provided in ASC 815-20-25-22 to permit a 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. But to do this, the contract must meet the definition of both a firm commitment and a derivative instrument.

The strategy may be used by companies that buy commodities for production or producers that sell commodities. For example, assume a company enters into a firm commitment, which also meets the definition of a derivative instrument, to purchase natural gas at a date on which it forecasts a need. In an all-in-one hedge, the forecasted purchase of the natural gas would be the hedged item, and the firm commitment to purchase natural gas would be the hedging instrument. Since the hedged item and the hedging instrument are the same transaction, the critical terms match and the forecasted transaction is settled with the delivery of the natural gas pursuant to the firm commitment. As such, there is an expectation of no ineffectiveness for this hedging transaction. The derivative is reported at fair value, with the offset recorded in other comprehensive income. At the time of delivery of the natural gas, the fair value, not the commitment price, is used to record the natural gas purchase. However, the balance in accumulated other comprehensive income is subsequently reclassified to earnings as the natural gas impacts earnings through its consumption or sale, which will result in the net impact on earnings equal to the fixed price under the firm commitment.

As an alternative, some companies may choose not to employ all-in-one hedging strategies, instead electing to apply the normal purchases and normal sales scope exception under ASC 815-10-15-22 to their firm commitments for the purchase of commodities like the natural gas in this example. However, the normal purchases and normal sales scope exception may be applied only to contracts that will not net settle and will result in the physical delivery of the nonfinancial asset, natural gas in this case, in the normal course of business. It is important to note that the net settlement of a contract designated as normal purchases or normal sales would call into question the classification of all similar contracts designated as normal purchases or normal sales. Therefore, while the designation of a contract under the normal purchases and normal sales scope exception avoids the administrative burden associated with hedge accounting, the application of all-in-one hedge accounting avoids the potential tainting of other, similar contracts if there is a risk that the contract may not settle by physical delivery.

4.6 Hedging Exposures to Foreign Currency

Hedging exposures to foreign currency risk is discussed more fully in DH 7. This section provides a summary of the concepts of foreign currency hedging, discusses issues that arise when hedging foreign currency transactions, and offers common strategies for hedging foreign currency exposures.

The purpose of a foreign currency hedge is to mitigate risk due to uncertainty of future changes in exchange rates. Hedge accounting is permitted for foreign currency exposures that involve:

- Unrecognized firm commitments with a financial component,
- Recognized assets or liabilities (including available-for-sale securities),
- Forecasted transactions,
- Intercompany forecasted transactions, and
- Net investments in foreign operations.

ASC 815 provides four exceptions for hedging foreign-currency-related risks by permitting:

1. Hedging of a net investment in a foreign operation (The concept of hedging assets and liabilities on a net basis is not permitted in other hedging relationships because the risk exposures of the various hedged items are dissimilar.),
2. Designation of nonderivative financial instruments denominated in a foreign currency as hedging instruments of unrecognized firm commitments and net investments in foreign operations,
3. Hedge accounting of intercompany foreign-currency-denominated transactions in consolidated financial statements, and
4. Use of intercompany foreign exchange derivatives as hedging instruments in consolidated financial statements (under defined circumstances).

Issues Unique to Foreign Currency Hedging

4.6.1 Use of Another Operating Unit as the Hedging Entity and Treasury Center Hedging

An entity hedging foreign currency risk must have exposure to the risk of changes in a currency different from its functional currency. This requirement, included in ASC

815-20-25-30, is satisfied when an operating unit executing a hedging transaction has direct exposure to the risk being hedged. For example, an operating unit holding a foreign-currency-denominated asset or liability has direct exposure to changes in value due to changes in exchange rates. ASC 815-20-25-30(a)(2) allows another member of the consolidated group that has the same functional currency as the operating unit with the foreign currency exposure to enter into a hedging instrument as a hedge of the operating unit's foreign currency risk. However, there may be no intervening operating units with a functional currency that is different from the functional currency of the hedging entity.

Because these requirements were inconsistent with existing foreign currency hedging practices and would be burdensome to implement, the Board included an exception that allows entities to use an internal derivative as a hedging instrument when certain criteria are met. ASC 815-20-25-31 permits a derivative instrument entered into with another member of a consolidated group to qualify for hedge accounting at the consolidated level only if the parent entity enters into an offsetting contract (pursuant to paragraph ASC 815-20-25-52 for the appropriate hedging relationship) with an unrelated third party to hedge the exposure it acquired from issuing the derivative instrument to the subsidiary that initiated the hedge. However, many organizations manage foreign currency risk on a centralized basis by transferring exposures assumed by various affiliates to a treasury center through internal derivative contracts. To manage this risk on a more cost-effective basis, the exposures assumed by the treasury center (i.e., through the issuance of the internal derivative contracts) historically have been offset with third parties on a net basis rather than individually by contract. Therefore, the Board also allowed the affiliate issuing the internal derivative contracts to offset the exposures arising from multiple derivative contracts on either a gross or net basis provided certain conditions are met.

See DH 7.12 for further discussion of treasury center hedging.

4.6.2 Hedging All Foreign Currency Risk

ASC 815 requires that all of the variability in the hedged item's functional-currency-equivalent cash flows of a recognized foreign-currency-denominated asset or liability be eliminated by the effect of a cash flow hedge. The guidance does not require perfect effectiveness in a foreign currency hedging relationship but does preclude the exclusion of a part of the foreign currency risk from the hedging relationship.

PwC Observation: Entities hedging foreign currency cash flow risk cannot separate exposures and hedge a portion of the total foreign currency risk. For example, a U.S. dollar functional currency entity seeking to hedge a recognized asset that will produce cash flows in both euros and British pounds cannot separate the currency risk and hedge the risk of changes in the U.S. dollar/euro rate only.

Spot versus Forward Rates: Use of Forward Exchange Contracts to Hedge Foreign Currency Exposures

4.6.3 Fair Value Hedges

Entities that have designated recognized foreign-currency-denominated monetary assets and liabilities as hedged items in a fair value foreign currency hedging relationship remeasure those items based on changes in spot exchange rates in accordance with ASC 830. However, the derivative hedging instrument is measured at fair value using the forward exchange rates. This results in different measurement bases for the hedged item (measurement based on spot rates) and for the hedging

derivative instrument (measurement based on forward rates). Therefore, gains or losses on a derivative hedging instrument in a fair value hedge of foreign exchange risk will not completely offset the losses or gains on the hedged item even when the hedging instrument appears to be perfectly effective.

Because a fixed price denominated in a currency other than an entity's functional currency adds a financial component to a firm commitment associated with a nonfinancial asset, the firm commitment would be eligible for fair value hedge accounting of the foreign currency risk. Unlike recognized assets and liabilities, either the spot rate or the forward rate could be used in recognizing the firm commitment to the extent the hedge is effective. Example 7-1 in DH 7 illustrates the application of hedge accounting in such a situation.

4.6.4 Cash Flow and Net Investment Hedges

A similar issue arises when forward exchange contracts are used to hedge the variability in foreign-currency-denominated cash flows or net investments in foreign operations. Entities are permitted to assess hedge effectiveness and measure the amount of ineffectiveness in a cash flow or net-investment hedge by using either (1) a method that is based on changes in spot exchange rates or (2) a method that is based on changes in forward exchange rates. When using the forward-exchange-rate method, the derivative hedging instrument is recorded at fair value using the forward rate and is offset, to the extent effective, by an entry to other comprehensive income (for a cash flow hedge) or cumulative translation adjustment (for a net investment hedge).

PwC Observation: Use of the spot method to measure ineffectiveness will result in volatility in earnings because changes to the fair value of the hedging instrument relating to the difference between the spot and forward prices will be recognized in income. Use of the forward method, while more complex, may result in less earnings volatility because all changes in the derivative instrument, including any periodic cash settlements, that meet the effectiveness criteria are recognized in other comprehensive income or cumulative translation adjustment.

The application of cash flow hedge accounting for foreign currency risks is similar to cash flow hedges for other risks, such as interest rate risk or market price risk. Example 7-4 in DH 7 illustrates the application of hedge accounting to a hedge of the foreign currency risk associated with the forecasted sale of equipment in a currency other than the entity's functional currency.

Examples 7-6 and 7-7 in DH 7 describe the application of hedge accounting to a hedge of a net investment in a foreign subsidiary with a forward exchange contract using the forward method and a nonderivative instrument using the spot method.

4.7 Other Areas

4.7.1 Portfolio Hedging

It is permissible to designate a group of similar assets, liabilities, or transactions as the hedged item in a fair value hedge or a cash flow hedge. In order to qualify for hedge accounting, the individual hedged items or transactions must share the "same risk exposure" for which they are designated as being hedged (e.g., risk of changes in fair value or cash flows due to changes in the benchmark interest rate).

Note that the requirements for fair value hedges of portfolios are more specific than for cash flow hedges in that there are quantitative parameters for individual items in a fair value hedge of a portfolio. ASC 815-20-55-14 provides an example of a hedged portfolio that experienced a change in fair value attributable to the hedged risk of 10 percent during an assessment period. The FASB noted that the change in fair value attributable to the hedged risk for each item in the portfolio must be within a fairly narrow range and provided 9 to 11 percent as an example of an acceptable range. It contrasted this acceptable range with a second range of 7 to 13 percent stating that the latter is inconsistent with the requirement. By narrowing the range within the two examples, the similar asset requirement makes it difficult to accomplish fair value hedging of portfolios, except in the case of highly homogeneous populations.

4.7.2 Dynamic Hedging

Dynamic hedging involves the designation of one or more assets (or one or more liabilities) and a derivative or group of derivatives whose fair value changes are expected to offset each other. When the hedge is established, it is anticipated that the hedged item or portfolio will change in price or in its components or both, requiring the preparation of a new hedge ratio or a new mix of derivatives in a rebalancing function to re-establish an expectation that the derivatives will be highly effective in offsetting changes in the hedged item or portfolio for the identified risks. The period of time between rebalancing may be anywhere from one day to several weeks.

A dynamic hedging strategy may be used in a hedging transaction associated with the overall changes in the fair value of a homogeneous portfolio of loans held for sale. It may also be used to establish a hedge related to changes in a loan portfolio's fair value due to changes in interest rates only; however, this strategy is more involved, as it requires modeling the loan population for changes due to the single hedged risk. The hedging relationship must also consider changes in the fair value due to any embedded prepayment options.

When establishing a hedge relationship, a company must perform a similar assets test. For accounting purposes, a loan portfolio must be segregated into groups of homogeneous loans. This means that each group is composed of loans so similar that changes in interest rates would change the individual fair values of loans of the group within the narrow range described in DH 4.7.1 (Portfolio Hedging). These groups are typically determined and designated daily, as new loans get originated or purchased and existing loans get sold or prepaid. Each group is typically hedged with a combination of derivatives such as interest rate swaps, forwards, futures, or options. As the hedged item changes frequently, the hedging instrument will also frequently change, typically termed *hedge rebalancing*. Hence there is a new hedge designation each time the portfolio or derivative composition changes. Effectiveness tests therefore must be completed for periods corresponding with a rebalancing, which is an event of a new hedge designation. If the hedging relationships are established daily, each day's hedge is independent of the previous day's hedge. If the retrospective effectiveness assessment performed on the previous day fails and the same test is used on the next day as a prospective assessment, the prospective assessment also fails. Hedge accounting may again be sought on the third day by satisfying a prospective test for that day. Some companies employ regression testing for a period of days within or beyond the current month as their retrospective test. Others use dollar offset for the day to determine if a given day's hedge qualifies for hedge accounting. Other statistical methods are also used to support the expectation that a hedge will be highly effective for the next designated day. See DH 8 for further discussion of effectiveness testing.

Regardless of the approach, entities should consider the consistency between the frequency and method of hedge effectiveness assessment and the hedge period. The SEC staff has commented that it would be improper to designate hedge periods that do not coincide with the frequency of rebalancing. For example, the staff would object to a documented hedge period of either monthly or quarterly when the hedge is being rebalanced on a daily or weekly basis.

4.8 What Cannot Be Hedged

ASC 815 puts restrictions on hedging and precludes certain transactions from qualifying for hedge accounting. The items included in the table below are not permitted to be hedged under the hedge accounting rules:

Instrument	Reason for Limitation
An investment accounted for by the equity method in accordance with the requirements of ASC 323	Hedge accounting for an equity-method investment conflicts with the notion underlying ASC 323, which requires an investor in common stock and corporate joint ventures to apply the equity method of accounting when the investor has the ability to exercise significant influence over the operating and financial policies of the investee. An exception applies to a net investment hedge of an equity investment in a foreign operation (see DH 7). Note that ASC 825-10-05-5 allows entities to elect to record eligible financial assets, including equity method investments, at fair value.
A noncontrolling interest in one or more consolidated subsidiaries, and 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	For reasons similar to those relating to equity method investments, the Board prohibited designation of the listed instruments as hedged items.
Transactions not impacting earnings	Transactions that do not impact earnings generally do not qualify as hedged items. Examples include equity and mezzanine instruments and other transactions reported as permanent equity, such as stock issuance costs, and dividends declared by a subsidiary to its parent. Further, (1) transactions with shareholders, such as dividend payments or projected purchases of treasury stock; (2) intercompany transactions (except for foreign-currency-denominated forecasted intercompany transactions) between entities whose financial information is included in the consolidated financial statements; and (3) forecasted stock issuances that are related to a stock option plan for which no compensation expense (based on changes in stock prices) is recognized cannot be hedged.

(continued)

Instrument	Reason for Limitation
A financial instrument meeting the definition and scope of a derivative instrument in ASC 815	<p>ASC 815 does not permit a derivative instrument to be designated as the hedged item in a hedging transaction. The FASB reasoned that special hedge accounting is not necessary if both the hedged item and the (derivative) hedging instrument are measured at fair value, with changes in fair value reported in earnings as they occur because offsetting gains and losses will be recognized in earnings together.</p> <p>Note that an instrument that meets the requirements of a derivative instrument pursuant to ASC 815 but meets the scope exception under ASC 815-10-15-22 (normal purchases and normal sales) may be designated as a hedged item in a fair value hedge if the transaction meets the requirements in ASC 815-20-25-7. Similarly, the purchase under that contract may be the hedged transaction in a cash flow hedge, if the provisions of ASC 815-20-25-15 are met.</p>

4.9 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, companies may choose to enter into “economic hedges” without electing hedge accounting. Economic hedging refers to a derivative instrument that mitigates the risk of an undesignated hedged item in a manner similar to or the same as a qualified and designated hedging transaction. 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. However, certain strategies are available to deal with the accounting outcome of an economic hedge for which the hedging instrument is reported at fair value and the hedged item is reported based on other applicable GAAP.

PwC Observation: Income Statement Classification and Disclosure ASC 815 does not provide specific guidance on the classification of gains and losses, both realized and unrealized, in the income statement. However, we believe that all of the impacts of derivative instruments associated with economic hedges should be classified within one line item in the income statement. The SEC has stated on several occasions that it would be inappropriate to “split” the impacts of derivative instruments used in economic hedges in more than one line item in the income statement and that classification should be consistent with the nature of and intent for the derivative instrument.

In addition, ASC 815-10-50 requires that entities provide an enhanced understanding of (1) how and why an entity uses derivative instruments, (2) how derivative instruments are accounted for under ASC 815, and (3) how derivative instruments affect an entity’s financial position, financial performance, and cash flows. See DH 10 for an expanded discussion of the disclosure requirements for derivative instruments. SEC registrants also are required to discuss the reasons for entering into economic hedging derivatives in Management’s Discussion and Analysis and to provide information necessary for users of the financial statements to understand the nature, intent, and significance of material positions.

Below is an example of a strategy for managing the impact of a transaction that has the characteristics of a hedge but is not designated as a qualifying hedging relationship.

4.9.1 Undesignated Hedged Item Is Reported at Fair Value

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 instrument and the unit of account to which the risk exposure pertains will offset in the income statement to the extent effective. This accounting is common for instruments such as marketable equity securities, mortgage servicing rights (assuming the fair value election is made), and other balances that are recorded at fair value under GAAP.

ASC 815-15-25-4 and ASC 825-10-15-4 provide elective options for fair value treatment for certain hybrid financial instruments and certain financial assets and liabilities, respectively. Preparers may wish to elect fair value treatment for eligible items to offset the changes in fair value of the derivative instrument serving as the economic hedge. Note that the elective options include certain conditions and limitations that must be evaluated when making an election.

Example: Company A enters into a pay-floating, receive-fixed interest rate swap with substantially the same critical terms as a fixed-rate debt instrument. The purpose of the derivative instrument is to provide an economic hedge of the changes in the fair value of the debt instrument. The company does not designate the derivative instrument as a hedging instrument.

The interest rate swap is measured and recorded at fair value under ASC 815. To match the accounting for the interest rate swap and reflect management's intent for the combined instruments, the company elects to measure the debt instrument at fair value under ASC 825-10-15-4. Gains and losses on the swap may provide a high level of offset to changes in the fair value of the debt instrument recognized in the statement of income.

Note that differences will arise in the valuation of the swap and the debt instrument because the fair value for the two instruments may vary due to inputs such as credit. The advantage of a fair value hedge is the ability to designate a specific hedged risk. For example, if the derivative instrument had been designated as a hedge of changes in the fair value of the debt due to changes in the benchmark interest rate, and assuming critical terms of the hedging and hedged instruments match and high effectiveness is achieved, then the changes in the fair value of the swap would closely match the change in the fair value of the debt attributable to changes in the benchmark interest rate.

4.10 Questions and Interpretive Responses

Nonderivative Instruments

Question No. 4-1: May an entity apply hedge accounting under ASC 815 when a *nonderivative* instrument is used to economically hedge an asset, liability, firm commitment, or forecasted purchase or sale?

PwC Interpretive Response: No, except for certain foreign currency hedge transactions. The Board limited the scope of hedge accounting to derivative instruments that meet the definition of a derivative as defined in ASC 815-10-15-83. Furthermore, the Board believes that hedge accounting generally should not be permitted for nonderivative instruments, because an application of the hedge accounting provisions of ASC 815 will often override the established GAAP measurement method for those instruments.

However, ASC 815 incorporates the provisions of ASC 830, Foreign Currency Matters, that permits the use of nonderivative instruments as hedging instruments in (1) hedges of unrecognized foreign-currency-denominated firm commitments and (2) hedges of the foreign currency exposure of a net investment in a foreign operation. ASC 815 does not override ASC 830 for the measurement approach for nonderivatives used as hedging instruments.

Use of a Component of a Derivative as a Hedging Instrument

Question No. 4-2: Can a component of a derivative qualify as a hedging instrument (e.g., can an entity designate the interest rate component of a foreign currency interest rate swap as a hedge of an asset's interest rate risk)?

PwC Interpretive Response: No. An entity must designate either *all* or a *proportion* of a derivative as the hedging instrument and cannot separate a compound derivative into components representing different risks. The proportion of the derivative must represent a percentage of the entire derivative so that the profile of risk exposures in the hedging portion is the same as that in the entire derivative. For example, 70 percent of the notional amount of the derivative can be used as a hedging instrument.

The Board decided to prohibit the bifurcation of hedging instruments into components that could be individually designated as hedging instruments because (1) ASC 815 allows a hedged financial asset or liability to be bifurcated by type of risk and (2) the Board believes it is important that the gain or loss on the derivative be an objectively determined market-based amount (to the extent possible) rather than an allocated amount of the overall gain or loss of the entire derivative. In addition, bifurcating both sides of the hedge transaction (i.e., the hedged item and the hedging instrument) would be confusing and complex.

Simultaneous Hedging of Fair Values and Cash Flows

Question No. 4-3: Does ASC 815 permit an entity to simultaneously hedge the fair value and cash flow exposures of a financial instrument?

PwC Interpretive Response: Yes. Since the hedge accounting approach in 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 should not be precluded. The Board concluded, as originally described in paragraph 423 of FAS 133, that 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, an 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.

Hedges of the Net Assets of a Discontinued Operation

Question No. 4-4: Would net assets of discontinued operations that are presented as a single line item on the balance sheet qualify as a hedged item in a fair value hedge?

PwC Interpretive Response: No. Although the net assets of a discontinued operation are presented as one line item on the balance sheet, they are considered to be a group of dissimilar assets and liabilities. ASC 815-20-25-12 requires only specific individual assets or liabilities, or groups of similar assets or liabilities to qualify as hedged items in fair value hedges. An exception to this rule is hedges of net investments in foreign operations.

Hedge of the Risk of a Transaction Not Occurring

Question No. 4-5: Can an entity apply hedge accounting to a hedge of the risk that a transaction will not occur (because, for example, the counterparty fails to fulfill its performance obligations or weather precludes an outdoor event from taking place, both of which would result in lost revenue)?

PwC Interpretive Response: No. The Board determined that hedges of the risk that a transaction will not occur are not sufficiently distinguishable from other strategic or macro hedges and, therefore, do not qualify for hedge accounting. These transactions often qualify as an insurable event, and entities may be able to purchase an insurance policy as protection against the risk that the event will not occur. The accounting for such a transaction will not be impacted by ASC 815 if the entity's insurance policy qualifies for the scope exception in ASC 815-10-15-52, which applies to certain insurance contracts.

Hedging an Interest Rate Spread

Question No. 4-6: 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 Interpretive Response: No. The Board stated that, 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.

Hedge of the Net Spread of Assets and Liabilities

Question No. 4-7: If a financial institution were to use a receive-variable, pay-fixed interest rate swap to economically hedge the spread between fixed-rate assets and the forecasted rollover of fixed-rate liabilities, would the institution be able to achieve hedge accounting by designating the swap as a hedge of *either* the assets or the forecasted rollover?

PwC Interpretive Response: Yes, a hedging relationship can be established to hedge either the fair value of the asset or the cash flow variability of the forecasted issuance of new liabilities, provided that the hedge criteria are met. The financial institution must however, select one of the approaches at the inception of the hedging relationship.

The strategy can protect the company against a change in the spread between the asset and liability, although the strategy is not a hedge of the net spread. The accounting for this strategy will vary with the type of designation. For instance, the hedge of a forecasted rollover of fixed-rate liabilities is a cash flow hedge of a forecasted transaction, and the hedge of the fair value of fixed-rate assets is a fair value hedge.

Basis Swaps

Question No. 4-8: Can an entity apply hedge accounting when an interest rate swap is used to convert the variable rate on a financial instrument to another variable rate (i.e., when the index that determines interest payments or receipts on the financial instrument is modified)?

PwC Interpretive Response: No, this transaction would not qualify for cash flow hedge accounting. ASC 815 does not permit an entity to apply hedge accounting to this type of instrument, since the variability of the net cash flows of the interest rate basis swap does not offset the variability of the cash flows associated with the financial instrument.

On the other hand, a basis swap may qualify as a hedging instrument when it is used to alter payments on both an existing asset and an existing liability with variable cash flows. In that case, the basis (e.g., prime rate or LIBOR) of the swap's pay and receive legs must be identical to the indexes of the hedged asset and liability. The pay and receive *rates* on the basis swap, however, do not have to be identical to the receive and pay rates of the hedged asset and liability, respectively. For example, if the hedged liability were at LIBOR plus 50 basis points, the receive rate on the basis swap could be LIBOR plus 200 basis points.

The 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 and measure ineffectiveness separately for each relationship.

Commodity Basis Swaps

Question No. 4-9: ASC 815-20-25-50 permits an entity to use a basis swap as a hedge of interest-bearing assets and liabilities if specified criteria are met. Would an entity be able to use a basis swap as a hedge of non-interest-bearing assets and liabilities (e.g., when an entity that has operations in both oil and natural gas desires to use a commodity basis swap to manage risk)?

PwC Interpretive Response: No. ASC 815-20-25-50 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 clearly restricts hedge accounting to interest-bearing assets and liabilities when a basis swap is involved.

Intercompany-Transaction Hedges

Question No. 4-10: Does ASC 815 permit a company to apply hedge accounting to intercompany-transactions in either the company’s consolidated financial statements or the stand-alone financial statements of the company’s subsidiary?

PwC Interpretive Response: Generally, intercompany-transactions are not eligible to be hedged items in consolidated financial statements. The Board considers hedge accounting appropriate only when there is a hedgeable risk arising from a transaction with an external party. Intercompany-transactions do not result in economic exposure to consolidated earnings. However, ASC 815-20-25-38(d) provides an exception to this rule by permitting hedge accounting for forecasted foreign-currency intercompany-transactions because there is a hedgeable exposure under the functional-currency model in ASC 830.

For purposes of a company’s subsidiary stand-alone financial statements, “intercompany” transactions may present an earnings exposure for the subsidiary when the transaction is with a unit that is external to the reporting entity. Therefore, a hedge of such an “intercompany” transaction is eligible for hedge accounting in the subsidiary’s stand-alone financial statements.

Use of Multiple Derivatives to Hedge a Single Item

Question No. 4-11: Can multiple derivatives that are entered into at the same time or at different times be designated as a hedge of the same item?

PwC Interpretive Response: Yes. 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, an 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 have been met and there is no “duplicate” hedging of the same risk.

Further, as indicated in ASC 815-20-25-88, an entity can enter into a combination option or a net written option and designate that option as a hedging instrument, provided that the option meets all of the hedge criteria.

Question No. 4-12: 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 Interpretive Response: Yes, as long as the transaction or item that is being hedged meets the respective criteria for either type of hedge. For example, an entity could (1) designate a derivative instrument (such as an interest rate swap) 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 other comprehensive income 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.

Retroactive Designation of a Hedge

Question No. 4-13: Can a derivative be designated retroactively as a hedge?

PwC Interpretive 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, an entity could retroactively identify hedged items, transactions, or methods of measuring effectiveness to achieve a desired accounting result.

Application of ASC 815 to Hedging Investment Securities Accounted for Under ASC 320

Question No. 4-14: How should the provisions of ASC 815 be applied to hedging activities involving investment securities that are accounted for under ASC 320, *Investments-Debt and Equity Securities*?

PwC Interpretive Response: The table below summarizes the provisions of ASC 815 as they apply to hedge transactions involving investment securities. DH 5 through DH 8 provide further analysis on specific hedge criteria that must be satisfied when an entity is entering into a fair value or cash flow hedge or when it is hedging foreign currency exchange rate risk.

(continued)

Summary of Application of ASC 815 to Investment Securities

Hedged Risk	Type of Hedge	Hedge Accounting Permitted?		
		Held-to-Maturity Security ⁶	Available-for-Sale Security ⁶	Trading Security ¹
Interest rate	Fair value	No	Yes ²	No
	Cash flow	No	Yes ³	No
Foreign currency	Fair value	Yes ²	Yes ²	No
	Cash flow	Yes ³	Yes ³	No
Credit ⁴	Fair value	Yes ²	Yes ²	No
	Cash flow	Yes ³	Yes ³	No
Prepayment risk ^{4, 5}	Fair value	Yes ²	Yes ²	No
	Cash flow	No	No	No

¹ A security that is classified as trading, or is fair valued in accordance with ASC 825-10-05-5, does not qualify as a hedged item under ASC 815, since the security is remeasured with the changes in fair value (for all risks) reported currently in earnings.

² Changes in the fair value of the derivative instrument are recorded in current-period earnings. The changes in the hedged security's fair value that are attributable to the risk that is being hedged are also recorded in current-period earnings.

³ Changes in the fair value (representing the effective portion) of the derivative instrument are recorded in other comprehensive income. The derivative gain or loss that is deferred in other comprehensive income is reclassified to the income statement when earnings are impacted by the variability of the hedged cash flows.

⁴ Although hedge accounting is permitted, it often will be difficult for a derivative instrument to satisfy the effectiveness criteria of ASC 815.

⁵ This represents a separate component of interest rate risk that is an embedded written option from the perspective of the holder of the security.

⁶ Careful analysis should be made if the hedged item becomes impaired.

Hedging an Equity Portfolio with a Total-Return Swap

Question No. 4-15: An entity owns a portfolio of equity securities and uses a total-return swap to eliminate the price risk in the securities and earn a LIBOR-based return. Under the terms of the swap, the entity receives a LIBOR-based return in exchange for the dividend income and any depreciation and pays any appreciation in the fair value of the equity securities. Would such a hedging relationship qualify for hedge accounting under ASC 815?

PwC Interpretive Response: No. A portfolio of equity securities would not qualify as a hedged item in either a fair value hedge or cash flow hedge, because the individual equity securities of different issuers do not have similar risk characteristics, as required by ASC 815-20-25-12(b)(1) for a fair value hedge and ASC 815-20-25-15(a)(2) for a cash flow hedge.

However, since the strategy results in an economic hedge (i.e., the swap changes the equity return into a debt-like return), the entity may be able to achieve the desired matching of the gains and losses of the hedged item and the hedging instrument by designating the equity portfolio at fair value under ASC 825-10-15-4. Such a designation should occur upon the acquisition of the securities.

(continued)

The gains and losses on the equity portfolio, as well as the losses and gains on the derivative instrument (i.e., the total-return swap), would be recorded currently in the income statement and would tend to offset each other.

In addition, the entity should consider the disclosure requirements associated with credit derivatives in ASC 815-10-50-4K as the total return swap may result in the entity providing credit protection to another party.

Determining if Foreign Currency-Denominated Cash is a Nonderivative Instrument

Question No. 4-16: Is foreign currency-denominated cash a “nonderivative financial instrument” that can be designated as a hedging instrument?

PwC Interpretive Response: Yes, in certain circumstances, and assuming the reporting entity meets all of the appropriate requirements of ASC 815 to ensure that the hedged relationship qualifies as a hedge.

The definition of a financial instrument in ASC 815-10-20 includes cash, which clearly makes foreign currency-denominated cash a nonderivative financial instrument. Nonderivative financial instruments may be designated as a foreign currency fair value hedge of an unrecognized firm commitment under ASC 815-20-25-37 or as a net investment hedge of a foreign operation under ASC 815-20-25-66. Foreign currency-denominated cash should only be used as a hedge of a net investment if an entity has a net liability position in a foreign operation. Foreign currency movements will affect an entity’s net liability position in the opposite direction from its foreign currency-denominated cash and thus the cash may be used to hedge its foreign currency exposure. Movements in an entity’s net asset position in a foreign operation attributable to changes in foreign exchange rates will be in the same direction as the foreign currency-denominated cash and thus the cash balance will not be an effective hedge.

Nonderivative financial instruments can not be designated as a hedging instrument in a foreign currency cash flow hedge or in a fair value hedge of the foreign currency exposure of a recognized asset or liability.

Applying Hedge Accounting for Tax Credits

Question No. 4-17: A company engages in activities related to the production and sale of synfuels as defined in the Internal Revenue Code. As a result, the company is eligible for a tax benefit which it receives only through a credit on its consolidated tax return (i.e., it does not receive the benefit through the direct sale of the benefit to another party). The tax credit is phased out as oil prices rise above a certain threshold. The company expects oil prices to rise and exceed the threshold, resulting in lower tax credits. The company has identified an option-based hedging strategy to offset the decrease in cash flows it will experience due to the loss of the tax credit. Assuming the hedging strategy is highly effective, is the phase out of a tax credit eligible for the designation as a hedged forecasted transaction in a cash flow hedge under the guidance of ASC 815?

PwC Interpretative Response: No, the synfuels tax credit on a consolidated tax return does not fall within one of the component cash flows specifically included as a qualifying hedged item. The synfuels tax credit is not a specifically identified cash flow, as it is only received through a reduction in the company'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) and ASC 815-20-25-15(j) for the component items of a forecasted transaction that are eligible for designation in a hedging relationship. Therefore the only potential designation available to the company is to hedge the overall changes in cash flows associated with the entire tax liability. However, such a hedging relationship will likely not qualify for hedge accounting, as the company may not find derivative instruments that would be highly effective given the multitude of risks that impact the variability in the total tax liability.

Hedging Strategy when a Subsidiary Enters into a Derivative Instrument Intended to Hedge its Parent's Interest Rate Risk Exposure

Question No. 4-18: A subsidiary entered into an interest rate swap which was designated for the purpose of the consolidated financial statements as a cash flow hedge of forecasted LIBOR-based interest payments on the parent company's variable rate debt. The swap agreement met all the criteria of hedge accounting under ASC 815. How should the parent and the subsidiary account for the interest rate swap on a consolidated and stand-alone basis, respectively?

PwC Interpretative Response: As 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. Therefore, the interest rate swap would be reported at fair value with changes in fair value recorded as a component of other comprehensive income, to the extent it is effective.

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 stand-alone financial statements at fair value with changes in fair value recorded in the income statement. 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 provided it meets the ASC 815 hedge accounting criteria. It is acceptable to have one derivative hedge two different exposures at different reporting levels. Note that special rules apply to hedges of foreign-currency exchange risk, and this conclusion would not necessarily extend to a foreign-currency hedge.

Determination of the Euribor as a Benchmark Interest Rate Risk

Question No. 4-19: In a fair value hedge or cash flow hedge of an interest bearing financial asset or liability, the designated risk being hedged may be the risk of changes in fair value attributable to changes in a benchmark interest rate. When the hedged item is a Euro-denominated instrument, may a company designate Euribor (the "Euro Interbank Offered Rate") as the benchmark interest rate?

PwC Interpretative Response: Yes, we believe Euribor would be considered a benchmark interest rate for Euro-denominated financial assets or liabilities. A benchmark interest rate is defined as “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.” The benchmark interest rate should be a risk-free rate. In some markets, government borrowing rates may serve as a benchmark. In other markets, the benchmark interest rate may be an interbank offered rate. Euribor 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. Therefore, Euribor would meet the criteria of a benchmark interest rate. Further, in ASC 815-20-55-128, a company designates 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 example does not object to Euribor being the designated benchmark interest rate in the hedging relationship.

Hedging a Portfolio of Similar Assets

Question No. 4-20: A company designates a portfolio of fixed rate loans in a fair value hedge with benchmark interest rate being the hedged risk. The company evaluated and documented at inception that the loans share the risk exposure for which they are being hedged in accordance with ASC 815-20-25-12(b)(1). Does ASC 815 require that the similar assets test be periodically updated, and if so, with what frequency?

PwC Interpretative Response: Although the criterion described in ASC 815-20-25-12(b)(1) does not appear to explicitly require an ongoing, quantitative assessment, we would expect companies to update their similar assets test at the time of the periodic assessment of hedge effectiveness (i.e., at least quarterly). However, the extent of the periodic assessment depends on the robustness and comprehensiveness of the original quantitative test, and the changes in facts and circumstances since the last quantitative test was performed.

We believe that a qualitative assessment may be sufficient to support that the conclusions reached under the quantitative analysis at inception remain valid at each reporting date. However, the original quantitative analysis should include a detailed and comprehensive analysis of how changes in the fair value of each individual loan would compare to changes in fair value of the portfolio considering all reasonable expectations of interest rate moves or other factors over the life of the loan portfolio.

When facts and circumstances regarding the portfolio, its sensitivity to interest rates, or any key assumptions used in the original quantitative analysis change, we expect companies to reconsider their similar assets test. When changes are significant such that the original conclusion is no longer valid without additional support, we would insist a new comprehensive quantitative analysis be performed at that time.

Hedging of Mortgage Servicing Rights

Question No. 4-21: Given the high volatility of MSR fair values due to changes in interest rates, there has been increased emphasis placed on hedging the value of MSRs in the mortgage banking industry. How does one go about hedging mortgage servicing rights?

PwC Interpretative Response: ASC 815 and hedging of MSRs are among the most complex issues encountered by engagement teams in the mortgage industry. Mortgage bankers use a wide variety of strategies and instruments in managing the risk of MSRs. Instruments typically used include interest rate floors, caps, swaps, swaptions, MBS forwards, U.S. Treasury futures, Eurodollar futures and options on futures. With significant potential earnings volatility related to MSRs and their related hedge positions, some mortgage companies may apply ASC 815 hedge accounting in managing their exposure to changes in the fair value if their MSR are not measured at fair value under ASC 860.

Pursuant to ASC 860-50-35, a mortgage banking enterprise may elect to subsequently measure servicing assets and servicing liabilities at fair value with changes in fair value reported in the period in which they occur. By electing the Fair Value Measurement Method, the mortgage banking enterprise may simplify its objective for hedge accounting because the Fair Value Measurement Method requires income statement recognition of the changes in fair value of those servicing assets and servicing liabilities, which will potentially offset the changes in fair value of the derivative instruments in the same accounting period without designating formal ASC 815 hedging relationships. Due to the complexities of ASC 815 hedging criteria, many mortgage banking enterprises may have economically hedged the risks of servicing assets and servicing liabilities using Trading securities.

If a mortgage banking enterprise has not elected to employ the Fair Value Measurement Method but rather has selected the Amortization Method but does not meet the criteria for hedge accounting (as more fully described below), the derivatives used to hedge MSRs are marked-to-market through earnings with any changes in the value of the MSRs subject to LOCOM (Lower Of Cost Or Market value) accounting. This mismatch in accounting treatment results in possible timing differences between earnings recognition of gains and losses on the MSRs and the financial derivatives used to risk manage them.

Cash flow hedging

Most mortgage companies do not apply cash flow hedge accounting to MSRs, but some designate the HFS portfolios in qualifying cash flow hedging relationships. If a mortgage banking enterprise elects a cash flow hedge approach, the effective portion of the gain or loss of the hedging derivative is recorded to Other Comprehensive Income (OCI) and released to earnings when the hedged item or forecasted transaction affects earnings. The ineffective portion of a cash flow hedge, or hedge gains and losses in excess of hedged item gains or losses, is recognized in current period earnings.

(continued)

Fair value hedging

Where the Fair Value Measurement Method has not been selected and the Amortization Method is being employed, most mortgage companies that apply hedge accounting for MSRs designate them in qualifying fair value hedging relationships. As such, if the criteria for fair value hedge accounting as set forth in ASC 815 are met, the change in value of the hedged item may be recognized in earnings concurrently with the corresponding change in value of the derivatives. The difference between the gains or losses of the hedging derivative and the hedged item are defined to be hedge ineffectiveness. This eliminates much of the earnings volatility caused by the potential timing differences expected to occur without applying hedge accounting.

Within the framework of a fair value hedge, the guidance allows a company to hedge the change in fair value attributable to the following risks: (1) the risk of changes in the overall fair value of the entire hedged item, (2) the risk of changes in its fair value attributable to changes in a designated benchmark interest rate (referred to as interest rate risk), (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), or (4) the risk of changes in its fair value attributable to both changes in the obligor's creditworthiness and changes in the spread over the benchmark interest rate with respect to the hedged item's credit sector at inception of the hedge (referred to as credit risk).

Most mortgage banking enterprises have designated either (1) or (2) above as the hedged risk. If an entity assumes high effectiveness when hedging the change in overall fair value, the entire change in fair value of the hedged item is recognized in current period earnings concurrently with the change in value of the hedging derivative. Assuming high effectiveness when hedging the change in a benchmark interest rate (i.e., LIBOR), the change in value of the hedged item due to the change in the benchmark interest rate is recognized in current period earnings concurrently with the change in value of the hedging derivative. When hedging interest rate risk (under the amortization method), the difference between the change in overall fair value and the change in value due to the change in the benchmark interest rate is subject to possible recognition in accordance with the impairment test, which is applied after the application of ASC 815.

Chapter 5: Fair Value Hedges

Executive Takeaway

- A fair value hedge is a hedge of an exposure to either overall changes in the fair value or changes in fair value attributable to a particular risk of a qualified hedged item.
- The application of hedge accounting for fair value hedges includes careful consideration of the eligibility of the designated hedging instrument and the designated hedged item.
- Assessing hedge effectiveness and measuring the hedge ineffectiveness associated with the designated hedging relationship are required to establish and continue hedge accounting throughout a hedging relationship.
- Detailed, comprehensive documentation of a designated fair value hedging relationship should be established at the inception of the hedging relationship.

5.1 Introduction and Scope

A fair value hedge is a hedge of an exposure to either overall changes in the fair value or changes in fair value attributable to a particular risk of a qualified hedged item. Some common examples of fair value hedges are:

- The use of an interest rate swap to economically change nonprepayable (i.e., noncallable) fixed-rate debt into variable-rate debt
- The use of futures contracts to hedge the fair value of inventory (e.g., copper and other types of commodities)
- The use of a forward contract to hedge a firm commitment to buy or sell inventory
- The use of purchased options to hedge available-for-sale securities

A qualified hedged item could be an asset, a liability, an unrecognized firm commitment or an identified portion of any of the aforementioned provided it meets the eligibility criteria.

5.2 General Qualifying Criteria for Fair Value Hedges

5.2.1 Hedge Designation, Documentation, and Risk Management

The documentation requirements associated with hedge accounting under ASC 815 are distinguishing characteristics of this guidance compared with others. These requirements add a layer of difficulty and compliance risk associated with qualifying for hedge accounting. Designated hedging relationships qualify for fair value hedge accounting if they meet all of the following general criteria specified in ASC 815-20-25.

As stated in ASC 815-20-25-3(b) and 25-3(c), formal documentation of the hedging relationship at hedge inception is required for fair value hedges.

a. Documentation requirements applicable to fair value hedges:

- 1. The hedging relationship.**
- 2. The entity's risk management objective and strategy for undertaking the hedge, including identification of all of the following:**
 - i. The hedging instrument.**
 - ii. The hedged item or transaction.**
 - iii. The nature of the risk being hedged.**
 - iv. The method that will be used to retrospectively and prospectively assess the hedging instrument's effectiveness in offsetting the exposure to changes in the hedged item's fair value (if a fair value hedge) or hedged transaction's variability in cash flows (if a cash flow hedge) attributable to the hedged risk. There shall be a reasonable basis for how the entity plans to assess the hedging instrument's effectiveness.**
 - v. The method that will be used to measure hedge ineffectiveness (including those situations in which the change in fair value method as described in paragraphs 815-30-35-31 through 35-32 will be used).**

b. Documentation requirements applicable to fair value hedges only:

- 1. For a fair value hedge of a firm commitment, a reasonable method for recognizing in earnings the asset or liability representing the gain or loss on the hedged firm commitment.**

ASC 815 prescribes that an entity must designate all or a portion of a derivative or a group of derivatives as the hedging instrument. The portion of the derivative must be expressed as a percentage of the *entire* derivative so that the profile of risk exposures in the hedging portion of the derivative will be the same as that for the entire derivative. For example, if an entity were to have a ten-year interest rate swap with a notional amount of \$500 million, it could designate 20 percent of the swap as a hedge of \$100 million ten-year, fixed-rate debt and designate the remaining 80 percent of the swap as a hedge of another \$400 million ten-year, fixed-rate debt, so long as all of the other qualifying criteria are satisfied. Also note that the remaining 80 percent 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.

Bifurcating a derivative into components representing different risks so that the components can be designated as a hedging instrument is not permitted. For example, if an entity were to combine a cross-currency swap and an interest rate swap in one derivative (e.g., if one party were to receive a fixed amount of foreign currency and pay a variable amount denominated in U.S. dollars), the entity would not be permitted to bifurcate the interest-rate-swap component in order to solely hedge the interest rate risk of a hedged item. However, an entity is allowed to designate a cross-currency swap as a fair value hedge of both the interest rate and foreign-currency risk in foreign-currency-denominated debt. Foreign-currency hedges are discussed in DH 7.

5.2.2 High Effectiveness

As stated in ASC 815-20-25, a qualifying hedging relationship is required to possess the following economic characteristics:

- **To qualify for hedge accounting, the hedging relationship, both at inception of the hedge and on an ongoing basis, shall be expected to be highly effective in achieving [...] offsetting changes in fair value attributable to the hedged risk during the period that the hedge is designated.¹**
- **If the hedging instrument (such as an at-the-money option contract) provides only one-sided offset of the hedged risk, [...] the increases (or decreases) in the fair value of the hedging instrument are expected to be highly effective in offsetting the decreases (or increases) in the fair value of the hedged item.²**
- **An entity shall use the effectiveness assessment method defined at hedge inception consistently throughout the hedge period.³**
- **All assessments of effectiveness shall be consistent with the risk management strategy for that particular hedging relationship.⁴**

¹ Reference: ASC 815-20-25-75.

² Reference: ASC 815-20-25-76.

³ Reference: ASC 815-20-25-80.

⁴ Reference: ASC 815-20-25-80.

The high-effectiveness requirement is intended to preclude the application of hedge accounting to economically ineffective hedging instruments. The *high effectiveness* expectation requirement allows entities some flexibility in how they assess effectiveness of the hedging relationship. Refer to DH 8 for discussion of hedge effectiveness.

Hedge effectiveness must be evaluated by the type of risk that is being hedged (e.g., interest rate risk, credit risk, foreign-currency risk, or the risk of changes in the overall fair value). Accordingly, the guidance limits the recognition of a change in the fair value of a financial hedged item to the change that is attributable to the risk that is being hedged. This methodology compares the derivative results with the effects on fair value from the type of risk hedged and not the entire item, unless the overall change in fair value (i.e., 100 percent of the risk) is being hedged. For nonfinancial items, generally the hedged risk must be the risk of changes in the price of the entire hedged item.

5.2.3 Written Options as Hedging Instruments

Written options must meet the criteria described in ASC 815-20-25-94 in order to qualify as hedging instruments:

If a written option is designated as hedging a recognized asset or liability or an unrecognized firm commitment, the combination of the hedged item and the written option provides 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.⁵

The written option test in the preceding paragraph shall be applied only at inception the hedging relationship and is met if all possible percentage favorable changes in the underlying (from zero percent to 100 percent) would provide at least as much gain as the loss that would be incurred from an unfavorable change in the underlying of the same percentage.⁶

A combination of options (for example, an interest rate collar) entered into contemporaneously shall be considered a written option if either at inception or over the life of the contracts a net premium is received in cash or as a favorable rate or other term. Furthermore, a derivative instrument that results from combining a written option and any other non-option derivative shall be considered a written option.⁷

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 at inception of the contract. For example, a written call option would provide 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. Due to the unlimited loss potential, but limited possible gains associated with written options,

⁵ Reference: ASC 815-20-25-94.

⁶ Reference: ASC 815-20-25-95.

⁷ Reference: ASC 815-20-25-88.

and thus the potential that an entity may be in a less desirable position when hedging with a written option, the FASB was concerned with allowing them to be used as hedging instruments. In other words, written options often have the potential to have the opposite effect of what a hedge is intended to accomplish.

However, there are circumstances in which a written option may be a more cost effective strategy for entities, for example when a written option is used to hedge the call option feature in fixed-rate debt, rather than issuing fixed-rate debt that is not callable. Written options are permitted to hedge recognized assets, liabilities or unrecognized firm commitments, provided the “written option test” is satisfied. That test encompasses ensuring that, when considering the written option in combination with the hedged item, the “upside” potential (or positive cash flows) is equal to or greater than the “downside” potential (or negative cash flows).

Hedging strategies can include various different combinations of instruments, for example forward contracts with written options, swaps with written caps, or combinations of one or more written and purchased options. Entities considering using a combination of instruments that include a written option as a hedging derivative, should carefully 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.

Written-Option Test Considerations

ASC 815-20-25-96 allows an entity to exclude the time value of a written option from the written-option test, provided that in defining how hedge effectiveness will be assessed, the entity specifies that it will base its assessment only on the changes in the option’s intrinsic value. This would result in the time value of the written option being excluded from the Company’s hedge effectiveness assessment, which is provided for in ASC 815-20-25-82(a). Excluding time value from the hedge effectiveness assessment will result in changes in time value impacting current earnings.

The guidance also provides that the written-option test need not be applied throughout the entire term of the hedging relationship but rather requires the special test to be performed only at inception of the designated hedging relationship.

New Assessment Under the Written Option Test Required With the Creation of a New Collar and Hedging Instrument

The determination of whether a combination of options is considered a net written option depends in part on whether strike prices and notional amounts of the options remain constant, as discussed in ASC 815-20-25-88 through 25-93.

Upon re-designation of options, a new assessment of whether a collar is a net purchased option or a net written option should be performed in assessing the combination of options. The new assessment is based upon their current fair values. For example, a Company disbanded one of its collars by disposing the original purchased put option contract and purchasing a new put option contract. The Company would combine the written call option contract currently in its portfolio (i.e., the call option in the previous collar that was not disposed and remains unchanged) with the put option recently purchased to create a new collar and a new hedging instrument. Therefore, the Company needs to reconsider the written call option currently in its portfolio when making the assessment of whether the combination of options (the new collar) is a net written option or a net purchased option. For

example, if the test is performed based on overall fair value and the fair value of the written option is greater than the fair value of the purchased option, the contract is considered a net written option. The Company would need to consider the net premium received or paid under the terms of the new collar (combinations of options) designated as a new hedging instrument.

Impact of Different Option Notification Dates when Applying the Special Written Option Test

Assume a Company is hedging fixed rate callable debt with a receive fixed pay floating swap that is cancellable at the counterparty's option.

When all of the critical terms of an embedded call in the hedged item option and a swap cancellation option match, including notification dates, a company may expect the economic gain or loss from each to perfectly offset each other. Each party, have options with identical terms, would be expected to behave in a similar manner under the same interest rate environment and decide whether or not to exercise their option at the same time. Thus the fair values of each option should move to the same extent in opposite directions and the special written option test in ASC 815-20-25-94 through 25-95 should be met.

However, when the options have different notification dates, the company cannot expect their economic gain or loss to perfectly offset each other.

Therefore, in assessing whether a written option is an eligible hedging instrument in a hedging relationship where the notification dates differ, the requirements specified in ASC 815-20-25-94 through 25-95 will only be met if the notification dates of the written option hedging instrument are the same or earlier than the notification date of the embedded purchased option in the hedged item. If that were not the case, then there would be a possibility where the combination or the fair values of the hedging instrument and the hedged item would not provide as much potential for gains as losses.

5.2.3.1 Covered Calls

Because of the criterion described above, hedge accounting is not permitted for "covered call" strategies. In writing a covered call option, an entity provides a counterparty with the option of purchasing an underlying (that the entity owns) at a certain strike price. In many cases, the entity may then purchase an option contract to buy the same underlying at a higher strike price. Many entities enter into this type of structure to generate fee income or to sell some, but not all, of the upside potential of the securities that they own. Often, the net written option in this situation is not designated as a hedging instrument.

For example, assume that an entity owns 1,000 shares of ABC Company's common stock, at a fair value of \$100 per share, and enters into the following option transactions:

	Strike Price	Premium
Written call option (1,000 shares)	\$100	\$5 received
Purchased call option (1,000 shares)	110	3 paid
	Net	\$2 received

The combination of the two options results in a net written option because of the net premium received. Assume that the stock price either (1) increases by 60 percent or (2) decreases by 60 percent. The entity's gains and losses (including the net premium received) for the combined position of the security and the two options would be as follows:

	60 Percent Increase in Underlying ^a	60 Percent Decrease in Underlying ^a
Net premium received for time value	\$ 2 ^b	\$ 2 ^b
Gain on purchased call (\$160 – \$110)	50	N/A
Loss on written call (\$160 – \$100)	(60)	N/A
Gain on security (\$160 – \$100)	60	N/A
Loss on security (\$100 – \$40)	N/A	(60)
Net gain/(loss)	\$52	\$(58)

^a The written-option test requires that the entity consider the effect that *all* possible changes in the underlying (both positive and negative changes) may have on the combined instrument. For the sake of simplicity, this example shows only two such changes.

^b ASC 815-20-25-96 allows an entity to exclude the time value of a written option from the written-option test, provided that in defining how hedge effectiveness will be assessed, the entity specifies that it will base its assessment only on the changes in the option's intrinsic value.

Under this strategy, the net written option does not qualify for hedge accounting because the potential gain is less than the potential loss. Although under certain circumstances an entity that has combined two options might be able to satisfy the requirement that the hedge provide as much potential for gains as it does for losses, 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.

5.2.3.2 Callable Debt

When a net written option hedges an identical purchased option that is embedded in a financial instrument, it may qualify as a hedging instrument. For example, an entity may issue callable debt and, at the same time, write a call option with terms that are identical to those of the purchased call option that is embedded in the debt. In this situation, the changes in the fair value of the embedded purchased call option on the debt (i.e., the hedged item) and the written option (i.e., the hedging instrument) may offset each other and may meet the criteria specified in ASC 815-20-25-94 through 25-95.

5.2.4 Nonderivative (or “Cash”) Instruments as Hedging Instruments

A cash instrument (i.e., a nonderivative financial instrument) generally cannot be designated as a hedging instrument because it does not meet the definition of a derivative instrument (i.e., it requires an initial net investment equal to the notional or contract amount). Although entities use nonderivative instruments as economic hedges, the Board decided to prohibit special “hedge accounting” treatment for such relationships, stating that such accounting “...would add complexity and delay issuing guidance on accounting for derivative instruments. The Board therefore decided to limit hedge accounting to derivatives.”

An exception to this general rule established in ASC 815-20-25-71 is provided for certain foreign-currency hedging relationships. Entities are permitted to designate cash instruments that are denominated in a foreign currency as hedges of (1) foreign-currency exposures of unrecognized firm commitments and (2) net investments in foreign operations. Special accounting, however, is not permitted for cash instruments that hedge *forecasted* foreign-currency transactions. Refer to DH 7 for further discussion of foreign-currency hedges.

5.3 Qualifying Criteria Specific to Fair Value Hedges

Hedge accounting may be applied to fair value hedging relationships when they fulfill the general qualifying criteria discussed in DH 5.2, as well as the criteria specific to the hedged item as discussed below.

5.3.1 Similar Assets

The eligibility criteria for hedged items that comprise multiple items and specific to fair value hedges are presented as follows:

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. [...] An entity may use different stratification criteria for the purposes of Topic 860 impairment testing and for the purpose of grouping similar assets to be designated as a hedged portfolio in a fair value hedge.⁸

That is, 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 this provision.⁹ In aggregating loans in a portfolio to be hedged, an entity may choose to consider some of the following characteristics, as appropriate: loan type, loan size, nature and location of collateral, interest rate type (fixed or variable) and the coupon interest rate (if fixed), scheduled maturity, prepayment history of the loans (if seasoned), and expected prepayment performance in varying interest rate scenarios.¹⁰

Consistent with the Board's view that macro hedging should be prohibited, 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

⁸ Reference: ASC 815-20-25-12.

⁹ Reference: ASC 815-20-55-14.

¹⁰ Reference: ASC 815-20-55-15.

for which they are being hedged. The Board interprets the concept of *similar* assets or liabilities very narrowly (i.e., the fair value of each individual item in the portfolio must be expected to change proportionately to the change in the entire portfolio). For example, when the changes in the fair value of the hedged portfolio that are attributable to the hedged risk alter that portfolio's fair value by 10 percent 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.

The above criterion, for example, would preclude hedge accounting when S&P 500 futures contracts are used to hedge a portfolio of equity securities that is (1) similar or identical to and (2) in the same proportion as the securities underlying the S&P 500 contracts. The hedge would not qualify for this accounting because none of the individual equity securities in the S&P 500 is expected to increase or decrease by the similar percentage as the entire portfolio. Further, equity securities that are issued by any two companies, even two companies in the same industry, would not likely qualify as *similar* assets because even though they both share the same industry risk exposure, the equity-risk characteristics of each entity would be unique to that entity, and therefore, the fair value of each equity security would not be expected to change in the same proportion.

The Board's narrow definition of similar assets presents a challenge for those entities wishing to hedge mortgage servicing rights. Accordingly, ASC 815's transition provisions granted entities a one-time opportunity, upon their initial adoption, to restratify their servicing assets so that the new individual strata will comply with the requirements regarding what comprises a portfolio of similar assets that could be designated as the hedged item. However, many entities continued to struggle with hedging servicing assets and therefore, the Board subsequently issued ASC 860-50, which permits entities to elect to measure servicing assets or servicing liabilities at fair value at each reporting date and report changes in fair value in earnings in the period in which the changes occur, referred to as the Fair Value measurement method. Thus entities may alternatively elect to account for certain servicing assets and liabilities under the Fair Value measurement method and enter into economic hedges rather than designate fair value hedges under ASC 815. Refer to DH 11 for discussion of transition provisions.

PwC Observation: ASC 815-20-25-12(b)(1) describes the criterion that must be met to support whether a portfolio of similar assets or liabilities may be designated in qualifying fair value hedging relationships. A rigorous, qualitative and quantitative assessment must be performed at the inception of the hedging relationship in order to document that the portfolio of assets or liabilities is eligible for designation as the hedged item in a fair value hedging relationship.

General practice is for companies to update their similar assets test at the time of periodic assessment of effectiveness (e.g., at least quarterly), such as a qualitative assessment. And, if this assessment indicated a change may be required, a quantitative assessment should be performed. However, there is no specific requirement within ASC 815 requiring that these criteria be re-documented as part of this assessment.

5.3.2 Hedging a Portion of a Hedged Item

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:
 - a. 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.
 - b. 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 the first two years of a four-year debt instrument).

Although ASC 815-20-25-12 allows the hedged item in a fair value hedging relationship to be one or more selected cash flows of a debt instrument, it should not be construed as permitting what is often referred to as **partial term** hedging. Under a partial term hedging strategy, an interest rate swap with a term of say two years is 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.

ASC 815-20-55-8 states that if selected interest payments of a fixed-rate debt instrument are designated in a fair value hedge, those payments should be treated for hedge accounting purposes as if they were zero coupon bonds. Thus, the derivative used in the hedging relationship must be effective in hedging the changes in fair value of a zero-coupon bond (or bonds) that corresponds to the timing and amount of each individual interest payment. A conventional interest rate swap would be unlikely to be highly effective in hedging these “zero-coupon bonds.” ASC 815-10-25-4 emphasizes that the hedge accounting concepts in ASC 815 are inconsistent with synthetic instrument accounting, which is not permitted under ASC 815.

5.3.3 Other Eligible Hedged Items

ASC 815-20-25-12(b)(2)(iii-iv) also indicates that a hedged item may be:

- iii. **A put option or a call option (including an interest rate or price cap or an interest rate or price floor) embedded in an existing asset or liability that is not an embedded derivative accounted for separately pursuant to ASC 815-15-25-1.**
- iv. **The residual value in a lessor’s net investment in a direct financing or sales-type lease.**

ASC 815-20-25-43(c)(1) also states if the entire asset or liability is an instrument with variable cash flows, 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.

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). An 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 as only derivatives may be designated as hedging instruments with certain exceptions as discussed in DH 5.2.4 above.

See DH 3 for a discussion of certain features of leases that may meet the definition of a derivative and thus need to be bifurcated from the lease agreement and accounted for individually.

5.3.4 Definition of a Firm Commitment

ASC 815 requires that the designated hedged item in a fair value hedge be a recognized asset or liability or an unrecognized firm commitment. The Board believes that an unrecognized asset or liability that does not embody a firm commitment should not be eligible for fair value hedge accounting, because to do so would result in the recognition of a portion of it through the application of the hedge accounting model (i.e., the subsequent changes in its fair value). The Board believes that the recognition of such items in the financial statements should be based on the conceptual and practical merits of the individual items and not merely the by-product of their designation in a hedging relationship.

While the Board acknowledges that allowing unrecognized firm commitments to be the subject of a fair value hedging relationship may be considered inconsistent with its conclusions for other unrecognized assets and liabilities, it believes that its definition is sufficiently restrictive to justify the application of hedge accounting. A firm commitment is defined in the ASC 815-20-20 Glossary as follows:

An agreement with an unrelated party, binding on both parties and usually legally enforceable, with the following characteristics:

- a. The agreement specifies all significant terms, including the quantity to be exchanged, the fixed price, and the timing of the transaction. The fixed price may be expressed as a specified amount of an entity's functional currency or of a foreign currency. It also may be expressed as a specified interest rate or specified effective yield. The binding provisions of an agreement are regarded to include those legal rights and obligations codified in the laws to which such an agreement is subject. A price that varies with the market price of the item that is the subject of the firm commitment cannot qualify as a fixed price. For example, a price that is specified in the terms of ounces of gold would not be a fixed price if the market price of the item to be purchased or sold under the firm commitment varied with the price of gold.**
- b. The agreement includes a disincentive for nonperformance that is sufficiently large to make performance probable. In the legal jurisdiction that governs the agreement, the existence of statutory rights to pursue remedies for default equivalent to the damages suffered by the nondefaulting party, in and of itself, represents a sufficiently large disincentive for nonperformance to make performance probable for purposes of applying the definition of a firm commitment.**

The definition of a firm commitment requires that the fixed price be specified in terms of a currency (or an interest rate). A contract with the pricing set by reference to an index or specified in terms of a fixed number of units of an asset other than currency, such as ounces of gold, will not qualify as a firm commitment.

5.3.5 Earnings Exposure

ASC 815-20-25-12(c) addresses earnings exposure as follows:

The hedged item presents an exposure to changes in fair value attributable to the hedged risk that could affect reported earnings. The reference to affecting reported earnings does not apply to an entity that does not report earnings as a separate caption in a statement of financial performance, such as a not-for-profit organization (NFP), as discussed in ASC 815-30-15-2 through 15-3.

The Board considers hedge accounting to be 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 the ASC 815, including fair value, cash flow, and foreign-currency hedges.

The earnings-exposure criterion specifically precludes hedge accounting for derivatives that are used to hedge (1) transactions with shareholders, such as dividend payments or projected purchases of treasury stock; (2) intercompany transactions (except for foreign-currency-denominated forecasted intercompany transactions) between entities whose financial information is included in the consolidated financial statements; and (3) forecasted stock issuances that are related to a stock option plan for which no compensation expense (based on changes in stock prices) is recognized. 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 for purposes of complying with ASC 815.

5.3.6 No Remeasurement for Changes in Fair Value

ASC 815-20-25-43(c)(3) states that the following shall not be designated as hedged item or transaction:

An asset or liability that is remeasured with the changes in fair value attributable to the hedged risk reported currently in earnings shall not be designated as a hedged item or transaction in a fair value hedge.

ASC 815 does not require special accounting for the hedged items referred to above 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. Any ineffectiveness from the hedging relationship is already recorded in the income statement in current-period earnings and accordingly, no special accounting is required.

5.3.7 Additional Criteria Specific to Fair Value Hedges

As stated in ASC 815-20-25-43(a-c), none of the following shall be designated as a hedged item or transaction in the respective hedges:

- 1. An investment accounted for by the equity method in accordance with the requirements indicated in ASC 323-10**

2. **A noncontrolling interest in one or 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. **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**
7. **For a held-to-maturity security, the risk of changes in its fair value attributable to interest rate risk**
8. **An asset or liability that is remeasured with the changes in fair value attributable to the hedged risk reported currently in earnings**
9. **An equity investment in a consolidated subsidiary**
10. **A firm commitment either to enter into a business combination or to acquire or dispose of a subsidiary, a non-controlling interest, or an equity method investee**
11. **An equity instrument issued by the entity and classified in stockholders' equity in the statement of financial position**
12. **Embedded options in a hybrid instrument that are required to be considered a single forward contract under paragraph 815-10-25-10 as items hedged individually in a fair value hedge in which the hedging instrument is a separate, unrelated freestanding option.**

As stated in ASC 815-20-25-12(d), the following is eligible for hedge designation as a hedged item in a fair value hedge if the following criteria are met:

- 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 ASC 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 that permits its prepayment, the designated hedged risk also may not be the risk of changes in its overall fair value.¹¹**

The Board expressed views on hedged risk associated with securities classified as held-to-maturity. The notion of hedging a security classified as held-to-maturity is inconsistent with the assertion related to the held-to-maturity classification under

¹¹ Reference: ASC 815-20-25-12(d).

ASC 320 if the risk being hedged is related to interest rate risk, since the held-to-maturity classification implies that the entity will hold the security regardless of the changes in market interest rates. However, hedging credit risk is not viewed as inconsistent since ASC 320 permits sales or transfers of a held-to-maturity security in response to significant deterioration in credit quality of the security. Accordingly, hedging credit risk of a held-to-maturity security is permitted, while hedging interest rate risk is prohibited. In addition, hedging of foreign exchange risk or the fair value of embedded prepayment options in held-to-maturity securities is permitted.

5.3.8 Hedgeable Risks—Nonfinancial Asset or Liability

ASC 815-20-25-12(e) states the following:

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.

Hedges of nonfinancial assets and liabilities are limited to hedges of the risk of changes in the price of the entire hedged item, except for nonfinancial firm commitments with financial components. The Board does not permit entities to designate as the hedged risk the market-price risk of only an ingredient or a component of a nonfinancial hedged item, because changes in the price of an ingredient or component generally do not have a predictable, separately measurable effect on the price of the nonfinancial item.

For example, the Board discussed if a derivative were used as a fair value or cash flow hedge of the exposure to changes in (1) the fair value of tires that are held in inventory or (2) the cash flows related to forecasted purchases or sales of tire inventory, the entity could not designate the market price (or changes in cash flows related to changes in the market price) of rubber as the hedged risk, even though rubber is a component of the tires.

The fair value of the tire inventory is based on the market price of tires, not the market price of rubber, even though the price of rubber may have an effect on the fair value of the tires. Had the Board decided to permit an entity to designate as the hedged risk the market price of rubber or the changes in cash flows related to changes in the market price of rubber, it would have been ignoring the other components of the price of the tires, such as steel and labor. Such a designation also could result in compliance with the effectiveness test, even though the price of rubber may not be highly correlated with the market price of tires.

The criterion in ASC 815-20-25-12(e), however, permits “cross” or “tandem” hedges. Accordingly, the use of a rubber-based derivative (e.g., a futures contract for rubber) as a fair value hedge of the tire inventory or as a cash flow hedge of the forecasted purchase or sale of tires may qualify for hedge accounting. 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. Any ineffectiveness must be included in earnings.

An example of a nonfinancial firm commitment with financial components (which is excluded from ASC 815-20-25-12(e) but included in ASC 815-20-25-12(f) below) is a fixed-price purchase order from a U.S. company to import inventory or machinery from a foreign country. The financial component of this nonfinancial firm commitment would be the obligation to pay for the inventory or machinery in a foreign currency. The foreign-currency component of the nonfinancial firm commitment would qualify as a hedged item under ASC 815-20-25-12(f)(3).

5.3.9 Hedgeable Risks—Financial Asset or Liability

ASC 815-20-25-12(f) states the following:

If the hedged item is a financial asset or liability, a recognized loan servicing right, or a nonfinancial firm commitment with financial components, the designated risk being hedged is any of the following:

- 1. The risk of changes in the overall fair value of the entire hedged item,**
- 2. The risk of changes in its fair value attributable to changes in the designated benchmark interest rate (referred to as interest rate risk),**
- 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),**
- 4. The risk of changes in its fair value attributable to both of the following (referred to as credit risk): (i) changes in the obligor's creditworthiness and (ii) changes in the spread over the benchmark interest rate with respect to the hedged item's credit sector at inception of the hedge,**
- 5. If the risk designated as being hedged is not the risk in ASC 815-20-25-12(f)(1), two or more of the other risks (interest rate risk, foreign currency exchange risk, and credit risk) may simultaneously be designated as being hedged.**

The benchmark interest rate being hedged in a hedge of interest rate risk shall be specifically identified as part of the designation and documentation at the inception of the hedging relationship. Ordinarily, an entity shall designate the same benchmark interest rate as the risk being hedged for similar hedges, consistent with paragraphs ASC 815-20-25-80 and 25-81. The use of different benchmark interest rates for similar hedges shall be rare and shall be justified.¹² In calculating the change in the hedged item's fair value attributable to changes in the benchmark interest rate (see ASC 815-20-25-12(f)(2)), the estimated cash flows used in calculating fair value must be based on all of the contractual cash flows of the entire hedged item. Excluding some of the hedged item's contractual cash flows (for example, the portion of the interest coupon in excess of the benchmark interest rate) from the calculation is not permitted.¹³

The Board's focus on the aforementioned types of risks is consistent with its belief that, currently, the largest amount of hedging activity for financial assets and liabilities

¹² Reference: ASC 815-20-25-6.

¹³ Reference: ASC 815-25-35-13.

is aimed at protecting entities against market-price risk, credit risk, foreign-exchange risk, or interest rate risk. Although entities may engage in various activities to control or reduce other kinds of economic risks, those activities do not pertain to risks that are eligible for special hedge accounting.

The Board has another reason for focusing on the four specified risks inherent in financial assets and liabilities, which is that 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 effect of price changes associated with other risks may not be as direct.

PwC Observation: As specified in criterion ASC 815-20-25-12(f) above, entities can hedge both the interest rate risk and the foreign-currency risk on the same hedged item. For example, if an entity were to have an investment in a foreign-currency-denominated, fixed-rate, available-for-sale debt security, it could either:

- Purchase 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 security in order to hedge the interest rate risk and simultaneously enter into a separate forward exchange contract in order to hedge the foreign-currency risk.

5.3.10 Prepayment Risk

Entities often seek to hedge the prepayment risk of prepayable loans or callable debt. In this regard, ASC 815 clarifies that prepayment risk per se cannot be designated as a hedged risk. However, the entity may achieve the same economic results by designating the prepayment option in a prepayable instrument as the hedged item (this also applies to situations in which the prepayment option is embedded in a held-to-maturity security). It may be difficult, however, to obtain a hedging instrument that is highly effective in offsetting the impact of prepayment risk.

Further, entities cannot hedge prepayment risk in items derived from prepayable instruments, such as mortgage servicing rights or interest-only strips, since such items do not themselves contain prepayment options. However, some companies may choose not to designate mortgage servicing rights or interest-only strips in hedging relationships given the availability of fair value options under ASC 860-50 or ASC 825-10, respectively.

When an entity hedges interest rate risk, it may not exclude the prepayment-option component of interest-rate risk, if there is any, from the assessment of hedge effectiveness. Accordingly, entities will not be able to assess effectiveness for a fixed-rate prepayable or callable debt instrument and a plain-vanilla interest rate swap without considering the implication of the prepayment option.

For example, assume an entity has issued prepayable, ten-year, fixed-rate debt of \$100 million. The debt is prepayable because it is callable by the issuer at par. The entity then enters into a noncancellable ten-year swap with a notional amount of \$100 million to convert the debt's interest rate into a variable rate. Interest rates decline significantly and the swap has a favorable fair value (gain) of \$8 million. If the debt were not prepayable at par, its fair value would be approximately \$108 million

(ignoring the effects of items other than movements in interest rates). However, since the debt is prepayable at par, its fair value generally will not equal \$108 million due to the possibility that the company might refinance the obligation at the current lower interest rates. Accordingly, the \$8 million gain on the swap would not be offset by a corresponding \$8 million loss on the debt. In other words, the swap would likely not be highly effective hedging instrument for this debt.

PwC Observation: High effectiveness would be achieved in this situation only if the interest rate swap were to contain an offsetting embedded option (i.e., a cancellable swap). In fact, if the interest rate swap had contained an offsetting embedded option and all other critical terms of the hedged item and hedging instrument had been identical, the hedging relationship may have qualified for the shortcut method of assessing hedge effectiveness. The application of the shortcut method requires careful consideration. The shortcut method is discussed in DH 8.

5.4 Accounting for Fair Value Hedges

5.4.1 Initial Measurement

In accordance with ASC 815-10-30-1, all derivative instruments shall be measured initially at fair value following the guidance in ASC 820, *Fair Value Measurements and Disclosures*. The entity shall be aware of the counterparty's creditworthiness (and changes therein) in determining the fair value of the derivative instrument.

5.4.2 Subsequent Measurement

5.4.2.1 General Rule

At each reporting period, all derivative instruments shall be remeasured at fair value calculated in accordance with ASC 820.

Gains and losses on a qualifying fair value hedge should be accounted for in accordance with ASC 815-25-35-1 and 35-2, as follows:

- a. The gain or loss on the hedging instrument shall be recognized currently in earnings.**
- 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.**

If the fair value hedge is fully effective, the gain or loss on the hedging instrument, adjusted for the component, if any, of that gain or loss that is excluded from the assessment of effectiveness under the entity's defined risk management strategy for that particular hedging relationship (as discussed in ASC 815-20-25-81 through 25-83), would exactly offset the loss or gain on the hedged item attributable to the hedged risk. Any difference that does arise would be the effect of hedge ineffectiveness, which consequently is recognized currently in earnings.

Unlike hedge accounting for cash flow hedges which permits special accounting for the derivative instrument designated in the cash flow hedging relationship (assuming all of the requirements for hedge accounting are met), hedge accounting for fair value hedges permits special accounting for the designated hedged item, assuming

all of the requirements for hedge accounting are met. 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 ineffectiveness associated with the designated fair value hedging relationship is recognized currently in earnings.

The measurement of hedge ineffectiveness for a particular fair value hedging relationship must be consistent with the risk management strategy and method of assessing hedge effectiveness that the entity documented at the inception of the hedging relationship. Any hedge ineffectiveness in a fair value hedge directly affects earnings, since both the entire change in the fair value of the derivative hedging instrument and the change in the fair value of the hedged item (attributable to the hedged risk) are both reflected in earnings for each reporting period, and the two changes may not perfectly offset each other.

An example of hedge ineffectiveness would be a case in which the entire change in the fair value of inventory does not correspond with the change in the fair value of the derivative contract, due to location and transportation costs that the entity considers in determining the fair value of the inventory but is not considered in its determination of the derivative's fair value. For example, assume that (1) an entity purchased, for \$10, an option contract to sell a commodity and (2) the option contract is designated as a fair value hedge of the entity's existing commodity inventory, with a carrying amount of \$1,000. Further, assume that (1) at the end of the first reporting period, commodity prices have fallen and (2) the change in fair value of the option (excluding the time-value component) does not match the change in fair value of the inventory, with the difference being \$2 due to changes in transportation and other costs that affected the change in fair value of the inventory, but not that of the option. The following example demonstrates the ineffectiveness of the hedge (as reflected in earnings) that is due to the option's time value and the inventory's location and transportation costs. In the following illustrative example the hedging relationship is considered highly effective, and accordingly, the measurement of ineffectiveness and resulting journal entries illustrate the application of hedge accounting.

Example of Hedge Ineffectiveness

	Income Statement Impact DR/(CR)
<u>Date of Purchase of the Option</u>	
Time value	\$ 10
Intrinsic value	<u>0</u>
Total value	<u>10</u>
<u>Next Reporting Period's End-Date</u> (also the expiration of the option)	
<i>Analysis of the option contract:</i>	
Change in time value—loss	(10)
Change in intrinsic value—gain	<u>50</u>
Net change in the value of the purchased option	<u>\$ 40</u>

(continued)

	Income Statement Impact DR/(CR)
Amount recognized in current-period earnings to record the option at its fair value of \$50 (\$10 initial value + \$40)	(40)
<i>Analysis of the adjustment in the carrying amount of the hedged inventory:</i>	
Beginning carrying amount	1,000
Basis adjustment attributable to the hedged risk (i.e., the change in the entire fair value of the inventory for the period)	(52)
Adjusted carrying amount of the hedged inventory	<u>\$ 948</u>
Amount recorded in current-period earnings to adjust the basis of the hedged item	<u>52</u>
Hedge ineffectiveness in the income statement for the period	\$ 12

The hedging relationship would be recorded in the following journal entries:

	DR	CR
<u>At Inception</u>		
1. Option (Derivative)	\$ 10	
Cash		\$ 10
To record the purchase of the option		
2. Inventory (Hedged Item)	1,000	
Cash		1,000
To record the purchase of inventory		
<u>End of Next Reporting Period</u>		
1. Earnings	52	
Inventory (Hedged Item)		52
To adjust the value of the inventory for the change in the fair value attributable to the hedged risk		
2. Option (Derivative)	40	
Earnings		40
To adjust the fair value of the option to reflect \$50 of intrinsic value at the expiration of the option		

Analysis

The net \$12 loss in the income statement is the total of (1) the \$10 change in the option's time-value component that is excluded from the assessment of effectiveness and (2) the \$2 hedge ineffectiveness between the change in the fair value of the inventory (\$52) and the change in the intrinsic value of the option contract (\$50) that was due to location and transportation costs that affected the fair value of the inventory but not that of the option. It is noteworthy that even though the hedge is highly effective in this example, volatility in earnings results from any hedge ineffectiveness, including the option's time value.

PwC Observation: 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 under ASC 815, 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.

For example, if a company were to hedge the risk of changes in the benchmark interest rate on its 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 (benchmark interest rate) and would not be adjusted for changes in fair value that are attributable to the unhedged risks (e.g., the credit risk).

5.4.2.2 Fair Value Hedge of Available-for-Sale Debt and Equity Securities

ASC 815-25-35-6 requires that for fair value hedges of available-for-sale debt or equity securities, the adjustment of the hedged item's carrying amount (for the hedged risk) be recognized in earnings, rather than in other comprehensive income, in order to offset the gain or loss on the hedging instrument. Although this approach will match the derivative instrument's gains and losses with those of the hedged item's in the income statement, entities will have to modify their information systems to address this provision, since a portion of the change in the fair value of an available-for-sale security (attributable to risks that are not hedged) will remain in other comprehensive income, while the portion attributable to the hedged risk(s) will be recorded in earnings.

For example, an entity may wish to hedge 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. For such a situation, 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 in other comprehensive income. This requirement amends the guidance in ASC 320, which required that an entity record the entire change in the fair value of available-for-sale securities (including the portion that is hedged) in other comprehensive income.

Available-for-sale debt and equity securities present unique accounting issues. As stated above, a portion of the change in the hedged item's fair value may remain in other comprehensive income. Once hedge accounting has been applied, an impairment assessment on the hedged item must be performed, including assessment for other-than-temporary-impairment. Therefore, if an other-than-temporary-impairment exists on a hedged item, there may be cumulative amounts in other comprehensive income 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.

5.4.2.3 Adjustment of the Carrying Amount of the Hedged Item

ASC 815-25-35-8 and 35-9 state:

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. 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.

When initially designating the hedging relationship and preparing the contemporaneous hedge documentation, an 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. Following are some examples:

Hedged Item	Accounting
Gains and losses on an interest-bearing debt instrument that are attributable to interest rate risk.	Amortize over the life of the instrument as a yield adjustment.
Hedge accounting adjustments on a firm commitment to purchase inventory.	Recognize in income when the purchased inventory is sold.
Hedge accounting adjustments for an operating lease with substantial cancellation penalties.	No obvious pattern of accounting for hedge accounting adjustments.

Further, to the extent that the hedged item is a portfolio of similar assets or liabilities, an 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, or (3) the hedged item is assessed for impairment.

The Board decided to permit entities to 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 was provided by the Board to simplify the accounting and record-keeping that an entity might otherwise have to undertake to track and properly account for “basis adjustments.” For an interest bearing asset or liability, an entity has two options in dealing with basis adjustments (1) defer the amortization of the hedged item’s basis adjustment or (2) immediately start amortizing any basis adjustment. (See Questions and Interpretive Responses Nos. 5-17 and 5-18.)

1. If amortization of the hedged item’s basis adjustment is deferred, a significant income statement impact may result in later periods, due to the approach of the hedged item’s maturity date, which would require the entity to “catch up” the basis of the hedged item to its par value over a shorter period.
2. 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 interest-accrual component of the changes in the swap’s fair value.

Generally, the effect of amortizing basis adjustments of financial liabilities will flow immediately to the income statement as part of interest expense. However, for

interest that is capitalized in accordance with ASC 835-20, *Capitalization of Interest*, this may not be the case. ASC 815-25-35-14 addresses how the rollout of a hedge's effects should be treated for capitalization purposes. Amounts recorded in interest expense as a result of a fair value hedge of interest rate risk should be reflected in the capitalization rate under ASC 835-20 and stated that, "Those amounts could include amortization of the adjustments of the carrying amount of the hedged liability, under ASC 815-25-35-9, if an entity elects to begin amortization of those adjustments during the period in which interest is eligible for capitalization. The ineffective portion of the fair value hedge shall not be reflected in the capitalization rate."

PwC Observation: When a financial instrument is denominated in a foreign currency and hedged using an interest rate or cross currency swap, the hedging basis adjustment should first be determined in the financial instrument's denominated currency. After accounting for the financial instrument in its denominated currency, foreign denominated amounts should be re-measured in the functional currency of the company in accordance with ASC 815-25-35-18.

5.4.2.4 Impairment of Hedged Item

As stated above, fair value hedge accounting requires the carrying amount of a hedged item to be adjusted for changes in fair value attributable to the hedged risk.

ASC 815-25-35-10 states an asset or liability that has been designated as being hedged and accounted for pursuant to ASC 815-25 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 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 ASC 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 any impairment assessments to the hedged asset or liability.

Interaction With Loan Impairment

The measurement of impairment under ASC 310-10-35 is implicitly affected by hedge accounting, by requiring the present value of expected future cash flows to be discounted by the new effective rate based on the adjusted recorded investment in a hedged loan,¹⁴ not the original effective rate.

ASC 310-10-35-31 requires that, when the recorded investment 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 recorded investment. The adjustment under fair value hedge accounting of the loan's carrying amount for changes in fair value attributable to the hedged risk shall be considered to be an adjustment of the loan's recorded investment. As discussed in that paragraph, the loan's original effective interest rate becomes irrelevant once the recorded amount of the loan is adjusted for any changes in its fair value. Because ASC 815-25-35-10 requires that the loan's carrying amount be adjusted for hedge

¹⁴ Reference: ASC 815-25-35-11.

accounting before the impairment requirements of ASC 310-10 are applied, this Subtopic implicitly supports using the new effective rate and the adjusted recorded investment.¹⁵

5.4.3 Example of Accounting for a Fair Value Hedge

The following example illustrates the concepts of “hedge ineffectiveness” and “hedged item basis adjustments,” as well as the journal entries that are necessary when fair value hedge accounting is applied.

On October 1, 20X1, a Company has one million ounces of silver in its inventory. The silver is recorded at an average historical cost of \$5.00 per ounce (\$5,000,000 total value). To protect the inventory from a decline in silver prices, the Company hedges its position by selling 200 silver futures contracts on the New York Mercantile Exchange (NYMEX). Each contract is for 5,000 troy ounces of silver priced at \$5.55 per ounce. The futures contracts mature in March 20X2, which is the month that the Company has scheduled for the delivery of the silver to its customer at what will then be the NYMEX spot price plus a spread of \$0.05 per ounce for location difference to the delivery point.¹⁶

The Company designates the futures contracts as a fair value hedge of its silver inventory (i.e., it is hedging changes in the inventory’s fair value, not changes in anticipated cash flows from the sale planned for March). Based on historical data, the Company determines that changes in the fair value of the silver contracts will be highly effective in offsetting changes in the fair value of the silver inventory only if the spot-forward difference is excluded from the assessment of hedge effectiveness. Accordingly, the Company will assess effectiveness based on changes in spot prices in accordance with ASC 815-20-25-82(d).

PwC Observation: ASC 815-20-25-82(d) permits entities to exclude changes in the fair value of futures contracts related to changes in the difference between the spot price and forward price of the futures contracts from effectiveness assessments. Thus, in assessing effectiveness, entities may choose to consider changes in the futures’ fair value that are attributable only to changes in spot prices from one reporting period to the next. In using this approach, however, some volatility in earnings would still result, since the excluded portion of the change in fair value of the futures contracts must be included in earnings as it occurs.

As shown in the table below, on December 31, 20X1 (the Company’s fiscal year-end) the price of silver futures that are scheduled for delivery in March, 20X2 falls from \$5.55 to \$5.40 per ounce, and the spot price falls from \$5.40 to \$5.30 per ounce. Silver prices also continue to fall during the first quarter of 20X2, as shown below.

On March 20, 20X2, the Company closes out its futures contracts. On that same date, the Company also sells one million troy ounces of silver to its customer for \$5.30 per ounce (NYMEX spot price of \$5.25 plus the agreed \$0.05 location difference).

¹⁵ Reference: ASC 815-25-35-11.

¹⁶ The effects of income taxes have been ignored in this example, for the sake of simplicity.

A summary of the silver spot and futures prices and transportation costs is as follows:

Date	Silver Prices (Per Ounce)		
	Spot Price	Futures Price (for Delivery on March 20, 20X2)	Basis Spread between Inventory Location and New York City
October 1, 20X1	\$5.40	\$5.55	\$0.05
December 31, 20X1	5.30	5.40	0.04
March 20, 20X2	5.25	5.25	0.05

A summary of the hedge's effectiveness, as calculated using the method based on changes in spot rates on a dollar-offset basis, is as follows:

Date	Change in Fair Value of Futures Contracts Gain/(Loss)	Change in Fair Value of Futures Contracts Due to Changes in Silver Spot Prices Gain/(Loss)	Change in Fair Value of Inventory Gain/(Loss)	Effectiveness Ratio	
				Method Based on Changes in Spot Prices	Method Based on Changes in Futures Prices
12/31/X1	\$150,000 ¹	\$100,000 ³	\$(110,000) ⁵	0.91	1.36
03/20/X2	150,000 ²	50,000 ⁴	(40,000) ⁶	1.25	3.75

¹ Calculated as \$5.55 – \$5.40 per ounce x 1 million ounces.

² Calculated as \$5.40 – \$5.25 per ounce x 1 million ounces.

³ Calculated as \$5.40 – \$5.30 per ounce x 1 million ounces.

⁴ Calculated as \$5.30 – \$5.25 per ounce x 1 million ounces.

⁵ Calculated as \$5,450,000 – \$5,340,000 [((\$5.40 + \$0.05 basis spread) x 1 million ounces) less ((\$5.30 + \$0.04 basis spread) x 1 million)].

⁶ Calculated as \$5,340,000 – \$5,300,000 [((\$5.30 + \$0.04 basis spread) x 1 million ounces) less ((\$5.25 + \$0.05 basis spread) x 1 million ounces)].

Note that if the Company assesses effectiveness based on changes in futures prices, this hedging relationship will not meet the high effectiveness criteria in either period. This highlights two typical factors that cause ineffectiveness in a fair value hedge: (1) changes in the spot-futures price differential and (2) changes in the basis spread between the Company's inventory location and the futures pricing point caused by fluctuations in transportation costs between those two points.

Since in this case, the Company elected to assess effectiveness using the method based on changes in spot prices, the only cause of ineffectiveness is the difference in the basis spread. In this example, the basis spread changes occurred due to transportation cost changes from \$0.05 per ounce on October 1, 20X1, to \$0.04 per ounce on December 31, 20X1, and then back to \$0.05 per ounce on March 20, 20X2. Since the ineffectiveness due to basis spread changes was relatively small, the Company was able to achieve "hedge accounting" for this hedging relationship, although it will have to record the change in fair value of the silver due to both changes in the spot-futures differential and the change in the basis differential in earnings.

Assuming that the Company elects the method based on changes in spot prices for this fair value hedge, it will record the following journal entries (excluding any margin deposit for the futures contracts) on December 31, 20X1, and March 20, 20X2:

	Debit	Credit
December 31, 20X1		
1. Futures contracts	\$ 150,000	
Gain/loss on hedge activity		\$ 150,000
To record the futures contracts at their fair value		
2. Gain/loss on hedge activity	110,000	
Silver inventory		110,000
To record the change in the fair value of the silver inventory due to the change in spot prices (the change in value of the hedged item due to the hedged risk)		
3. Cash in margin accounts	150,000	
Futures contracts		150,000
To record the settlement of the futures contracts that occurred each day throughout the quarter		
March 20, 20X2		
1. Futures contracts	150,000	
Gain/loss on hedge activity		150,000
To adjust futures contracts to their fair value		
2. Gain/loss on hedge activity	40,000	
Silver inventory		40,000
To record the change in the fair value of the silver inventory		
3. Cash	150,000	
Futures contracts		150,000
To record the settlement of the futures contracts that occurred each day from January 1 to March 20, 20X2 (Note that the futures contracts were closed on March 20th with no physical delivery of silver)		
4. Cash	5,300,000	
Silver inventory sales		5,300,000
To record the sale of the silver inventory at the March 20, 20X2, spot price plus the spread of \$0.05 per ounce for location difference		
5. Cost of sales	4,850,000	
Silver inventory		4,850,000
To remove the silver inventory from the accounting records at carrying value (\$5,000,000 – \$110,000 – \$40,000)		

Analysis

Because of the Company's decision to assess hedge effectiveness based on spot prices, the Company has locked in the gross margin based on the spot price of silver when it entered into the hedge. The Company has, in effect, sold its inventory forward at \$5.45 per ounce (spot price of \$5.40 plus \$0.05 for location difference) less the \$5.00 per ounce historical cost, for a gross profit of \$0.45 per ounce, \$450,000 in total. Treating this hedge transaction as a fair value hedge produces

a matching of changes in the fair value of the derivative hedging instrument and changes in the fair value of the silver inventory due to changes in spot prices, to the extent that the hedge is effective. However, volatility in earnings results from (1) the spot-futures price differential, which is excluded from the assessment of effectiveness, and (2) the change in the basis differential, which causes some hedge ineffectiveness, both of which are recorded in earnings. The Company is able to achieve hedge accounting for this hedging relationship and is able to partially offset the gain or loss on the futures contracts by adjusting the carrying value of the silver inventory.

5.5 Determining the Change in a Hedged Item's Fair Value

5.5.1 General Rule

ASC 815-25-35-1 requires the carrying amount of the hedged item to be adjusted for its fair value changes attributable to the hedged risk. The methodology to measure the gain or loss should be consistent with the originally documented risk management strategy. The measurement of the changes in a hedged item's fair value depends on the nature of the hedged item (e.g., a financial asset or liability, or a non-financial asset) and the designated hedged risk.

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, *Fair Value Measurements and Disclosures*. For a non-financial asset or liability, additional guidance is provided in ASC 815-20-25-12(e) to consider its actual location (if a physical asset).

When the hedged item is a financial asset or liability and the hedged risk is interest rate risk, ASC 815 provides some guidance when measuring the changes in fair value of hedged items (see DH 5.5.2 below).

ASC 815-10-20 defines credit risk as the difference between the market yield of an instrument and a benchmark interest rate. However, due to the complexity associated with such hedging strategies, we do recommend that Companies carefully evaluate both the hedging relationship and the methodology to measure the fair value changes of the hedged item.

Also, refer to DH 7 when the designated risk is the foreign exchange risk, or a combination of foreign exchange risk and interest rate risk, simultaneously designated.

5.5.2 Determining the Change in a Hedged Item's Fair Value That Is Attributable to Changes in the Benchmark Interest Rate

ASC 815 does not prescribe any specific method for an entity to calculate changes in fair value attributable to the benchmark interest rate. However, the Board clarifies in ASC 815-25-35-13 that "in calculating the change in the hedge item's fair value attributable to changes in the designated benchmark interest rate (see ASC 815-20-25-12(f)(2)), the estimated cash flows used must be based on all of the contractual cash flows of the entire hedged item." 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). The guidance also prohibits any method of calculating the hedged item's fair value that initially uses all of the hedged item's contractual cash flows but, in future periods, backs out cash flows that may be deemed related to the obligor's creditworthiness at the inception of the hedging

relationship. No specific guidance is provided regarding the yield curve with which the hedged item's estimated cash flows should be discounted.

PwC Observation: Because the guidance requires the use of the total contractual cash flows when determining the change in fair value of the hedged item attributable to the hedged risk, there will always be some amount of ineffectiveness to be recognized in earnings when a fixed rate interest-bearing asset or liability is being hedged for changes in the benchmark interest rate. 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) is to qualify for the shortcut method, which assumes 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. As a result, there is often a strong desire to use the shortcut method instead of one of the long-haul approaches described below. However, as discussed in DH 8, the shortcut method is limited to only those hedging relationships that strictly comply with the criteria set forth in the guidance.

In practice, two methodologies may be used by an entity to estimate the changes in value attributable to the risk being hedged, as described below.

5.5.2.1 The Example 9 Method

The first method is described in ASC 815-25-55-55 (Example 9) and often referred to as the "120C method" (as originally described in paragraph 120C of FAS 133) and states:

Under this method, the change in the 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 as of the end of the period that exclude or include, respectively, the effect of the changes in the benchmark interest rate during the period. The discount rates used for those present value calculations would be, respectively,

- a. the discount rate equal to the market value interest rate for that hedged item at the inception of the hedge adjusted (up or down) for changes in the benchmark rate (designated as the interest rate risk being hedged) from the inception of the hedge to the beginning date of the period for which the change in the fair value is being calculated,**
- b. the discount rate equal to the market interest rate for that hedged item at the inception of the hedge adjusted (up or down) for changes in the designated benchmark rate from the inception of the hedge to the ending date of the period for which the change in the fair value is being calculated.¹⁷**

Both present value calculations are computed using the estimated future cash flows for the hedged item (which typically would be its remaining contractual cash flows).¹⁸

¹⁷ Reference: ASC 815-25-55-55.

¹⁸ Reference: ASC 815-25-55-56.

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 discounted 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 discounted 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 discounted cash flows associated with the hedged item using the benchmark rate at the beginning and end of the specified period, respectively. 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. In addition, under this method, the change in fair value due to the passage of time is excluded.

PwC Observation: The amortization of the basis adjustment 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.¹⁹ Absent any amortization policies under the Example 9 method, entities 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, entities may choose to amortize basis adjustments each reporting period. While the guidance does not specify the method of amortization, 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 (i.e., the interest rate method). Companies should carefully consider modeling the amortization of basis adjustments to ensure such adjustments are fully amortized upon the maturity of the hedged item. Amortization methods that do not result in amounts being amortized in the current period will inevitably result in a lag effect on the reported yield for the hedged instrument and, most likely amortization will not result in yields on the hedged item that are comparable to floating rate items of a similar term. The method of calculating changes in fair value as well as the entity’s policy for amortizing basis adjustments should be documented contemporaneously with the hedge relationship and applied consistently for similar hedges.

5.5.2.2 The Example 11 Method

The second method of measuring changes in fair value of a hedged item attributable to benchmark interest rate is illustrated in ASC 815-25-55-72 through 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 discounted 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 discounted 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 the discounted cash flows at the beginning of the period (using the benchmark rate as of the beginning of the period) with the discounted cash flows as of the end of the period (using the benchmark rate as of the end of the period). Accordingly, the change in fair value attributable to changes in the benchmark rate (designated as the hedged risk) from the beginning of the period to the end of the period includes the passage of time. Adjustments may need to be made for the receipt/payment of cash.

¹⁹ Reference: ASC 815-25-35-9.

In some instances, a debt instrument's present value is different from its book or par value at hedge inception since interest coupons are typically different from the benchmark rate. Upon maturity, the debt's present value will equal its book value, that is, the par or redemption amount. Accordingly, the cumulative changes in present value of the debt instrument over the hedge period are not nil when using the present value technique under Example 11 method. The cumulative changes in fair value are not solely attributable to changes in benchmark rate but encompass another element that is the passage of time, 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), assume the company has an outstanding debt with a \$100 principal balance and \$105 present value at hedge inception. The market premium is due to a decrease in rates since debt issuance. The fair value of the debt may fluctuate during the hedge period but will always equal \$100 at maturity date (the redemption or par amount), irrespective of the interest rates during the period or at maturity. Consequently, the cumulative changes in fair value not attributable to changes in benchmark rates amount to (\$5) over the hedge period (a decline from a \$105 present value at hedge inception to a \$100 fair value at hedge maturity). Accordingly, the (\$5) passage of time must be excluded from the measurement of changes in fair value attributable to the changes in the benchmark calculated under the Example 11 Method.

PwC Observation: While the guidance does not explicitly prohibit companies from including the passage of time in the recognition of changes in fair value of hedged items attributable to the benchmark, the above guidance clarifies that the changes in fair value attributable to changes in the benchmark interest rates for a period are not merely the difference between the beginning fair value and the ending fair value. Hence, companies measuring changes in fair value attributable to the benchmark interest rate need to carefully consider the implication of coupon payments and the passage of time when measuring the changes in fair value attributable to changes in the benchmark rate when using the Example 11 Method.

PwC Observation: The Example 11 Method described above is more common in practice, due in part to the fact that the calculation of changes 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 due to the passage of time of the hedged item as prescribed under the Example 9 method. In addition, the Example 11 Method may result in "natural amortization" since the calculation of the changes in fair value is based on the difference between two present-value calculations of future cash flows at different points in time (the beginning of the period and the end of the period, respectively).

5.5.2.3 Example 9 Method—Illustrative Example

The following is an example of how to calculate the change in the value of the hedged item that is due to changes in the benchmark rate using the Example 9 method. Note that this method isolates the change in value due to the change in the benchmark rate by calculating the difference between the two present value calculations at the end of period that exclude or include, respectively, the

effect of the changes in the benchmark interest rate during the period. While a variety of approaches may be used, this example uses the forward yield curve of the benchmark interest rates at each valuation date adjusted by the initial credit spread at the issuance of the debt to discount the future cash flows. For ease of calculation, the forward yield curves are assumed to be flat at the level of the current benchmark interest rate (LIBOR).

On January 1, 20X1, Company A issues a non-callable, five-year, \$100 million note at 6 percent fixed interest with semiannual payments. On that date, Company A also enters into a five-year interest rate swap with a notional amount of \$100 million. The swap pays LIBOR and receives a fixed rate of 5 percent, with semiannual payments. The Company does not pay or receive a premium for the swap. The designated benchmark interest rate is LIBOR. On January 1, 20X1, June 30, 20X1, and December 31, 20X1, LIBOR is 5.0 percent, 5.5 percent, and 4.5 percent, respectively. The discount rates that are in effect on January 1, 20X1, June 30, 20X1, and December 31, 20X1, are 6.0 percent, 6.5 percent, and 5.5 percent, respectively.

This example illustrates the calculation of the change in the value attributable to the risk being hedged for the periods from January 1, 20X1, to June 30, 20X1, and July 1, 20X1, to December 31, 20X1, under the Example 9 Method. For each period below, steps 1 through 3 calculate the change in value due to changes in LIBOR, the benchmark interest rate. Steps 4 and 5 calculate the change in value of the hedging instrument, the interest rate swap, with the assumption that the fair value at inception was zero, as no upfront cash or other consideration was exchanged. Step 6 calculates the discrete-period dollar-offset hedge ratios, and assumes that the entity has chosen not to exclude any portion of the hedging instrument's time value as permitted by ASC 815-20-25-82.

Period 1—January 1, 20X1 to June 30, 20X1

1. Calculate the present value (PV) of the debt on June 30 using the beginning-of-period discount rate:

Interest

Payment = \$3,000,000

Discount rate = $6\% \div 2 = 3\%$

Periods = 9

PV = \$23,358,327

Principal

Future value = \$100 million

Discount rate = $6\% \div 2 = 3\%$

Periods = 9

PV = \$76,641,673

Total PV of debt, based on the beginning-of-period discount rate = \$100 million

2. Calculate the PV of the debt on June 30 using the end-of-period discount rate (i.e., $6.0\% + (5.5\% - 5.0\%) = 6.5\%$):

Interest

Payment = \$3,000,000

Discount rate = $6.5\% \div 2 = 3.25\%$

Periods = 9

PV = \$23,088,368

(continued)

Principal

Future value = \$100 million

Discount rate = $6.5\% \div 2 = 3.25\%$

Periods = 9

PV = \$74,987,600

Total PV of debt, based on the end-of-period discount rate = \$98,075,968

3. Subtract, to calculate the difference in the PVs of the debt:

$\$100,000,000 - \$98,075,968 = \$1,924,032$ gain

4. Calculate the fair value of the swap on June 30 using the new LIBOR swap rate:

Swap payment (LIBOR) = \$2,750,000 (assuming a flat yield curve)

Swap receipt (fixed) = \$2,500,000

Payment (net) = (\$250,000)

Discount rate = $5.5\% \div 2 = 2.75\%$

Periods = 9

PV = (\$1,969,420)

5. Calculate the change in the fair value of the swap:

$(\$1,969,420) - \$0 = (\$1,969,420)$ loss

6. Calculate hedge ineffectiveness and the hedge effectiveness ratio:

$\$1,969,420 - \$1,924,032 = \$45,388$

$\$1,969,420 \div \$1,924,032 = 102.4\%$ effective

Period 2—July 1, 20X1 to December 31, 20X1

1. Calculate the PV of the debt on December 31 using the beginning-of-period discount rate:

Interest

Payment = \$3,000,000

Discount rate = $6.5\% \div 2 = 3.25\%$

Periods = 8

PV = \$20,838,741

Principal

Future value = \$100 million

Discount rate = $6.5\% \div 2 = 3.25\%$

Periods = 8

PV = \$77,424,698

Total PV of debt, based on the beginning-of-period discount rate = \$98,263,439

2. Calculate the PV of the debt on December 31 using the end-of-period discount rate (i.e., $6.5\% + (5.5\% - 4.5\%) = 5.5\%$):

Interest

Payment = \$3,000,000

Discount rate = $5.5\% \div 2 = 2.75\%$

Periods = 8

PV = \$21,282,943

(continued)

Principal

Future value = \$100 million

Discount rate = $5.5\% \div 2 = 2.75\%$

Periods = 8

PV = \$80,490,635

Total PV of debt, based on the end-of-period discount rate = \$101,773,578

3. Subtract, to calculate the difference in the PVs of the debt:

$\$98,263,439 - \$101,773,578 = \$3,510,139$ loss

4. Calculate the fair value of the swap on December 31:

Swap payment (LIBOR) = \$2,250,000 (assuming a flat yield curve)

Swap receipt (fixed) = \$2,500,000

Payment (net) = \$250,000

Discount rate = $4.5\% \div 2 = 2.25\%$

Periods = 8

PV = \$1,811,796

5. Calculate the change in the fair value of the swap:

$\$1,811,796 - (\$1,969,420) = \$3,781,216$ gain

6. Calculate hedge ineffectiveness and hedge effectiveness ratio:

$\$3,781,216 - \$3,510,139 = \$271,077$

$\$3,781,216 \div \$3,510,139 = 107.7\%$ effective

5.5.2.4 Measuring Ineffectiveness Under the Example 11 Method for a Fair Value Hedge of Interest Rates Where the Fair Value of the Hedged Item Is Not Equal to Its Par Value at Hedge Inception

As previously mentioned, if the Example 11 method of ASC 815-25-55-72 (formerly the FAS 138 method) is applied, in order to properly measure the change in the hedged item due to the hedged risk and also to recognize the right amount of hedge ineffectiveness, the hedge adjustments to the carrying value of the hedged item must exclude a portion of the changes in the fair value due to the passage of time (sometimes referred to as “pull-to-par”). The passage of time/pull-to-par effects associated with any difference between the **present value** of the hedged item (discounted at the benchmark interest rate) and its par or maturity amount **at hedge inception** must be excluded when measuring the hedge ineffectiveness. The pre-hedge **book value** of the hedged item is usually par or an amount that is amortizing its original issue discount or premium over the proper period of the instrument. These amounts represent changes in the fair value of the hedged item (for the hedged risk) that are not driven by changes in the hedged risk.

ASC 815-25-35-9 states “An adjustment of the carrying amount of a hedged interest-bearing **financial instrument** *[as a result of hedge accounting being applied]* 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.”

As noted above, the Example 11 method includes the impact of passage of time. As a result, the Example 11 method is an amortizing method by its very nature. Therefore it is imperative that all the basis adjustments result in the hedged item being recorded at par upon its maturity.

The following example illustrates how to exclude the “pull-to-par” effect from the ineffectiveness measurement under the Example 11 method.

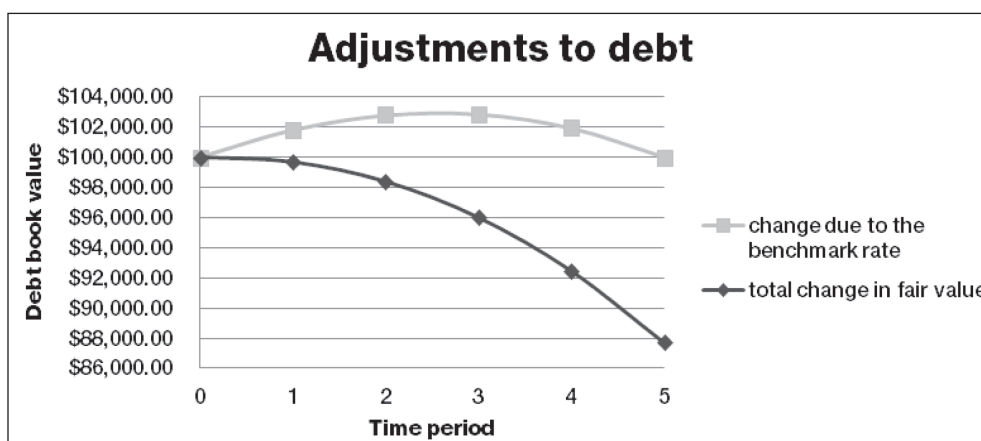
On January 1, 20X1, Company B issued at par a \$100,000, 7-year fixed-rate noncallable debt instrument with an annual 10 percent interest coupon. Two-years after issuance, on December 31, 20X2, when market interest rates for 5 year debt are 7 percent, and the debt remains on the books at a carrying value equal to par, Company B enters into a 5-year receive-fixed interest rate swap based on the LIBOR swap rate and designates it as the hedging instrument in a fair value hedge of the \$100,000 liability. Under the terms of the interest rate swap, Company B will receive fixed interest at 7 percent and pay variable interest at LIBOR. 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 the books of Company B at \$100,000, however the present value of the debt discounted at the benchmark interest rate is approximately \$112,300, a difference of \$12,300.

Consistent with the example in ASC 815-25-55-54, the calculations in this example have been greatly 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 only change once per year on December 31, of each year. During the hedge period, the gain or loss on the interest rate swap will be recorded in earnings.

If the book value of the debt is simply adjusted for the total change in value due to both interest rate changes and due to the changes in time, the pull-to-par adjustment for a debt’s change in value from a significant premium (i.e., the \$12,300) 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 when the debt will be settled for \$100,000 when the book value is \$87,700. Reference the lower line in Exhibit A.

To avoid this outcome, pull-to-par effects must be removed from the accounting. 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 percent 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 Impact of Δt in the following table).

Exhibit A



The calculations of the amounts are cross referenced to the applicable journal entries below:

Hedge of the remaining 5 years of a 10 percent debt issuance in a current 7 percent interest rate environment where the rate will decline 50 bps per year.

**Change in Present Value of the Cash Flows Due to Both Interest Rates
and Time Remaining Until Maturity**

Date	12/31/20X2	12/31/20X3	12/31/20X4	12/31/20X5	12/31/20X6	12/31/20X7	Totals
Present Value	\$112,300.59	\$111,990.30	\$110,692.05	\$108,308.44	\$104,761.90	\$100,000.00	
Total Change in Present Value ("TC")	N/A	\$ 310.30	\$ 1,298.25	\$ 2,383.61	\$ 3,546.53	\$ 4,761.90	\$12,300.59

**Isolate the Change in Time Adjustment Under Example 11 Method
While Keeping Rates Constant at 7%**

Date	12/31/20X2	12/31/20X3	12/31/20X4	12/31/20X5	12/31/20X6	12/31/20X7	
Present Value	\$112,300.59	\$110,161.63	\$107,872.95	\$105,424.05	\$102,803.74	\$100,000.00	
Change in Present Value due to Passage of Time ("Δ t")	N/A	\$ 2,138.96	\$ 2,288.69	\$ 2,448.89	\$ 2,620.31	\$ 2,803.74	\$12,300.59

**Compute Changes in Fair Value due to Changes
in the Benchmark Interest Rate**

Date	12/31/20X2	12/31/20X	12/31/20X	12/31/20X	12/31/20X	12/31/20X	
Total Change in Present Value ("TC")		\$ 310.30	\$ 1,298.25	\$ 2,383.61	\$ 3,546.53	\$ 4,761.90	\$12,300.59
Less Impact of Δ t	<u>-Δ t</u>	<u>\$ 2,138.96</u>	<u>\$ 2,288.69</u>	<u>\$ 2,448.89</u>	<u>\$ 2,620.32</u>	<u>\$ 2,803.74</u>	<u>\$12,300.59</u>
Change in Present Value due to changes in Benchmark Interest Rates		\$ -1,828.66	\$ -990.44	\$ -65.28	\$ 926.22	\$ 1,958.17	\$ 0.00
		<i>a</i>	<i>c</i>	<i>e</i>	<i>g</i>	<i>i</i>	
Change in fair value of the swap		\$ 1,712.90	\$ 960.11	\$ 96.47	\$ -864.72	\$ -1,904.76	\$ 0.00
		<i>b</i>	<i>d</i>	<i>f</i>	<i>h</i>	<i>j</i>	
Ineffectiveness		\$ -115.76	\$ -30.33	\$ 31.19	\$ 61.50	\$ 53.41	
Periodic Dollar Offset Effectiveness		93.7%	96.9%	147.8%	93.4%	97.3%	
Cumulative Dollar Offset Effectiveness		93.7%	94.8%	96.0%	97.3%	100.0%	

(continued)

12/31/X3			
Dr Loss on hedge activity	\$ 1,828.66		<i>a</i>
Cr Debt		\$ (1,828.66)	<i>a</i>
<i>Change in fair value of debt for change in benchmark interest rates</i>			
Dr Swap contract	\$ 1,712.90		<i>b</i>
Cr Gain on hedge activity		\$ (1,712.90)	<i>b</i>
<i>Change in fair value of swap</i>			
Dr Interest expense	\$10,000.00		
Cr Cash		\$(10,000.00)	
<i>Record/pay interest on debt</i>			
Dr Cash	\$ 500.00		
Cr Interest expense		\$ (500.00)	
<i>Receive settlement on swap</i>			
12/31/X4			
Dr Loss on hedge activity	\$ 990.44		<i>c</i>
Cr Debt		\$ (990.44)	<i>c</i>
<i>Change in fair value of debt for change in benchmark interest rates</i>			
Dr Swap contract	\$ 960.11		<i>d</i>
Cr Gain on hedge activity		\$ (960.11)	<i>d</i>
<i>Change in fair value of swap</i>			
Dr Interest expense	\$10,000.00		
Cr Cash		\$(10,000.00)	
<i>Record/pay interest on debt</i>			
Dr Cash	\$ 1,000.00		
Cr Interest expense		\$ (1,000.00)	
<i>Receive settlement on swap</i>			
12/31/X5			
Dr Loss on hedge activity	\$ 65.28		<i>e</i>
Cr Debt		\$ (65.28)	<i>e</i>
<i>Change in fair value of debt for change in benchmark interest rates</i>			
Dr Swap contract	\$ 96.47		<i>f</i>
Cr Gain on hedge activity		\$ (96.47)	<i>f</i>
<i>Change in fair value of swap</i>			
Dr Interest expense	\$10,000.00		
Cr Cash		\$(10,000.00)	
<i>Record/pay interest on debt</i>			
Dr Cash	\$ 1,500.00		
Cr Interest expense		\$ (1,500.00)	
<i>Receive settlement on swap</i>			

(continued)

12/31/X6			
Dr Debt	\$ 926.22		<i>g</i>
Cr Gain on hedge activity		\$ (926.22)	<i>g</i>
<i>Change in fair value of debt for change in benchmark interest rates</i>			
Dr Loss on hedge activity	\$ 864.72		<i>h</i>
Cr Swap contract		\$ (864.72)	<i>h</i>
<i>Change in fair value of swap</i>			
Dr Interest expense	\$10,000.00		
Cr Cash		\$(10,000.00)	
<i>Record/pay interest on debt</i>			
Dr Cash	\$ 2,000.00		
Cr Interest expense		\$ (2,000.00)	
<i>Receive settlement on swap</i>			
12/31/X7			
Dr Debt	\$ 1,958.17		<i>i</i>
Cr Gain on hedge activity		\$ (1,958.17)	<i>i</i>
<i>Change in fair value of debt for change in benchmark interest rates</i>			
Dr Loss on hedge activity	\$ 1,904.76		<i>j</i>
Cr Swap contract		\$ (1,904.76)	<i>j</i>
<i>Change in fair value of swap</i>			
Dr Interest expense	\$ 10,000.00		
Cr Cash		\$ (10,000.00)	
<i>Record/pay interest on debt</i>			
Dr Cash	\$ 2,500.00		
Cr Interest expense		\$ (2,500.00)	
<i>Receive settlement on swap</i>			
Dr Debt	\$100,000.00		
Cr Cash		\$(100,000.00)	
<i>Retire the debt at par</i>			

5.6 Questions and Interpretive Responses

Balance Sheet Presentation

Question No. 5-1: Should the carrying amount of the derivative that is used in a fair value hedge of an on-balance sheet item be added to the carrying amount of the hedged item, such as in a fair value hedge of a fixed-rate debt obligation with a pay-floating, receive-fixed interest rate swap? At issue is whether the change in the fair value of an interest rate swap could be added to the carrying amount of a debt obligation.

PwC Interpretive Response: No. At the December 2000 AICPA SEC Conference, the SEC staff stated that it would object to that presentation. The staff believes that as a result of the hedge, a debt discount would have been recorded that, when amortized into income, would result in an alteration of the fixed interest rate of the debt obligation. The derivative liability is not associated with the future cash obligations to the debt holders and, therefore, should not be presented on a combined basis. In cases such as this, the staff would expect a presentation of the balances for the derivative-instrument asset or liability that is separate from the presentation of the hedged item. More generally, the SEC staff reminded registrants that derivative assets and liabilities should not be netted on the balance sheet unless they meet the requirements of ASC 210-20-45. Further, ASC 210-20-05-1 indicates that “it is a general principle of accounting that the offsetting of assets and liabilities in the balance sheet is improper except if a right of setoff exists.” ASC 210-20-45-1 states that a right of offset exists when all of the following criteria are met:

- a. Each of two parties owes the other determinable amounts.
- b. The reporting party has the right to set off the amount owed with the amount owed by the other party.
- c. The reporting party intends to set off.
- d. The right of setoff is enforceable at law.

A debtor having a valid right of setoff may offset the related asset and liability and report the net amount. Since derivative balances and hedged items on a company’s balance sheet will likely be with different counterparties, it is unlikely that the conditions above of ASC 210-20-45-1 will be met.

Portfolio of Similar Assets or Liabilities

Question No. 5-2: When similar assets or liabilities are aggregated and hedged as a portfolio, the individual assets or liabilities must share the same risk exposure for which they are designated as being hedged. How similar must the individual items in the group be in order to qualify as a hedged item under ASC 815? For example, can all fixed-rate residential mortgages be hedged as one portfolio, or must they be divided into groups of mortgages, under such categories as “same expected maturity,” “coupon rate,” and “region of the country”?

PwC Interpretive Response: The Board intended the term “similar” to be interpreted narrowly. For example, at the inception of the hedge and on an ongoing basis, there must be an expectation that the fair value of each individual item in the portfolio will change proportionately to the change in the fair value of the entire portfolio for the hedged risk.

(continued)

Accordingly, we believe that a pool of homogeneous fixed-rate mortgages could be considered a hedgeable item, to the extent that (1) the mortgages within the pool were to contain similar critical terms and risk characteristics (e.g., similar fixed rates, maturities, face amounts, geographic locations, and loan-to-value ratios) and (2) each loan's fair value would change proportionately to the change in the fair value of the entire portfolio (e.g., if the fair value of the portfolio were to increase by 10 percent, the fair value of each loan should increase within a narrow range such as from 8 percent to 12 percent).

Blockage Factor

Question No. 5-3: An entity hedges its investment in a large block of a publicly traded common stock. In determining changes in the fair value of the hedged common stock, can the entity consider a blockage factor (i.e., a premium or discount based on an entity holding a large proportion of the total available trading units of an instrument), since the average daily trading volume for the common stock is less than the quantity owned by the entity?

PwC Interpretive Response: It depends. ASU 2011-04 in its amendment of ASC 820, *Fair Value Measurements and Disclosures*, precludes the use of premiums or discounts related to size as a characteristic of the entity's holding of a financial instrument (including blockage factors) when measuring fair value because the unit of account is the level at which the fair value measurement must be applied. However, if the unit of account is the portfolio (when electing the portfolio exception within ASC 820), size reflects a characteristic of the asset and a related premium or discount would be permitted (Refer to FV 4.1.1).

Hedging a Portfolio of Credit Card Receivables

Question No. 5-4: A financial institution has a portfolio of \$100 million of credit card receivables that pay a fixed rate of interest. The portfolio does not have a stated maturity date, but based on historical experience, the entity has determined that the portfolio's weighted-average maturity (considering prepayments) is about five years. The entity enters into a five-year, receive-variable, pay-fixed interest rate swap with a notional amount of \$50 million and designates the swap as a fair value hedge of 50 percent of each loan in the portfolio. Would the relationship qualify for hedge accounting and be effective as a hedge under ASC 815?

PwC Interpretive Response: Probably not. It is unlikely that the changes in fair value of the five-year swap would be highly effective in offsetting the changes in fair value of the credit card receivables portfolio due to changes in interest rates.

There are additional reasons that might preclude this relationship from qualifying for hedge accounting or at least make it impractical.

(continued)

If it is determined that the expected maturities of the credit card receivables are much shorter than five years, a five-year swap would not be highly effective as a hedging instrument. Further, the hedging instrument cannot be divided into a short-term portion and a long-term (i.e., bifurcated into various components). In a hedge of an entire portfolio of receivables, all assets in the portfolio would have to be “similar,” as defined ASC 815-20-25-12(a and b) which requires that the individual items in a portfolio share the same risk exposure and have fair value changes attributable to the hedged risk that are expected to respond in a proportionate manner to the overall fair value changes of the entire portfolio. While it may be argued that many credit card borrowers do not change their borrowing habits or switch lenders in response to changes in interest rates, in order to meet this requirement a lender would have to demonstrate that the response of each credit card borrower would be the same as the response of every other borrower in the portfolio.

Any changes in the portfolio (e.g., changes caused by the payment of old receivables and the origination of new receivables) or the derivative (e.g., a designation of a different portion of the notional amount) would cause a dedesignation of the existing hedge relationship and necessitate that a new hedging relationship be designated going forward. This dedesignation and redesignation could be a significant operational burden. For instance, since the hedging relationship may have ceased, the financial institution may have to begin amortization of the basis adjustments related to any of the receivables that will not be hedged going forward. Also, in order to account for future transactions, those basis adjustments would have to be allocated (pushed down) to each individual receivable in the portfolio.

The forecasted originations of future credit card receivables are not eligible to be fair value hedged items because they are not firm commitments.

The forecasted originations of future credit card receivables are also not eligible to be cash flow hedged items, because there is no variability of cash flows in these forecasted transactions (i.e., the credit card interest rate is fixed).

Question No. 5-5 has been eliminated

Estimating the Change in the Fair Value of the Hedged Item

Question No. 5-6: As part of a fair value hedge transaction, an entity must record the change in the fair value of the hedged item that is attributable to the risk that is being hedged in current-period earnings. When an entity enters into an interest rate swap to hedge the risk of changes in a benchmark interest rate on the entity’s fixed-rate debt, should the following factors be considered in the estimation of changes in the debt’s fair value for purposes of applying ASC 815?

1. Changes in the entity’s credit quality
2. Changes in sector credit spreads
3. Liquidity of the hedged item

PwC Interpretive Response: No. The provisions of ASC 815 indicate that, in accounting for the hedged item, an entity 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 that is being hedged. In this example, the risk that is being hedged comprises changes in the debt's fair value that are 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, an entity should not consider changes that are attributable to entity-level or sector-level credit risk or liquidity. However, those factors should be considered for purposes of disclosing the fair value of the entity's financial instruments pursuant to ASC 825-10-50 and ASC 820. Such risks however may be relevant in determining the fair value of the hedging instrument.

Demand Deposits as a Hedged Item

Question No. 5-7: Can a financial institution hedge the fair value of non-interest-bearing demand deposits for which the fair value amounts and the carrying-value amounts are considered the same?

PwC Interpretive Response: No. The Board determined that since the fair value of this type of deposit liability, as currently defined in accounting literature, does not change with fluctuations in interest rates, there is no impact on earnings and, therefore, non-interest-bearing demand deposits do not qualify as a hedged item.

The Board further observed that while a financial institution could economically hedge demand deposits, it would be difficult for that institution to consistently value and account for the hedge transaction.

Types of Risks Eligible for Hedge Accounting

Question No. 5-8: In a fair value hedge of a financial instrument, what components or risks may be hedged under ASC 815?

PwC Interpretive Response: ASC 815-20-25-12(f) permits an entity to hedge the following risks individually or in combination in a fair value hedge of a financial asset or liability:

1. The risk of changes in the overall fair value of the entire hedged item,
2. The risk of changes in its fair value attributable to changes in the designated benchmark interest rate (referred to as interest rate risk),
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), or
4. The risk of changes in its fair value attributable to both changes in the obligor's creditworthiness and changes in the spread over the benchmark interest rate with respect to the hedged item's credit sector at inception of the hedge (referred to as credit risk).

(continued)

Risks such as liquidity, theft, weather, catastrophe, competition, and seasonality do not qualify for hedge accounting under ASC 815. The Board determined that limitations on hedgeable risks are necessary in order to (1) ensure that the notion of hedge effectiveness remain meaningful and (2) preclude entities from arbitrarily using specific risks inherent in a hedging instrument as an indicator of the risk that is being hedged in the hedged item.

Question No. 5-9: In a fair value hedge of a nonfinancial asset or liability (other than a recognized loan servicing right or a nonfinancial firm commitment with financial components), what components or risks may be hedged under ASC 815?

PwC Interpretive Response: ASC 815-20-25-12(e) states that only the risk of changes in the fair value of the entire hedged asset or liability may be hedged (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 shall 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.

Hedging Prepayment Risk of a Held-to-Maturity Security

Question No. 5-10: Can an entity hedge the prepayment-option component of a fixed-rate held-to-maturity security?

PwC Interpretive Response: Yes. The Board decided to permit hedge accounting for fair value hedges of prepayment risk, including prepayment risk in held-to-maturity securities (i.e., the embedded call option in a held-to-maturity debt security can be designated as a hedged item under ASC 815). The hedging instrument must, however, be highly effective in offsetting the changes in the overall fair value of the embedded prepayment option.

Because (1) prepayments can occur for many reasons other than a mere decline in interest rates (e.g., prepayments may occur when a homeowner decides to move or when a company decides to (a) prepay its debt in the context of the company's being acquired or (b) restructure all debt) and (2) the timing of prepayments is difficult to predict, it might be difficult for an entity to obtain an effective hedging instrument for the prepayment risk, at least in terms of an individual debt instrument.

Hedging an Available-for-Sale Security

Question No. 5-11: If an entity were to hedge the entire fair value of an available-for-sale security, would the changes in the fair value of the security continue to be reported in other comprehensive income under ASC 815? Also, would the changes in the fair value of an available-for-sale security continue to be reported in other comprehensive income if an entity were to hedge only the security's fair value changes that were due to interest rate risk (versus hedging both interest rate and credit or foreign-currency risk)?

PwC Interpretive Response: No to both questions. ASC 815-25-35-6 states that if the hedged item is otherwise measured at fair value, with changes in fair value reported in other comprehensive income (such as an available-for-sale security), the adjustment of the hedged item's carrying amount discussed in ASC 815-25-35-1(b) must be recognized in earnings rather than in other comprehensive income to offset the gain or loss on the hedging instrument. It is the subsequent changes in fair value that would be reported in earnings, while previously recognized changes in fair value would continue to be recognized in accumulated other comprehensive income adjusted for the effects of interest amortization and other than temporary impairment. The reclassification effects would still be reported in other comprehensive income.

If the entity were to hedge only the security's interest rate risk, changes in the value of the security that are attributable to credit risk, foreign-currency risk, liquidity or any other component would continue to be reported in other comprehensive income.

Using Short-Term Futures to Hedge a Longer-Term Hedged Item

Question No. 5-12: An entity owns a fixed-rate five-year debt instrument. It wishes to hedge the interest rate risk (i.e., changes in the fair value of the debt that are due to changes in the benchmark interest rate) with a ninety-day futures contract on a five-year U.S. Treasury note. Does this transaction qualify for hedge accounting under ASC 815?

PwC Interpretive Response: Yes. Even though there are maturity differences between the derivative and the hedged item, it is likely that during the ninety-day term of the derivative the hedge will meet the high-effectiveness criterion. Since the hedging derivative is based on a U.S. Treasury instrument that has the same maturity date as the hedged item, the transaction is likely to satisfy the criterion that the changes in the fair value of the derivative be expected to offset substantially all of the changes in the fair value of the hedged item (i.e., the changes that are attributable to the risk that is being hedged).

Measurement of a Firm Commitment That Has Been Hedged

Question No. 5-13: What is the amount that the entity should record as a result of applying the hedge accounting prescribed under ASC 815 to a hedge of a firm commitment?

PwC Interpretive Response: Firm commitments represent rights and obligations that are assets and liabilities, even though they are generally not recorded. If they were to be designated as a hedged item, an entity would account for the changes in the fair value of the hedged commitment in a manner similar to how that 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 entity recognizing the firm commitment on the balance sheet. The recognition of subsequent changes in fair value would adjust the entity's recognized firm-commitment amount.

Definition of a Firm Commitment—Disincentive for Nonperformance

Question No. 5-14: ASC 815 specifies that a firm commitment must include a disincentive for nonperformance that is sufficiently large to make performance probable. How is the phrase “disincentive for nonperformance that is sufficiently large” defined under ASC 815?

PwC Interpretive Response: 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 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 an 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.

Intercompany Commitments

Question No. 5-15: Can an intercompany commitment ever be considered “firm” and, therefore, be eligible for designation as a fair value hedged item?

PwC Interpretive Response: No. As defined in ASC 815-25-20, a “firm commitment” must be entered into with an unrelated third party.

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 would be eligible for designation as a hedged forecasted transaction. 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. (Cash flow hedges are discussed in DH 6, and foreign-currency hedges are discussed in DH 7.)

Monetization of an Embedded Call Option

Question No. 5-16: If an entity were to issue fixed-rate callable debt and, at the same time, monetize the call option (e.g., by writing a call option), how would the embedded purchased call option and the related written call option be accounted for under ASC 815?

PwC Interpretive Response: So long as the critical terms of the embedded purchased option and the written option are identical, the hedging relationship satisfies the high-effectiveness criterion (i.e., the written option test in ASC 815-20-25-94), which means that hedge accounting is permitted, assuming that the relationship also satisfies all of the other qualifying criteria. The embedded-purchased-option component of the debt would not be bifurcated from the host contract, assuming it would be clearly and closely related to the debt host. The carrying value of the debt would be adjusted for changes in the value of the embedded purchased option, and the written option would be marked to market, with gains or losses included in earnings. ASC 815 permits an unbifurcated embedded derivative to qualify as a hedged item in this situation, even though, on a stand-alone basis, derivatives do not qualify as hedged items.

Amortization of the Basis Adjustment of a Hedged Item

Question No. 5-17: Once an interest-bearing financial asset or liability has been adjusted for changes in its fair value that are attributable to the risk that is being hedged, should the basis adjustment of the financial asset or liability be subsequently amortized?

PwC Interpretive Response: ASC 815-25-35-8 through 35-9 requires that an entity account for the adjustment of the carrying amount of a hedged interest-bearing financial instrument in the same manner that the entity accounts for other components of the instrument's carrying amount. For example, an adjustment of the carrying amount of a hedged interest-bearing asset would be amortized to earnings based on a recalculated effective yield.

The guidance requires that amortization or accretion must begin *no later than* when the hedged item ceases to be adjusted for changes in its fair value that are attributable to the risk that is being hedged. That is, amortization or accretion can be delayed until the hedging relationship is dedesignated or discontinued regardless of the reason for the delay. Theoretically, amortization should start immediately. The Board, however, recognized that it might be complex and burdensome to amortize prior basis adjustments in the hedged item at the same time that the item's basis is being adjusted for changes in value that are attributable to the hedged risk.

If an entity chooses to delay the amortization of the hedged item's basis adjustment, there will be a mismatch in the income statement, because changes in fair value of the hedging derivative, including changes related to the passage of time, would be recorded in current earnings, while the hedged item's basis adjustment would not be amortized. Also, it is noteworthy that if amortization of a basis adjustment is delayed, the hedged item's yield will be affected to a greater extent than would otherwise prove the case, since the basis adjustment is amortized over the time that remains until the hedged item reaches its maturity, which is a shorter period than that which would have resulted if amortization had started shortly after the hedge was initiated. In practice, companies generally do not elect to defer amortization.

Question No. 5-18: As discussed in the previous question, entities are permitted to defer amortization of an interest-bearing hedged item's basis adjustment (i.e., the gains and losses of the hedged item that are attributable to the risk that is being hedged) until the hedged item ceases to be adjusted for changes in fair value that are attributable to the hedged risk. Can an entity choose 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?

PwC Interpretive Response: No. We believe that since the hedge accounting model is applied on a prospective basis, entities must establish their accounting policy for amortizing the basis adjustment of an interest-bearing hedged item at the inception of the hedge (i.e., prior to the date that the hedge results are known). Entities should establish similar accounting policies for amortizing (or deferring amortization of) basis adjustments for similar types of hedged items. 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.

Question No. 5-19: Company A issues 10 year fixed-rate debt at par and simultaneously enters into a receive-fixed, pay-floating (LIBOR-based) interest rate swap with matching terms. Company A designates the swap as a hedge of the risk of changes in the fair value of the debt as a result of changes in the benchmark interest rate (LIBOR).

At the end of the second year, Company A terminates the original swap and receives its fair value in cash. At the same time, Company A enters into an eight-year receive-fixed, pay-floating (LIBOR-based) interest rate swap with terms that match the fixed rate debt. Company A designates the replacement swap as a hedge of the risk of changes in the fair value of the debt as a result of changes in the benchmark interest rate (LIBOR).

The Company uses the Example 11 Method illustrated in ASC 815-25-55-72 through 55-77 to calculate the hedged item's basis adjustment. Under the Example 11 Method, the hedged item's basis adjustments are determined by computing the differences between two present-value calculations: the present value of contractual cash flows discounted to the beginning of the reporting period using the beginning-of-period rate and the present value of contractual cash flows discounted to the end of the reporting period using the end-of-period rate.

May Company A continue to use this method for calculating changes in the basis adjustments of the hedged item upon de-designation and immediate re-designation of the hedge?

PwC Interpretive Response: ASC 815-25-35-9 states—"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."

However, ASC 815-25-40-1 states—"An entity shall discontinue prospectively the accounting specified in ASC 815-25-35-1 through 35-6 for an existing hedge if one of the following occurs...(c) the entity removes the designation of the fair value hedge."

Company A removed the designation of the fair value hedge and, as stated by ASC 815-25-40-1, should discontinue adjusting the carrying value of the hedged item attributable to the hedged risk. We believe that it is possible for Company A to continue to use the method described above for calculating changes in the basis adjustment if both of the following conditions are met:

1. Re-designation of the new hedging relationship occurs concurrently with a de-designation of the original hedging relationship. We believe that there cannot be even a one day gap between the two relationships.
2. The hedged item in the new hedging relationship is either 100 percent of the originally designated hedged item or less than 100 percent of the originally designated hedged item but not greater than 100 percent.

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If the originally designated hedged item was 100 percent of the total debt and the newly designated item is 60 percent of the total debt, then amortization of amounts with respect to the 60 percent of the total debt that is subject to the new hedging relationship can be included with the calculations for the new hedge, but separate amortization must begin for the 40 percent of the total debt that is no longer being hedged.

The language in ASC 815-25-35-9 appears to provide entities with a choice as to when to commence amortization. An entity must make an accounting policy decision as to whether amortization of the adjustment of the carrying amount of hedged item will commence at the conclusion of each individual hedging relationship or will be postponed until the hedged item ceases to be adjusted for changes in its fair value attributable to the risk that gives rise to the adjustment to be amortized.

We believe that although Company A discontinued the hedging relationship of the original swap, the debt was immediately designated as the hedged item in a new hedging relationship with the same risk as that hedged in the original hedging relationship and, as such, its carrying value will continue to be adjusted in future periods for changes in its fair value attributable to changes in the benchmark interest rate (LIBOR). Therefore, Company A can continue to adjust the carrying value by using the method described above.

On the other hand, if Company A did not meet the above criteria, it would need to independently calculate the basis adjustment of the new hedge and would have to amortize the basis adjustments of the de-designated old hedge consistent with ASC 815-25-35-8 and 35-9.

Question No. 5-20: Company A issues 10 year fixed-rate debt at par and simultaneously enters into a receive-fixed, pay-floating (LIBOR-based) interest rate swap with a matching notional amount. Company A designates the swap as a hedge of the risk of changes in the fair value of the debt attributable to changes in the benchmark interest rate (LIBOR).

Under what circumstances should Company A elect to begin amortization of the basis adjustments applied to the carrying amount of the 10 year fixed-rate debt resulting from the application of fair value hedge accounting?

PwC Interpretive Response: ASC 815-25-35-8 states “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....” ASC 815-25-35-9 states “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.”

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Company A could choose not to elect any amortization of the basis adjustment for a period of time allowed under ASC 815-25-35-8, but most companies choose not to do this as their earnings would fluctuate from period to period due to the mismatch that would occur between changes in the debt carrying value and changes in the fair value of the swap. The change in the fair value of the interest rate swap would reflect a passage-of-time element that would not be reflected in the accounting for the hedged item absent amortization. In our experience, we have seen few companies not choose to elect immediate amortization due to the mismatch of accounting and economics that would be reflected in the financial statements.

Depending on the methodology used to calculate the basis adjustment of the hedged item, the choice that the company has made to begin amortization immediately may not be readily apparent without looking at the actual calculation of the basis adjustment. For example if Company A used the methodology illustrated in the Example 11 of ASC 815-25, the amortization that occurs is transparent in the basis adjustment calculation because it incorporates a “natural amortization.” The implicit “natural amortization” occurs because Company A computes the change in fair value attributable to the changes in benchmark interest rates by the taking the difference between two present value calculations of future cash flows at different points in time. This methodology compares the beginning-of-the-period present value of the hedge item’s future cash flow to the end-of-the-period present value after adjustments for cash payments. The difference between these two present values will be the adjustment that will need to be added to or subtracted from the carrying amount of the fixed rate debt. By using this methodology, the “natural amortization” that is implicit in the calculation will result in the match of accounting and economics that Company A wanted to obtain when it selected 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 as the calculation incorporates a benchmark interest rate based factor for the “passage of time.”

In contrast, Company A could choose to apply the Example 9 Method. In that methodology, the changes in fair value of the hedged item attributable to the risk being hedged would be calculated by comparing the present values of two end-of-period cash flow streams. The difference between these two present values will be the basis adjustment that will need to be added or subtracted from the carrying amount of the fixed-rate debt. There is no passage of time captured or implicitly factored into this calculation, because both of the amounts are as of the end of the period, and therefore no “natural amortization” will occur. If Company A 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 the company would not get the full offset between changes in fair value of the swap and debt without separately amortizing the basis adjustments. In order to achieve the accounting offset between the hedging instrument and the hedged item, Company A should 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 approach described in the previous paragraph 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 Company A would have to keep separate records and schedules to determine the amount of amortization for each period.

Accounting for the Basis Adjustments when Differences Exist at Inception of the Hedge between the Initial Calculation of the Present Value of Future Cash Streams and the Par Amount of the Debt

Question No. 5-21: Company A issued fixed-rate debt. Company A elects to hedge the fair value exposure from the fixed-rate debt by using an interest rate swap. The designated risk being hedged is the risk of changes in fair value attributable to the changes in the benchmark interest rate. The Company uses the Example 11 Method to calculate the basis adjustment to the hedged item. Under the Example 11 Method, the hedged item's basis adjustments are determined by computing the differences between two present value calculations: the present value of contractual cash flows discounted to the beginning of the reporting period by using the beginning-of-period rate and the present value of contractual cash flows discounted to the end of the reporting period by using the end-of-period rate.

What is the impact of this approach if Company A's initial present value calculation of future cash flows is not equal to par? This phenomenon could occur either because Company A elected to discount cash flows using only the benchmark rate, exclusive of issuance date credit spreads or because Company A elected to designate the hedging relationship some time period after the debt's issuance date, at which time interest rates may have moved.

PwC Interpretive Response: ASC 815-25-35-1(b) states:

The gain or loss (that is, the change in fair value) of the hedged item attributable to the hedged risk shall adjust the carrying amount of the hedged item and be recognized currently in earnings.

ASC 815-25-35-9 states, in part:

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.

The Company used the Example 11 Method to adjust the carrying amount of the hedged item. This method includes an implicit "natural amortization" by taking the difference between two present value calculations of future cash flows at different points in time. Consequently a separate election to commence amortization pursuant to ASC 815-25-35-9 is not necessary.

As noted above, the difference between these two present values will ordinarily be the adjustment that will need to be added to or subtracted from the carrying amount of the fixed-rate debt. However because the initial present-value amount did not equal par, application of the Example 11 Method without an additional adjustment may result in potential gains or losses at maturity. This would occur because under the Example 11 Method, even if rates do not change after hedge inception, the initial present value amount of the contractual cash flows would migrate toward par value over time. The hedged risk is the risk of changes in fair value attributable to changes in the benchmark rate. It is readily apparent in these circumstances that a portion of the change in the present-value calculations is attributable not to changes in rates, but to the natural migration of the initial present value to par over time. Therefore an adjustment must be made to the

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differences in present-value calculations to further isolate the change in value attributable to the hedged risk. To make the adjustment the company would measure the change in the fair value of the hedged item that would have occurred if the interest rates did not change from the inception of the hedge, and use this amount to adjust the amounts otherwise calculated under the Example 11 Method.

For example, assume Company A issued five-year fixed-rate debt that had an initial fair market value of 100. The debt is subsequently hedged at the end of the following period using a pay-floating receive-fixed interest rate swap. However, due to a number of factors the debt now has a present value of 104 at the inception of the fair value hedge. There would be no basis adjustment to the hedged item at this point (i.e., it would not be 4), as this change in value did not arise in the hedge period. To make the correct basis adjustment in future periods, Company A 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. Continuing with the example, in the first reporting period during the hedge, the present value of 104 may have become 110 by the end of the period. The calculation that assumed no changes in the benchmark rate would tell us that if rates had not changed, the present value would have decreased from 104 to 103 as it migrates back to par. This difference of minus 1 would need to be subtracted from the basis adjustment calculation of 6 ($110 - 104$) resulting in 7 ($6 - (-1)$) as the net basis adjustment to be recognized against the hedged item. If Company A consistently made this adjustment to its basis adjustment each reporting period, Company A would correctly account for any differences that existed at inception between the present value of future cash streams and par. See DH 5.5.2.4.

Basis Adjustment of a Hedged Item When a Collar Is Used as a Hedging Instrument

Question No. 5-22: If an entity were to purchase a collar (i.e., a combination of a purchased and written option) to hedge the price risk in its nonfinancial asset (e.g., inventory), would that entity be required, under ASC 815, to (1) adjust the inventory for all changes in the inventory's prices or (2) adjust the inventory to reflect only those changes in prices that are outside the range of the collar? For example, if the collar were to consist of (1) a purchased put, with a strike price of \$80, and (2) a written call, with a strike price of \$120, would the entity be required to adjust the inventory through earnings to reflect price fluctuations within the range of \$80 to \$120?

Also, may the entity hedge a recognized financial asset (e.g., an available-for-sale security) with a collar? If so, how would the answer differ?

PwC Interpretive Response: The hedge strategy in this situation is to protect the inventory from fair value changes outside a specific range (i.e., not to hedge changes in the fair value from \$80 to \$120). The entity's hedge documentation reflects this in how the hedge was designated. As a result, the entity would adjust the inventory to reflect only those 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).

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For example, the purchased put option with a strike price of \$80 would have intrinsic value when the inventory price is below \$80; this intrinsic value would offset inventory losses that occur when the price is below \$80. Similarly, the written call option with a strike price of \$120 would have intrinsic value when the inventory price is above \$120; this intrinsic value would offset the inventory gains that will occur when the price is above \$120. Therefore, to offset the intrinsic-value gains and losses on the collar (i.e., the hedging instrument), the entity should adjust the carrying amount of the inventory (i.e., the hedged item) to reflect only (1) price decreases below \$80 and (2) price increases above \$120. The inventory would *not* be adjusted for price fluctuations that fall within the range of \$80 to \$120. Similarly, the hedge-effectiveness analysis would ignore price fluctuations that fall within the range of \$80 to \$120, which represents the unhedged portion of the inventory's price risk. 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 carrying amount adjustments made to the inventory. All changes in the fair value of the collar associated with changes in time value would also be recorded in earnings, as the effectiveness assessment is based on changes in intrinsic value.

A similar approach would be appropriate for a fair value hedge of a financial asset using a collar. In that circumstance, absent other authoritative accounting guidance applicable to the financial asset, it would not be revalued for price fluctuations within the range of the collar. Of course, in many financial-asset hedging situations that involve a collar, the hedged financial asset is marked to market pursuant to other GAAP (e.g., ASC 320). In a hedge of an equity security that is classified as available for sale, for example, the security would be adjusted through other comprehensive income for changes in fair value within the collar's range, pursuant to the provisions of ASC 320, and through income for changes in fair value outside the range, pursuant to ASC 815.

Excluding Prepayment Risk from Interest Rate Risk

Question No. 5-23: An entity has a \$500 million portfolio of similar fixed-rate home mortgages that are prepayable at par, at the option of the borrower. The entity wishes to hedge the fair value (i.e., the interest rate risk) of this portfolio by entering into a plain-vanilla, receive-variable, pay-fixed interest rate swap. Such a swap, however, would not be a highly effective hedging instrument, because the hedged item is prepayable at par and, as such, its fair value would generally not exceed par. If the entity can demonstrate (based on historical data) that \$100 million of this portfolio would not prepay if interest rates were to decline, would an interest rate swap with a notional amount of \$100 million qualify for fair value hedge accounting?

PwC Interpretive Response: No. The entity would be required to designate a specific proportion (in this case, 20 percent) of each loan in the mortgage portfolio as the hedged item. The contractual terms of the hedged mortgages include the prepayment option (for the borrower), which cannot be ignored. Prepayment risk cannot be excluded when an entity hedges interest rate risk, since prepayment risk is a component of interest rate risk. ASC 815-20-25-6 states that "the effect of an embedded derivative of the same risk class shall be considered in designating a hedge of an individual risk. For example, the effect of an embedded prepayment option shall be considered in designating a hedge of interest rate risk."

Exclusion of the Change in Fair Value of an Interest Rate Swap Attributable to the Passage of Time from the Assessment of Hedge Effectiveness

Question No 5-24: Company X designates an interest rate swap to hedge its exposure to changes in the fair value of its debt obligation attributable to changes in a benchmark interest rate (i.e., interest rate risk). In this hedging relationship, the interest rate swap would not be hedging Company X's exposure to changes in the fair value of the debt obligation attributable to the passage of time.

If the hedging relationship was deemed highly effective, the basis adjustment to be made to the debt obligation should include only the portion of the change in fair value of the debt obligation attributable to the changes in the benchmark interest rate (and not changes in fair value of the debt obligation attributable to the passage of time). This basis adjustment would be recorded currently in earnings and should offset the portion of the recognized changes in fair value of the interest rate swap also attributable to the changes in the benchmark interest rate.

However, the interest rate swap would be recognized at its full fair value with changes in fair value recognized currently in earnings. The changes in fair value of the interest rate swap would include a component for the passage of time. Therefore, a difference will exist between the full fair value changes recognized for the interest rate swap and the basis adjustments for the debt obligation (i.e., hedge ineffectiveness).

Because the interest rate swap in this hedging relationship is not hedging Company X's exposure to the changes in fair value of its debt obligation attributable to the passage of time, may Company X exclude the changes in fair value of the interest rate swap attributable to the passage of time from its assessment of hedge effectiveness?

PwC Interpretive Response: Yes, consistent with the principles expressed in ASC 815-20-25-82, we believe the changes in fair value of an interest rate swap attributable to the passage of time may be excluded from the assessment of hedge effectiveness in a fair value hedge. The changes in fair value of the excluded component would be included currently in earnings, together with any ineffectiveness that results from the hedging relationship.

ASC 815-20-25-82 specifies how a company may exclude all or part of a hedging instrument's time value (specifically options, forwards, and futures) from the assessment of hedge effectiveness. This guidance should also be considered for interest rate swaps because, economically, an interest rate swap is a series of off market forward rate agreements.

The guidance further explores other components of the change in an option's time value that may be excluded from the assessment of hedge effectiveness such as the change in time value attributable to the passage of time (theta) from the assessment of hedge effectiveness, while assessing hedge effectiveness based on the remaining components of changes in an option's value. Companies are also permitted to exclude one or more components of the change in an option's time value from the assessment of hedge effectiveness, including the portion of the change in time value attributable to the passage of time.

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ASC 815-20-25-82 does not explicitly address the exclusion of time value in the assessment of hedge effectiveness for interest rate swaps. Nevertheless, the FASB has specifically acknowledged that it is permissible to exclude certain elements of the derivative's change in fair value to prove its effectiveness as a hedge. Therefore, we believe the exclusion of the change in fair value attributable to the passage of time in the assessment of hedge effectiveness for a fair value hedge may also be extended to interest rate swaps.

Off-Market Derivatives

Question No. 5-25: ASC 815-20-25-88 states that “a derivative instrument that results from combining a written option and any other non-option derivative shall be considered a written option.” If an entity were to enter into an off-market noncancellable swap and receive \$100,000 at the initiation of the contract (with that amount being attributable solely to the fair value of the contract on the date that the swap is entered into), would the entity have to regard the contract as a written option?

PwC Interpretive 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 (i.e., noncancellable); rather, the contract is off-market and, therefore, has an initial value of \$100,000. The counterparty to the contract is thus paying for this initial value, for which the counterparty expects to be repaid through future periodic settlements. In essence, the swap contract contains a financing element, which, if it is more than significant, should give rise to the considerations in ASC 815-10-45-11 through 45-15. If the \$100,000 financing element is significant enough to disqualify the entire item as a derivative, such as in a prepaid interest rate swap, then the financing element should be accounted as the debt host and the implicit swap recognized separately as a bifurcated embedded derivative.

Benchmark Interest Rates

Question No. 5-26: In a fair value hedge or cash flow hedge of a financial asset or liability, the designated risk being hedged may be attributable to changes in a benchmark interest rate.

When the hedged item is a euro-denominated instrument, may a company designate Euribor (the euro interbank offered rate) as the benchmark interest rate?

PwC Interpretive Response: Yes, we believe Euribor would be considered a designated benchmark interest rate for euro-denominated financial assets or liabilities.

A benchmark interest rate is defined in ASC 815 as “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.” The benchmark interest rate should be a risk-free rate, but may be an interbank offered rate which is not entirely free of risk.

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Euribor 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. Therefore, Euribor would meet the criterion of a benchmark interest rate.

ASC 815-20-55-128 also confirms Euribor as an eligible benchmark interest rate. The guidance provides an example that a company designates 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 guidance does not object to Euribor being the designated benchmark interest rate in the hedging relationship.

5.7 Examples

Example 5-1: Use of a Plain-Vanilla Interest-Rate Swap to Hedge Fixed-Rate Debt (Shortcut Method)

On June 30, 20X1, Company A (the “Company”), a manufacturer of high credit quality, borrows \$10,000,000 of three-year 7.5 percent fixed-rate interest-only nonprepayable debt. There are no issuance costs, premiums or discounts associated with the debt issuance. The Company concurrently enters into a three-year interest-rate swap with Bank B to economically convert the debt’s fixed rate to a variable rate. Under the terms of the swap, the Company receives interest at a fixed rate of 7.5 percent and pays interest at a variable rate equal to the six-month U.S. LIBOR, based on a notional amount of \$10,000,000. Both the debt and the swap require that payments be made or received on December 31 and June 30 (no premium or discount was incurred upon entering into the swap, because the pay and receive rates on the swap represent prevailing market rates for each counterparty; in this example, the forward yield curve is assumed to be upward sloping.) The six-month U.S. LIBOR rate on each reset date determines the variable portion of the interest-rate swap for the following six-month period. Company A designates the swap as a fair value hedge of the fixed-rate debt, with changes in the fair value that are due to changes in benchmark interest rates being the specific risk that is hedged.

Initial Hedge Documentation

Hedging relationship

The designated hedging relationship is a fair value hedge of the Company’s fixed-rate debt, entered into on June 30, 20X1, due to the variability in the 6-month U.S. LIBOR rate (designated benchmark interest rate). The hedging relationship is designated on June 30, 20X1.

Risk management objective

The risk management objective is to offset the changes in fair value of the Company’s fixed-rate debt associated with the risk of variability in the 6-month U.S. LIBOR rate. In essence, the objective is to economically change the Company’s fixed-rate debt to variable rate debt.

Strategy for undertaking the hedge

In order to meet the risk management objective, the Company entered into an interest rate swap described below under *Hedging instrument* with the same critical terms (notional amounts, interest payment dates, and the index on which the variable rate is based matches the benchmark interest rates) as the Company’s \$10

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million fixed-rate debt entered into on June 30, 20X1. Since the critical terms of the hedging instrument match the critical terms of the Company's fixed rate debt, the Company expects the interest rate swap to offset the changes in fair value of the debt attributable to the variability in the 6-month U.S. LIBOR rate (benchmark interest rate).

Hedging instrument

A noncancellable interest rate swap contract with Bank B effective June 30, 20X1, with a maturity of June 30, 20X4. The swap contract provides for the Company to pay a variable interest rate (6-month U.S. LIBOR) and to receive a fixed interest rate (7.5 percent). The variable interest rate reset dates are semi-annual, December 31st and June 30th, respectively. The payment dates are December 31st and June 30th, respectively.

Hedged item

The Company's \$10 million fixed-rate debt entered into June 30, 20X1, maturing on June 30, 20X4. Variable interest rate reset dates are semi-annual (December 31 and June 30) and are based upon the six-month U.S. LIBOR rate). The payment dates are also semi-annual, December 31st and June 30th, respectively.

Nature of the risk being hedged

The nature of the risk being hedged is the risk of changes in fair value attributable to the variability in the six-month U.S. LIBOR interest rate (benchmark interest rate).

Method of assessing prospective and retrospective effectiveness for the Company's hedging instrument¹

The Company is applying the "shortcut method" outlined in ASC 815-20-25-102 through 25-117 and accordingly, since all of the requirements under ASC 815-20-25-104 through 25-105 for the assumption of no ineffectiveness have been met, the Company is permitted under the standard to assume that the hedging relationship is perfectly effective. An ongoing quantitative effectiveness assessment for this hedging relationship is not required.

Method of measuring ineffectiveness¹

The Company is applying the "shortcut method" outlined in ASC 815-20-25-102 through 25-117 and accordingly, since all of the requirements under the shortcut method for the assumption of no ineffectiveness have been met, the Company's measurement of ineffectiveness is assumed to be zero.

Both at the inception of the hedge and on an ongoing basis, Company A assumes that there is no ineffectiveness in the hedging relationship involving the interest-bearing debt and the interest-rate swap because all of the applicable conditions specified in ASC 815-20-25-104 through 25-105 for fair value hedges are met:

- a. The notional amount of the swap matches the principal amount of the interest-bearing debt (\$10 million).**
- b. The fair value of the swap at its inception is zero (i.e., no payments or discounts / premiums). 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**

(continued)

¹ Actual documentation should be more specific than what is described in this illustrative example. In general, reperformance of effectiveness assessments and ineffectiveness measurements should be possible based on the initial hedge documentation.

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 ASC 820-10-35-7. If the interest rate swap 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 the other conditions are met.²

- c. The formula for computing net settlements under the interest-rate swap is the same for each net settlement. (That is, the fixed rate is the same throughout the term, and the variable rate is based on the same index and includes the same constant adjustment or no adjustment; fixed rate of 7.5 percent for fixed leg of the swap throughout the term of the swap, six-month U.S. LIBOR rate for variable leg of the swap throughout the term of the swap.)
- d. The interest-bearing debt is not prepayable.
- e. The index on which the variable leg of the swap is based (i.e., six-month U.S. LIBOR) matches the benchmark interest rate designated as the interest rate risk being hedged for the hedging relationship. (The U.S. LIBOR rate represents one of the benchmark rates permitted by ASC 815 to be used in a short-cut method hedge.)
- f. All other terms in the interest-bearing debt and interest rate swap are typical of those instruments and do not invalidate the assumption of no ineffectiveness.
- g. The expiration date of the swap matches the maturity date of the interest-bearing debt (June 30, 20X4).
- h. There is no floor or ceiling on the variable interest rate of the swap.
- i. The interval between repricings of the variable interest rate in the swap is frequent enough to justify an assumption that the variable payment is at a market rate (generally three to six months or less; the variable leg of the interest rate swap resets every six months).

Application of ASC 815

Because Company A concludes that the swap will be highly effective in offsetting changes in the fair value of the debt, it uses the changes in the fair value of the interest-rate swap to measure the offsetting changes in the fair value of the debt attributable to benchmark interest rate changes. The Company obtains dealer quotes

(continued)

² For further discussions of upfront option premiums received or paid on mirrored options contained within the swap under shortcut reference DH 8.2.3 item c.

which are corroborated using other market data obtained by the company and its own valuation processes in order to determine the fair value of the interest-rate swap.

The period analyzed in this example is from June 30, 20X1 to June 30, 20X2; information and journal entries pertaining to dates beyond this period are not presented.

The six-month U.S. LIBOR rates and the swap and debt fair values are assumed to be as follows for the first year of the swap and debt agreements:

Date	Six-Month U.S. LIBOR Rate¹	Swap Fair value Asset (Liability)²	Debt Carrying Value
06/30/X1	6.0%	\$ — ³	\$(10,000,000)
12/31/X1	7.0%	(323,000)	(9,677,000)
06/30/X2	5.5%	55,000	(10,055,000)

¹ All rate changes are assumed to take place on the date indicated.

² These fair values are assumed to be subsequent to net swap settlements for the period, should there be any.

³ ASC 820 bid/ask initial fair value.

The interest payments on the debt are fixed, which will subject the fair value of the debt to gains or losses should the general level of market interest rates change. The hedge of the interest-rate exposure in a recognized fixed-rate liability is considered a fair value hedge. The swap is reported on the balance sheet as an asset or liability at fair value with changes in fair value reflected in the income statement each reporting period. The change in the fair value of the debt (that is, the gain or loss on the hedged item) attributable to changes in the benchmark interest rate (i.e., six-month U.S. LIBOR) is also reflected in earnings through adjustments to the debt's carrying amount.

Application of ASC 815's Shortcut Method

Applying the shortcut method involves the following steps:

1. Determine the difference between the fixed rate to be received on the swap and the fixed rate to be paid on the debt.
2. Combine that difference with the variable rate to be paid on the swap.
3. Compute and recognize interest expense using that combined rate and the fixed-rate debt's principal amount. (Amortization of any issuance costs, purchase premium or discount on the debt also must be considered, although that aspect is not present in this example.)

	(a)	(b)	(c)	(d)	(e)
Semiannual Period Ended	Difference between Fixed Rates	Variable Rate on Swap	Sum (a) + (b)	Debt's Principal Amount	Semiannual Interest Expense ((c) x (d)) / 2
12/31/X1	0.00%	6.00%	6.00%	\$10,000,000	\$300,000
06/30/X2	0.00%	7.00%	7.00%	\$10,000,000	\$350,000

(continued)

4. Determine the fair value of the interest rate swap.
5. Adjust the carrying amount of the swap to its fair value and adjust the carrying amount of the debt by an offsetting amount.

The following journal entries are applicable assuming all of the requirements for hedge accounting have been met.

Accounting Entries	Debit	Credit
June 30, 20X1^{4, 5}		
1. Cash	\$10,000,000	
Debt		\$10,000,000
To record the issuance of the debt		
December 31, 20X1		
2. Interest expense	375,000	
Accrued interest payable		375,000
To accrue semiannual interest on the debt at a fixed rate of 7.5%		
3. Accrued interest payable	375,000	
Cash		375,000
To record the semiannual debt interest payment		
4. Cash	75,000	
Interest expense		75,000
To record the settlement of the semiannual swap-amount receivable at 7.5%, less the amount payable at LIBOR, 6%, as an adjustment to interest		
5. Debt ⁶	323,000	
Gain on hedge activity		323,000
To record the change in the debt's fair value that is attributable to changes in the benchmark interest rate (e.g., six-month U.S. LIBOR) at the end of Company A's first reporting period		
6. Loss on hedge activity	323,000	
Swap contract		323,000
To record the change in the fair value of the swap at the end of Company A's first reporting period		
June 30, 20X2		
7. Interest expense	375,000	
Accrued interest payable		375,000
To accrue semiannual interest on the debt at a fixed rate of 7.5%		
8. Accrued interest payable	375,000	
Cash		375,000
To record the semiannual debt interest payment		
9. Cash	\$25,000	
Interest expense		\$25,000
To record the receipt of the semiannual swap amount receivable at 7.5%, less the amount payable at LIBOR, 7%		

(continued)

Accounting Entries	Debit	Credit
10. Loss on hedge activity	\$378,000	
Debt		\$378,000
To record the change in the debt's fair value that is attributable to changes in the benchmark interest rate (i.e., six-month U.S. LIBOR) at the end of Company A's second reporting period		
11. Swap contract	\$378,000	
Gain on hedge activity		\$378,000
To record the change in the fair value of the swap at the end of Company A's second reporting period		

⁴ No entry is made to record the fair value of the swap contract at the hedge's inception, because its fair value is zero.

⁵ In order to simplify the accounting for the swap contract, the Company does not record a separate accrual for the current swap period payment, should there be one. The accounting for the accrual of the current swap period payment is, however, captured each period through the fair value adjustment of the swap contract.

⁶ Basis adjustments to the debt are implicitly amortized each period through subsequent basis adjustments that are made for changes in the fair value of the swap.

Analysis

The debt is presented on the balance sheet at an amount that reflects the impact of changes in the benchmark interest rates (e.g., six-month U.S. LIBOR) on its fair value. The swap contract is presented on the balance sheet at its fair value. The changes in the fair value of (1) the debt that are attributable to the hedged interest-rate risk and (2) the swap contract are recognized in current-period earnings. Net interest expense for the period reflects the debt's coupon rate adjusted for the swap's settlement for the period.

Example 5-2: Use of Futures Contracts to Hedge Available-for-Sale GNMA Securities

On July 8, 20X1, Company A (the "Company") holds \$10,000,000 par value (\$9,600,000 cost and carrying value) 6 percent GNMA securities that are classified as available-for-sale (AFS). The Company concludes that it is exposed to changes in the benchmark interest rate (e.g., U.S. Treasuries), since an increase in interest rates will cause the fair value of the securities to decrease.

To hedge against the risk of loss in the fair value of the GNMA securities that would result if the benchmark interest rate (e.g., U.S. Treasuries) were to rise, the Company sells 100 September 20X1 Treasury-note futures contracts on July 8, 20X1. Futures contracts are standardized contracts, traded on a futures exchange, to buy or sell a certain underlying instrument at a certain date in the future, at a specified price. The Company has determined through a mathematical analysis that the hedging relationship between the futures contracts and the GNMA securities is highly effective (both at the inception of the relationship and on an ongoing basis) in achieving offsetting changes in the fair value that are due to changes in the benchmark interest rate. Accordingly, this transaction is designated as a fair value hedge. Since Treasury-note futures contracts are sold in contract units of \$100,000, the Company sells 100 contracts to hedge the \$10,000,000 in securities that it holds (the maturity of the notes underlying the Treasury-note futures contracts matches the expected remaining life

(continued)

of the GNMA securities) resulting in a 1:1 hedge ratio. The Company has formally documented the hedging relationship between the futures contracts (designated hedging instrument) and the GNMA securities (designated hedged item), as well as its objectives and strategy for designating the hedging relationship.

The prices of the hedged item and the hedging instrument (and the resulting gains and losses) are summarized in Table 1. Assume that the GNMA securities are sold on September 30, 20X1 at what was then the fair value of \$9,850,000.

Initial Hedge Documentation

Hedging relationship

The designated hedging relationship is a fair value hedge of the Company's GNMA securities using Treasury-note futures contracts due to changes in fair value attributable to the variability in the benchmark interest rate (U.S. Treasuries). The hedging relationship is designated on July 8, 20X1.

Risk management objective

The risk management objective is to offset the changes in fair value of the Company's GNMA securities attributable to the variability in the benchmark interest rate (U.S. Treasuries).

Strategy for undertaking the hedge

In order to meet the risk management objective, the Company sold U.S. Treasury-note futures contracts described below with the same duration as the Company's GNMA securities. Since the duration of the hedging instrument matches the duration of the Company's GNMA securities, the Company expects the futures contracts to offset the changes in fair value of its GNMA securities attributable to the variability in U.S. Treasury rates (benchmark interest rate).

Hedging instrument

100 U.S. Treasury-note futures contracts entered into on July 8, 20X1 (maturity in September 20X1).

Hedged item

The hedged item is the Company's \$10,000,000 par value 6 percent GNMA securities.

Nature of the risk being hedged

The nature of the risk being hedged is the risk of changes in fair value attributable to the variability in U.S. Treasury rates (benchmark interest rate).

Method of assessing prospective and retrospective effectiveness for the company's hedging instrument¹

The Company will use a mathematical analysis to assess the effectiveness of the hedging relationship prospectively. The Company will use the dollar offset method, period-by-period approach (outlined in ASC 815-20-35-5(a)), to assess the effectiveness of the hedging relationship retrospectively.

Method of measuring ineffectiveness¹

The Company's measurement of ineffectiveness will be a dollar offset approach that compares the change in value of the Company's GNMA securities attributable to changes in benchmark rates to the change in fair value of the Company's U.S. Treasury-note futures contracts. Both amounts will be recorded in earnings. Any difference in the amounts recorded in earnings is considered hedge ineffectiveness.

¹ The Company's mathematical analysis used to assess effectiveness prospectively is not included in this illustrative example. Actual documentation should be more specific than what is described in this illustrative example. In general, reperformance of effectiveness assessments and ineffectiveness measurements should be possible based on the initial hedge documentation.

Additional Assumptions (Table 1)

Date	Hedged Item Position	Futures Position	Margin	
			Initial	Variation
Company A sells one hundred treasury-note futures contracts on July 8, 2001.				
July 8, 20X1	\$10,000,000 in 6% GNMA's at 96.00 ^{2, 3}	Sell one hundred September Treasury-note contracts at 117.10 ²	\$150,000 ⁴	
Interest rates declined as of August 31, 20X1.				
August 31, 20X1	\$10,000,000 in 6% GNMA's at 98.00 ^{2, 3}	Value of one hundred September Treasury-note contracts at 119.15		\$(215,625) ⁶
Rates further decline and the futures contracts are terminated by Company A on September 30, 20X1.				
September 30, 20X1	\$10,000,000 in 6% GNMA's at 98.16 ^{2, 3}	Buy one hundred September Treasury-note contracts at 120.00		\$ (53,125) ⁸
Summary:				
<u>7/8–8/31/20X1</u>				
Securities gain	\$ 200,000 ⁵			
Futures loss	(215,625) ⁶			
Total net loss	<u>\$ (15,625)</u>			
<u>9/1–9/30/20X1</u>				
Securities gain	\$ 50,000 ⁷			
Futures loss	(53,125) ⁸			
Total net loss	<u>\$ (3,125)</u>			
Cumulative loss	\$ (18,750)			

² These dealer quotes represent the fair value of the GNMA securities. For purposes of this example, we assumed the changes in fair value attributable to changes in the benchmark interest rate calculated by the Company were equal to these amounts. Such an assumption would not be justified in an actual benchmark interest rate fair value hedge.

³ Treasury-note futures contracts and mortgage-backed securities are quoted as a percentage of par, with fractions in 32nds of a point. A price of 117.10 means 117–10/32 or 117.3125% of \$100,000. A price change of 1/32 of a point is equal to \$31.25 (.01 x 1/32 x \$100,000).

⁴ A margin deposit of \$1,500 per contract was deposited with the broker, as required by the futures exchange.

⁵ (\$10,000,000 x .98) – \$9,600,000 previous carrying value.

⁶ (1.1946875 – 1.173125) x \$10,000,000. It is assumed that the initial margin is required by the exchange and that the broker requires a variation margin equal to the losses on the futures contracts, without any consideration for the initial margin. In many situations, however, a broker will require a variation margin less than the total amount of the losses on the futures contract.

⁷ (\$10,000,000 x .9850) – \$9,800,000 previous carrying value.

⁸ (1.20 – 1.1946875) x \$10,000,000.

(continued)

Retrospective Hedge-Effectiveness Analysis

Date	Change in the Fair Value of		
	Treasury-Note Futures Contracts Gain (Loss)	GNMA Securities Gain (Loss)	Effectiveness Ratio for the Period
August 31, 20X1	\$(215,625)	\$200,000	1.08
September 30, 20X1	(53,125)	50,000	1.06

Management assesses hedge effectiveness through a comparison of the change in the fair value of the hedging instrument to the change in fair value of the GNMA securities (period-by-period approach) that is caused by changes in the benchmark interest rate (e.g., U.S. Treasuries). For purposes of this example, it is assumed that all changes in the fair value of the securities are attributable to changes in the benchmark interest rate. In an actual benchmark interest rate hedge, an analysis would be required to identify the change in value solely attributable to the change in benchmark interest rates. Based on the effectiveness ratios calculated above, management determined that the hedging relationship between the futures contracts and GNMA securities was highly effective.

Application of ASC 815

The interest payments on the GNMA securities are fixed, which will subject the fair value of the securities to gains or losses should benchmark interest rates change. The hedge of the interest-rate exposure in a recognized fixed-rate asset is considered a fair value hedge. The Company has designated as the hedged risk changes in the fair value of the GNMA securities due to changes in the benchmark interest rate (e.g. U.S. Treasuries). The change in the fair value of the GNMA securities (hedged item) that is due to fluctuations in the benchmark interest rate is reflected in earnings. Any remaining change in the fair value of the available for sale GNMA securities that is due to unhedged risks (i.e., credit risk) continues to be recorded in other comprehensive income, as required by ASC 320 (such changes are not presented in this example). Accordingly, the futures contracts are recorded on the balance sheet as an asset or liability and marked to market, with changes in the fair value reflected in the income statement each reporting period.

The following journal entries are applicable assuming all of the requirements for hedge accounting have been met.

Accounting Entries	Debit	Credit
July 8, 20X1⁹		
1. Amount due to/from broker	\$150,000	
Cash		\$150,000
To record the initial margin deposit		
August 31, 20X1		
2. GNMA Securities ¹⁰⁻¹²	200,000	
Gain on hedge activity		200,000
To record the gain on mortgage securities that is due to the change in the benchmark interest rate at the end of Bank A's first reporting period		

(continued)

Accounting Entries	Debit	Credit
3. Loss on hedge activity	\$ 215,625	
Cash		\$ 215,625
To settle the futures contracts pursuant to the change in the fair value of contracts at the end of Bank A's first reporting period		
September 30, 20X1		
4. GNMA securities ¹⁰⁻¹²	50,000	
Gain on hedge activity		50,000
To record the gain on mortgage securities that is due to the change in the benchmark interest rate at the date of the termination of futures contracts		
5. Loss on hedge activity	53,125	
Cash		53,125
To settle the futures contracts pursuant to the change in the fair value of futures contracts just prior to the termination of the contracts		
6. Cash	150,00	
Amount due to/from broker		150,000
To record the receipt of the initial margin deposit upon the termination of futures contracts		
7. Cash	\$9,850,000	
GNMA securities		\$9,850,000
To record the sale of GNMA securities at fair value		

⁹ No entry is made to record the fair value of the futures contracts, because at the time of the purchase their fair value is zero.

¹⁰ The change in the fair value of the mortgage securities differs from the change in the fair value of the futures contracts, due to a slight amount of hedge ineffectiveness caused by the basis difference between mortgage rates and U.S. Treasury interest rates (benchmark interest rate). In accordance with ASC 815-25, the change in the fair value of the available-for-sale securities attributable to the benchmark interest rate is recorded in earnings.

¹¹ Had there been changes in the securities' fair value that were attributable to factors other than changes in the benchmark interest rate (e.g., credit quality), such changes in the fair value would be recorded in other comprehensive income, as required by ASC 320.

¹² For purposes of this example, principal and interest receipts on the securities are not reflected in the journal entries.

Analysis

The futures contracts are reflected at their fair value on the balance sheet after taking into account amounts paid to settle the changes in fair value, with change in fair value recorded in earnings. The entire fair value changes of the GNMA securities that is due to changes in the benchmark interest rate are also recognized in earnings.

Example 5-3: Use of Option Contracts to Hedge Available-for-Sale Securities

Company A (the “Company”) is a manufacturer that has investments in marketable equity securities. On January 1, 20X1, Company A purchases 100 shares of MBI at a cost of \$50 per share. The Company does not plan to sell these securities in the near term and, therefore, classifies the shares as “available for sale” in accordance with ASC 320. Twelve months later when the investment is now worth \$65 per share, in order to protect itself from a decrease in the price of MBI shares, on December 31, 20X1, the Company purchases for a premium of \$600 an at-the-money put option, which gives it the right, but not the obligation, to sell 100 shares of MBI at \$65 per share. The option expires on December 31, 20X3. The fair value of the MBI shares and the option are as follows:

	12/31/X1	12/31/X2	12/31/X3
MBI shares			
Per share	\$ 65	\$ 60	\$ 57
Per share	<u>\$6,500</u>	<u>\$6,000</u>	<u>\$5,700</u>
Put option			
Time value	\$ 600	\$ 350	\$ —
Intrinsic value	<u>—</u>	<u>500</u>	<u>800</u>
Total value	\$ 600	\$ 850	\$ 800

The intrinsic value of the option is based on a comparison of the current share price and the strike price. Please note that there are two ways to evaluate the intrinsic value of the option: (a) by comparing the strike price and the current spot prices or (b) by comparing the strike price and the value of the current forward contract rate at the option’s expiration date. For example, assuming that the Company had elected to define intrinsic value as the difference between the current market price (i.e., spot price) and the strike rate, then on 12/31/X2, the intrinsic value of the put option is \$500 because the current share price of MBI has fallen \$5 below the strike price of \$65 [$(\$65 - \$60) \times 100 \text{ shares} = \500]. The time value of the option (e.g., \$350 as of 12/31/X2) is equal to its total fair market value (e.g., \$850 as of 12/31/X2) less its intrinsic value (e.g., \$500 as of 12/31/X2).

Just prior to the option’s expiration on December 31, 20X3, the Company exercises the option (and delivers the MBI shares to the option writer), since it is “in the money.”

Retrospective Hedge-Effectiveness Analysis

Date	Change in Option's Intrinsic Value (Gain) Loss	Change in Value of MBI Shares (Gain) Loss	Effectiveness Ratio For the Period
12/31/X2	\$(500)	\$500	1.00
12/31/X3	(300)	300	1.00

The Company determines hedge effectiveness based on changes in the option’s intrinsic value. The Company has determined that the hedging relationship between the option contract and the MBI shares was highly effective in achieving the offset of changes in fair values that are attributable to the equity price risk. It has formally documented the hedging relationship of the option contract and the MBI shares,

(continued)

the level at which it seeks protection, its definition of intrinsic value, as well as its objectives and strategy for undertaking the hedge.

Application of ASC 815

The Company has decided to exclude the time value of the put option from its hedge effectiveness assessment. Accordingly, changes in the option's time value are charged to earnings. Changes in the option's intrinsic value and the offsetting decreases in the fair value of the available-for-sale securities are both recorded in current earnings. The Company in this example is hedging the entire change in the fair value of the available-for-sale securities.

Initial Hedge Documentation

Hedging relationship

The designated hedging relationship is a fair value hedge of the Company's MBI shares purchased on January 1, 20X1, using the intrinsic value of a purchased put option, which gives the Company the right, but not the obligation, to sell 100 shares of MBI at \$65 per share expiring on December 31, 20X3. The hedge designation date is December 31, 20X1.

Risk management objective

The Company's risk management objective is to offset the declines in fair value of the Company's MBI shares with a purchased put option on MBI shares.

Strategy for undertaking the hedge

In order to meet the risk management objective, the Company purchased an option to sell MBI shares (a purchased put option) described herein for the same notional amount as the Company's MBI shares. It is expected that this put option will offset declines in the fair value of the Company's MBI shares below \$65 per share.

Hedging instrument

A purchased put option, which gives the Company the right, but not the obligation, to sell 100 shares of MBI at \$65 per share expiring on December 31, 20X3.

Hedged item

The hedged item is the 100 MBI shares purchased on January 1, 20X1. (The Company is assumed to use the specific identification method for its security portfolio.)

Nature of the risk being hedged

The nature of the risk being hedged is the risk of decline in the overall fair value of Company's MBI shares purchased on January 1, 20X1, below \$65/share.

Method of assessing retrospective and prospective effectiveness¹

The Company's method of assessing effectiveness is the dollar offset method (period-by-period approach outlined in ASC 815-20-35-5(a)), excluding the option's time value (ASC 815-20-25-82(a)). Specifically, the Company will compare the changes in value of the purchased put option, due to the option's intrinsic value only, to the entire change in fair value of the Company's MBI shares purchased on January 1, 20X1, below the hedge threshold of \$65.

(continued)

¹ Actual documentation should be more specific than what is described in this illustrative example. In general, reperformance of effectiveness assessments and ineffectiveness measurements should be possible based on the initial hedge documentation.

Method of measuring hedge ineffectiveness¹

The Company's method of measuring ineffectiveness will compare the changes in intrinsic value of the purchased put option to the change in fair value of the Company's MBI shares purchased on January 1, 20X1, below the hedge threshold of \$65. Both amounts will be recorded in earnings. Since the changes in time value of the put option are excluded from the assessment of effectiveness, there will be no ineffectiveness recorded in earnings.

The following journal entries are applicable assuming all of the requirements for hedge accounting have been met.

Accounting Entries	Debit	Credit
January 1, 20X1		
1. Available-for-sale securities	\$5,000	
Cash		\$5,000
To record purchase of MBI shares		
December 31, 20X1		
2. Available-for-sale securities ²	1,500	
Other comprehensive income ³		1,500
To record appreciation of MBI shares		
3. Put option	600	
Cash		600
To record the purchase of the put option		
December 31, 20X2		
4. Put option	500	
Gain on hedge activity		500
To record the increase in the intrinsic value of the put option		
5. Loss on hedge activity ⁵	500	
Available-for-sale securities		500
To record the decrease in the fair value of MBI shares ⁴		
6. Loss on hedge activity	250	
Put option		250
To record the portion of the change in the fair value of the put option [i.e., the change in time value] excluded from the effectiveness assessment in earnings		
December 31, 20X3		
7. Put option	300	
Gain on hedge activity		300
To record the increase in the intrinsic value of the put option		
8. Loss on hedge activity ⁶	300	
Available-for-sale securities		300
To record the decrease in the fair value of MBI shares ⁴		

(continued)

¹ Actual documentation should be more specific than what is described in this illustrative example. In general, reperformance of effectiveness assessments and ineffectiveness measurements should be possible based on the initial hedge documentation.

Accounting Entries	Debit	Credit
9. Loss on hedge activity	\$ 350	
Put option		\$ 350
To record the portion of the change in the fair value of the put option [i.e., the change in time value excluded from the effectiveness assessment] in earnings		
10. Cash	6,500	
Put option		800
Available-for-sale securities		5,700
To record the exercise of the put option on December 31, 20X3, by delivering MBI shares		
11. Other comprehensive income	\$1,500	
Realized gain on MBI shares		\$1,500
To reclassify the unrealized gain on MBI shares from “other comprehensive income” to “earnings” because the securities were sold		

² $(\$65 - \$50) \times 100$.

³ For purposes of this example, the tax effects of gains and losses in other comprehensive income are not shown.

⁴ According to ASC 320, unrealized gains/losses on available-for-sale securities shall be excluded from earnings and reported in stockholders' equity until realized. However, ASC 815 amends ASC 320 to require that all or a portion of the unrealized holding gain or loss of an available-for-sale security that is designated as a hedged item in a fair-value hedge be recognized in earnings during the period of the hedge.

⁵ $(\$60 - \$65) \times 100$.

⁶ $(\$57 - \$60) \times 100$.

Example 5-4: Use of Futures Contracts to Hedge Copper Inventory

On October 1, 20X1, a mining company in Colorado (the “Company”) has 10 million pounds of copper inventory on hand at an average cost of 65 cents per pound. To protect the inventory from a possible decline in copper prices, the Company hedges its position by selling 400 copper contracts on the N.Y. COMEX (each copper contract is for 25,000 pounds) at 93 cents a pound for delivery in February 20X2 to coincide with its expected physical sale of its copper inventory. (The Company designates the hedge as a fair value hedge [i.e., the Company is hedging changes in the inventory's fair value, not changes in cash flows from anticipated sales.]) The margin deposit payable on each copper contract is \$700 (in the form of U.S. Treasury Securities), and the N.Y. COMEX copper spot price on October 1, 20X1, is 91 cents per pound.

The Company's strategy is to hedge against changes in fair value of its copper inventory. If prices fall during the next 5 months, the gain from the N.Y. COMEX future contracts is expected to substantially offset the decline in the fair value of the Company's copper inventory. The hedging relationship may not be perfectly effective due to the existence of basis risk because the Company's inventory is located in Colorado, while the price of the future contracts (hedging instrument) is based on delivery of copper in New York. Basis risk is the risk that a price difference exists because of differences in delivery location, quality or grade of commodity, or other commodity-specific variable.

(continued)

Based on the results of mathematical analysis using historical data, the Company determines that the spot price of their copper in Colorado and the spot price of copper on the N.Y. COMEX have a strong positive correlation. Accordingly, the Company concludes that the changes in the fair value of the futures contracts related to changes in the spot price of copper at the N.Y. COMEX are expected to be highly effective in offsetting future changes in the fair value of the copper inventory located in Colorado.

On December 31, 20X1, the Company's fiscal year-end, the February copper futures price at the N.Y. COMEX has fallen to 91 cents a pound, and the N.Y. COMEX spot price has fallen to 89 cents a pound.

On February 20, 20X2, the Company closes out its futures contracts by entering into an offsetting contract in which it agrees to buy 400 February 20X2 copper futures contracts at 92 cents a pound.

The Company sells copper inventory in the open market on February 20, 20X2, at the spot price of 93.1 cents per pound.

Date	N.Y. COMEX Copper Prices		Colorado Copper Prices
	Spot	February 20X2 Futures	Spot
October 1, 20X1	91¢	93¢	92.2¢
December 31, 20X1	89¢	91¢	90.0¢
February 20, 20X2	92¢	92¢	93.1¢

As permitted by ASC 815-20-25-82(d), the Company assesses hedge effectiveness based on changes in fair value attributable to changes in spot prices as follows:

Retrospective Hedge-Effectiveness Analysis

Date	Change in the Spot Price of		Effectiveness Ratio for the Period
	N.Y. COMEX Copper (Gain) Loss	Inventory (Gain) Loss	
12/31/20X1	\$(200,000) ¹	\$ 220,000 ²	0.91
2/20/20X2	300,000 ³	(310,000) ²	0.97

¹ \$0.89 – \$0.91 on 10,000,000 pounds.

² The Company estimates the change in the fair value of the copper inventory in Colorado by starting with the current N.Y. COMEX spot price and adjusting it to reflect the differences that are due to changes in transportation costs, storage costs, and regional supply and demand conditions. \$0.922 – 0.90 on 10,000,000 pounds for 12/31/20X1, and \$0.90 – 0.931 on 10,000,000 pounds for 2/20/20X2.

³ \$0.92 – \$0.89 on 10,000,000 pounds.

The Company elected to assess hedge effectiveness based on changes in spot prices rather than on changes in future prices using the period by period approach outlined in ASC 815-20-35-5(a) and ASC 815-20-25-82(d). The effect of changes in the difference between the spot prices and the future prices is excluded from the Company's hedge effectiveness assessment. The Company has determined that the hedging relationship between the futures contracts and the copper inventory is highly effective (both at the inception of the relationship and on an ongoing basis) in achieving the offset of changes in the fair value that are attributable to changes in the spot price of copper.

(continued)

The above analysis, which reflects only the spot price changes, was prepared solely for the purpose of retrospectively assessing hedge effectiveness. The journal entries that follow reflect the actual gains and losses on the futures contracts and are based on changes in futures prices.

Application of ASC 815

The hedge of the commodity price exposure in the fair value of an asset is considered a fair value hedge. ASC 815-20-25-12(e) specifies that in a fair value hedge of a nonfinancial asset (copper inventory in this example) the designated risk that is being hedged is the risk of changes in the fair value of the entire hedged asset (reflecting its actual location, because it is a physical non-financial asset). ASC 815-20-35-1(b) specifies the accounting for qualifying fair value hedges. The futures contracts are recognized on the balance sheet as assets or liabilities net of cash payments to the broker/dealer, and gains or losses on the futures contracts are recognized currently in earnings. Gains or losses on the copper inventory (the hedged item) are also recognized currently in earnings by adjusting the carrying amount of the hedged item. As a result, any ineffective portion of the hedge is recognized currently in earnings.

Initial Hedge Documentation

Hedging relationship

The designated hedging relationship is a fair value hedge of the Company's 10 million pounds of copper inventory to offset the changes in fair value associated with the variability in the price of copper by entering into 400 copper futures contracts (short position) on the N.Y. COMEX. The hedge designation date is October 1, 20X1.

Risk management objective

The Company's risk management objective is to offset the overall change in fair value of the Company's 10 million pounds of copper inventory.

Strategy for undertaking the hedge

In order to meet the risk management objective, the Company entered into 400 copper futures contracts on the N.Y. COMEX for the same notional amount as the copper inventory. It is expected that these contracts will offset the overall changes in fair value of the Company's copper inventory.

Hedging instrument

400 copper futures contracts (short position) for settlement in February 20X2.

Hedged item

The hedged item is the Company's 10 million pounds of copper inventory. (Note that the Company is hedging its entire inventory of copper. In the event the Company was to hedge only a portion of its copper inventory, additional specificity of the hedged item would be required in order to ascertain which 10 million pounds of copper inventory represents the hedged item.)

Nature of the risk being hedged

The nature of the risk being hedged is the risk of changes in the overall fair value of Company's 10 million pounds of copper inventory.

Method of assessing prospective and retrospective effectiveness⁴

The Company uses mathematical analysis, for example regression, to assess effectiveness prospectively. The Company's method of assessing effectiveness retrospectively is the dollar offset method (period-by-period approach outlined in ASC 815-20-35-5(a)). Specifically, the Company will compare the changes in value

(continued)

of the 400 copper futures contracts, due to changes in spot rates as per ASC 815-20-25-82(d), to the entire change in fair value of the Company's 10 million pounds of copper inventory for each discrete period.

*Method of measuring hedge ineffectiveness*⁴

The Company's method of measuring ineffectiveness will compare the changes in the fair value of the 400 copper futures contracts, due to movements in the spot rate, to the change in fair value of the Company's 10 million pounds of copper inventory. Both the resulting amounts and the amounts excluded from the assessment of effectiveness will be recorded in current period earnings. Any difference between the amounts recorded in current period earnings will be considered ineffectiveness.

The following journal entries are applicable assuming all of the requirements for hedge accounting have been met.

Accounting Entries	Debit	Credit
October 1, 20X1 ⁵		
1. Treasury securities, pledged ⁶	\$280,000	
Treasury securities		\$280,000
To record the initial margin deposit on 400 copper contracts		
December 31, 20X1		
2. Loss on hedge activity ⁷	220,000	
Copper inventory		220,000
To adjust the carrying amount of the inventory for changes in its fair value		
3. Margin deposits—variation margin ⁸	200,000	
Gain on hedge activity		200,000
To record the gain on futures contract		
February 20, 20X2		
4. Cash ⁹	100,000	
Treasury securities	280,000	
Loss on hedge activity ¹⁰	100,000	
Treasury securities, pledged ¹¹		280,000
Margin deposits—variation margin		200,000
To record the return of the margin deposit, recognize the loss on the futures contracts from 12/31/20X1 to 2/20/20X2, and eliminate the receivable from the broker		

(continued)

⁴ Actual documentation should be more specific than what is described in this illustrative example. In general, reperformance of effectiveness assessments and ineffectiveness measurements should be possible based on the initial hedge documentation.

Accounting Entries	Debit	Credit
5. Copper inventory ¹²	\$310,000	
Gain on hedge activity		\$310,000
To adjust the carrying amount of the inventory that is due to the increase in spot prices		

February 20, 20X2

6. Accounts receivable ¹³	9,310,000	
Cost of goods sold ¹⁴	6,590,000	
Copper sales		9,310,000
Copper inventory		6,590,000

To record the sale of 10,000,000 pounds of copper inventory at 93.1 cents per pound

⁵ No entry is made to record the fair value of the futures contracts, because at the time of their inception their fair value is zero.

⁶ A margin deposit of \$700 per contract is deposited with the broker, as required by the futures contracts (\$700 x 400). Income earned on the initial margin deposit and on open trade equity (i.e., variation margin) is ignored for purposes of this example. The securities pledged are assumed to not change in value.

⁷ The Company's estimate of the change in fair value of their copper inventory (refer to hedge-effectiveness analysis).

⁸ \$.93	February copper futures price at 10/1/20X1
	(.91)	February copper futures price at 12/31/20X1
	.02	gain per pound
x	10,000,000	pounds
\$	200,000	gain on futures contracts from 10/1/20X1 to 12/31/20X1

⁹ \$	200,000	10/1/20X1 to 12/31/20X1 gain on futures contract (see footnote 8)
	(100,000)	12/31/20X1 to 2/20/20X2 loss on futures contract (see footnote 10)
\$	100,000	net gain on futures contract

¹⁰ \$.91	February copper futures price at 12/31/20X1
	(.92)	February copper futures price at 2/20/20X2
	(.01)	loss per pound
x	10,000,000	pounds
\$	(100,000)	loss on futures contracts from 12/31/20X1 to 2/20/20X2

¹¹ \$280,000 margin deposit in the form of U.S. Treasury Securities reclassified from "Treasury securities, pledged" to "Treasury securities" on 2/20/20X2.

¹² The Company's estimate of the changes in fair value for their copper inventory (refer to hedge-effectiveness analysis).

¹³ \$0.93.1 Colorado spot price at 2/20/20X2 x 10,000,000 pounds.

¹⁴ \$	6,500,000	average cost of copper inventory at 10/1/20X1
	(220,000)	adjustment to carrying value at 12/31/20X1 (see footnote 7)
	310,000	adjustment to carrying value at 2/20/20X2 (see footnote 12)
\$	6,590,000	

(continued)

Analysis

By entering into the copper futures contracts, the Company essentially neutralized its price exposure associated with its copper inventory except for the basis difference between N.Y. COMEX copper prices and Colorado copper prices. To the extent the variability in the price of copper for these two locations were exactly the same (the basis difference remained constant), the Company would have offset its entire exposure to the variability in the price of copper associated with its inventory.

Had the Company not entered into the copper futures contracts, its gross profit would have been lower by the gain on the futures contracts of \$100,000. The cumulative gain associated with the Company's copper futures contracts was \$100,000 compared to the cumulative gain associated with the Company's copper inventory of \$90,000 results in cumulative net positive impact in earnings of \$190,000. (Note that a \$20,000 net hedging loss was recorded for the period ended December 31, 20X1, and a \$210,000 net hedging gain was recorded for the period ended February 20, 20X2). However, the ineffectiveness associated with the Company's fair value hedging relationship is only \$10,000 as spot vs. future copper prices differences are excluded from the Company's effectiveness assessment. This hedge ineffectiveness resulted from the copper price differences associated with the locations of N.Y. COMEX and Colorado, respectively.

Chapter 6:

Cash Flow Hedges

Executive Takeaway

- A cash flow hedge is a hedge of an exposure to either overall changes in the cash flows associated with a recognized asset or liability or of a forecasted transaction, or changes in the cash flows attributable to a particular risk of a qualified hedged item.
- The application of hedge accounting for cash flow hedges includes careful consideration of the eligibility of the designated hedging instrument and the designated hedged item including its probability of occurrence.
- Assessing hedge effectiveness and measuring hedge ineffectiveness associated with a designated cash flow hedging relationship is required to establish and continue hedge accounting throughout the hedging relationship period.
- Documentation requirements supporting a designated hedging relationship should be established at the inception of the hedging relationship, and should be detailed and comprehensive in nature.

6.1 Introduction and Scope

An entity may designate a derivative instrument as a hedge of the exposure to the variability in expected future cash flows that is attributable to a particular risk such as changes in prices, interest rates, or exchange rates (referred to as a *cash flow hedge*). That exposure may be associated with an existing recognized asset or liability (such as all or certain future interest payments on variable-rate debt) or a forecasted transaction (such as forecasted purchases or sales of a product or forecasted issuances of debt).

The term *forecasted transaction* is not intended to include transactions that qualify as firm commitments, even though such transactions are executed in the future. Hedges of unrecognized firm commitments are considered fair value hedges, since the price is fixed. Hedges of forecasted transactions (which involve the variability of cash flows) are considered cash flow hedges, since the price is not fixed. However, foreign-currency firm commitments can qualify as cash flow hedges, since the currency fluctuation would create variability of cash flows in the company's functional currency. Additionally, as noted in ASC 815-20-25-21, a derivative instrument that also 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 that is to be paid or received in the forecasted transaction that will occur upon the gross settlement of the derivative contract itself.

The primary purpose of a cash flow hedge is to link together the income statement recognition of a hedging instrument and a hedged transaction whose changes in cash flows are expected to offset each other. In order for an entity to achieve this offsetting or "matching" of cash flows, the effective portion of the changes in the fair value of the derivative instrument (which is designated and effective as a cash flow hedge) is (i) initially reported as a component of other comprehensive income and (ii) later reclassified into earnings in the same period or periods during which the hedged transaction affects earnings (e.g., when a forecasted sale actually occurs).

Common examples of cash flow hedges are:

- The hedge of a forecasted sale or purchase of a commodity (e.g., natural gas) with forward, futures, or option contracts
- The hedge of variable interest payments or receipts on a debt instrument or investment through the use of an interest rate swap that economically converts the variable payments or receipts into fixed payments or receipts
- The hedge of a forecasted foreign-currency-denominated sale or purchase through the use of foreign-currency forward contracts

The following table provides examples of some common hedging relationships and the designated risk in each instance:

Hedged Item	Hedging Instrument	Designated Risk
Non-benchmark rate debt	Benchmark rate swap	Overall changes in cash flows
Non-benchmark rate debt	Non-benchmark rate swap	Overall changes in cash flows
Benchmark rate debt	Matching benchmark rate swap	Benchmark interest rate
Forecasted purchase of commodity inventory	Commodity forward or swap	Overall changes in cash flows
Forecasted sale of inventory in a foreign currency	Foreign currency forward	Variability in functional currency equivalent cash flows

6.1.1 Cash Flow Hedge Accounting by Not-for-Profit Organizations and Other Entities That Do Not Report Earnings

ASC 815-30-15-2 indicates that cash flow hedge accounting is not available to a not-for-profit or other entity that does not report earnings as a separate caption in a statement of financial performance. The thrust of this guidance appears to be directed at the fact that not-for-profit entities do not report earnings. The rationale for denying cash flow hedge accounting to these organizations is that it would be mechanically impossible for an entity that does not report earnings separately from other comprehensive income to utilize the reporting model provided for cash flow hedges (that is, to initially report a derivative gain or loss outside earnings and then to reclassify the gain or loss into earnings in a later period).

One type of not-for-profit organization, however, is required to report a measure of earnings that is analogous to income from the continuing operations of a business enterprise. These are not-for-profit health-care organizations, which must report a “performance indicator” as a separate caption in the statement of operations. ASC 954-815-25-2 explicitly requires not-for-profit health-care organizations to apply the provisions of ASC 815 (including the provisions pertaining to cash flow hedge accounting) in the same manner as business enterprises. That is, the gain or loss items that are included in a business enterprise’s income from continuing operations similarly should be included in the health-care organization’s performance indicator, and the gain or loss items that are reported in other comprehensive income by the for-profit enterprise similarly should be excluded from the performance indicator by not-for-profit health-care organizations.

PwC Observation: The AICPA’s AcSEC discussed whether the scope of ASC 954-815-25-2 should extend to other types of not-for-profit organizations (that is, not-for-profit organizations that follow the AICPA Audit and Accounting Guide *Not-for-Profit Organizations*) in situations where those organizations voluntarily choose to provide an earnings measure. AcSEC chose not to address similar issues for those organizations because, unlike health-care organizations, those types of not-for-profit organizations are permitted to define an earnings measure in any manner they wish, as long as appropriate disclosures pertaining to the composition of the earnings measure is provided. We believe that in situations where a not-for-profit organization (i) voluntarily reports a performance measure that is analogous to the performance indicator reported by not-for-profit health-care organizations and (ii) does so in a consistent manner, the cash flow hedging provisions of ASC 815 may be applied.

6.2 Qualifying Criteria Specific to Cash Flow Hedges—General

Designated hedging instruments and their associated hedged items qualify for cash flow hedging if all of the applicable criteria are met. The criteria in ASC 815-20-25-1 are organized as follows:

- a. formal designation and documentation at hedge inception.
- b. eligibility of hedged items and transactions.
- c. eligibility of hedging instruments.
- d. hedge effectiveness.

6.2.1 Formal Designation and Documentation at Hedge Inception

ASC 815-20-25-3 states in part:

Concurrent designation and documentation of a hedge is critical; without it, an entity could retroactively identify a hedged item, a hedged transaction, or a method of measuring effectiveness to achieve a desired accounting result. To qualify for hedge accounting, there shall be, at inception of the hedge, formal documentation of all of the following:

- a. The hedging relationship**
- b. The entity's risk management objective and strategy for undertaking the hedge, including identification of all of the following:**
 - i. The hedging instrument.**
 - ii. The hedged item or transaction.**
 - iii. The nature of the risk being hedged.**
 - iv. 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 (if a cash flow hedge) attributable to the hedged risk will be assessed. There shall be a reasonable basis for how the entity plans to assess the hedging instrument's effectiveness.**
 - v. The method that will be used to measure hedge ineffectiveness (including those situations in which the change in fair value method as described in paragraphs 815-30-35-31 through 35-32 will be used).**

For a cash flow hedge of a forecasted transaction, documentation shall include all relevant details, including all of the following:

- i. The date on or period within which the forecasted transaction is expected to occur.**
- ii. The specific nature of asset or liability involved (if any).**
- iii. Either of the following:**
 - 1. The expected currency amount for hedges of foreign currency exchange risk; that is, specification of the exact amount of foreign currency being hedged.**
 - 2. The quantity of the forecasted transaction for hedges of other risks; that is, specification of the physical quantity (that is, the number of items or units of measure) encompassed by the hedged forecasted transaction.**
- iv. If a forecasted sale or purchase is being hedged for price risk, the hedged transaction shall not be specified in either of the following ways:**
 - 1. Solely in terms of expected currency amounts**
 - 2. As a percentage of sales or purchases during a period.**
- v. The current price of a forecasted transaction shall be identified to satisfy the criterion in paragraph ASC 815-20-25-75(b) for offsetting cash flows.**

- 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 of a specific product 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).**

Documentation of hedging relationships is a critical component of qualifying for hedge accounting. Without complete and contemporaneous documentation of the qualifying criteria, including the company's risk management objective, the assessment of hedge effectiveness at inception, and the assessment of hedge effectiveness and measurement of hedge ineffectiveness on an ongoing basis (i.e., at least quarterly) throughout the term of the hedge, the necessary components for a qualifying hedge are not complete and an entity would be precluded from applying hedge accounting.

In accordance with ASC 815-20-25-3, documentation should include identification of the hedging instrument, the hedged item or transaction, the nature of the risk being hedged, how the hedging instrument's effectiveness in hedging the exposure to the hedged transaction's variability in cash flows attributable to the hedged risk will be assessed, and the methodology that will be used to measure hedge ineffectiveness. While ASC 815 does not require a particular methodology for assessing a cash flow hedge's effectiveness, it must be reasonable and consistently applied to similar hedges.

In addition, entities should document the required criteria set out for the particular methodologies being used. For instance, if an entity is accounting for a hedging transaction using a purchased option by applying the guidance in ASC 815-20-25-126 through 25-129, it must document (at the inception of the hedge) its intention to assess hedge effectiveness based on the total changes in the option's cash flows (that is, the company's intention to base its assessment on the hedging instrument's entire change in fair value, not just the change in intrinsic value). A company must apply the documented method consistently when assessing effectiveness, throughout the hedging relationship. Similarly, an entity using the shortcut method in ASC 815-20-25-104 would be required to document at inception how it meets each of the criteria in that paragraph. See further discussion of these methods in DH 8.

See Examples 6-1 through 6-8 at the end of this chapter, which include sample documentation illustrating ASC 815-20-25-3 requirements.

6.2.1.1 Excluding Certain Components From Hedge Effectiveness

As described below in DH 6.4.1, entities may exclude certain components of a hedging instrument's change in fair value from the assessment of hedge effectiveness. If an entity chooses to exclude any of those allowable components under ASC 815-20-25-81 through 25-83, it must document that decision at the inception of the hedge.

6.2.1.2 Specificity

The formal documentation of a hedging relationship must include all relevant details, including the date on or period within which the forecasted transaction is expected to occur, the specific nature of the asset or liability involved, if any, and the expected currency amount (in a hedge of foreign currency exchange risk) or quantity (hedges other than those of foreign currency exchange risk) of the forecasted transaction.

The forecasted transaction must be specific enough so that when it occurs, it is clear whether or not that transaction is the hedged transaction. See DH 6.3.1 below for a detailed discussion on specificity.

6.2.2 Highly Effective Hedging Relationship

As discussed in DH Chapters 5, 6, and 7, ASC 815-20-25-80(a) requires an entity wishing to qualify for hedge accounting to have 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. If this expectation cannot be met, hedge accounting is not allowed. For a discussion of the determination of *highly effective* see DH 8.1.1.

For qualifying hedging relationships considered to be *highly effective* but not *perfectly effective* (i.e., those hedging relationships that do not qualify for either the shortcut or critical terms match methods described in Sections DH 8.2 and DH 8.3), effectiveness as documented at the inception of the hedging relationship must be assessed each period and any ineffectiveness must be reported in current period earnings and disclosed.

ASC 815-20-25-81 indicates that the guidance does not specify a single method for assessing effectiveness and that the appropriateness of a specific method will depend on the risk being hedged and the type of hedging instrument being used. Furthermore, entities should assess effectiveness for similar hedges in a similar manner and should use the defined methodology consistently throughout the hedge period. Entities assess effectiveness under one of three overall approaches:

1. Shortcut method
2. Critical terms match method
3. Long-haul method

For a detailed explanation of these methodologies, how to apply them, and the issues associated with them, refer to DH 8.

Hedge effectiveness criteria applicable to cash flow hedges are established in ASC 815-20-25-74 through 25-117 and ASC 815-20-25-119 through 25-131.

6.2.2.1 Quarterly Assessments of Hedge Effectiveness

On at least a quarterly basis, entities must perform retrospective and prospective hedge effectiveness assessments, although the methodologies are not required to be the same. For example, an entity may perform its retrospective effectiveness assessments by using the cumulative dollar-offset method and perform its prospective effectiveness assessments by using regression analysis.

Consideration needs to be given in a situation where an entity, in performing its quarterly retrospective hedge effectiveness assessment, determines that the hedge was not highly effective for that assessment period. When this occurs, the entity may not apply hedge accounting for that period. However, that does not automatically result in a requirement to dedesignate the hedging relationship. We believe that pursuant to the guidance in ASC 815-20-55-68 through 55-70, an entity may continue to apply hedge accounting under the existing hedge, provided that:

- i. The results of the prospective test show that the hedge is expected to be highly effective going forward;
- ii. The terms of the hedging relationship have not been modified; and
- iii. The forecasted transaction has not changed.

If the criteria above are not satisfied, the entity would need to dedesignate the hedge and apply the guidance in ASC 815-30-40-1 through 40-6 for the prospective accounting. Refer to DH 9 for guidance on discontinuing hedge accounting.

Note that the prospective test that was designated at inception must be applied consistently, in accordance with ASC 815-20-25-80 and ASC 815-20-35-19. If an entity chooses to change that method to an improved method to apply prospectively, it must dedesignate the hedge and redesignate a new hedging relationship.

6.2.3 Written Option Test

ASC 815-20-25-94 states in part:

If a written option is designated as hedging...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:

- b. At least as much potential for favorable cash flows as exposure to unfavorable cash flows (if a cash flow hedge).**

ASC 815-20-25-95 adds in part:

The written-option test in the preceding paragraph shall be applied only at inception of the hedging relationship and is met if all possible percentage favorable changes in the underlying (from zero percent to 100 percent) would provide either of the following:

- b. At least as much favorable cash flows as the unfavorable cash flows that would be incurred from an unfavorable change in the underlying of the same percentage (if a cash flow hedge).**

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 for the holder, the writer receives a premium from the holder at inception of, or in installments over all or some portion of the life of the contract. For example, a written call option would provide 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. Due to the unlimited loss potential—but limited gains associated with written options and thus the potential that an entity may

be in a less desirable position when hedging with a written option—the FASB was concerned with allowing them to be used as hedging instruments. In other words, written options often have the potential to have the opposite effect of what a hedge is intended to accomplish.

However, there are circumstances in which 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. Written options can be used to hedge recognized assets, recognized liabilities, or unrecognized firm commitments, provided the written option test is satisfied. That test encompasses ensuring that, when considering the written option in combination with the hedged item, the “upside” potential (or positive cash flows) is equal to or greater than the “downside” potential (or negative cash flows).

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 instrument that results from combining a written option and a nonoption derivative is considered a written option. That definition of a written option encompassed in the fair value hedge guidance also applies to cash flow hedges. Entities considering using a combination of instruments that include a written option (e.g., a cancellable interest rate swap) as a hedging derivative should carefully 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.

In some cases, written options are combined with purchased options and could be considered a net purchased option or zero-cost collar. In those cases, the written-option test would not be required. In determining if a hedge using a combination of purchased and written options is a net written option and therefore subject to the written-option test, entities should follow the guidance in ASC 815-20-25-89. The following four conditions must be met in order for a combination of options entered into contemporaneously (in which the strike price and the notional amount in both the written and purchased option components remain constant over the life of the respective components) to not be considered a net written option:

1. No net premium is received.
2. The components of the combination of options are based on the same underlying.
3. The components of the combination of options must have the same maturity date.
4. The notional amount of the written option component is not greater than the notional amount of the purchased option component.

If a combination of options does not meet all of the criteria above, it cannot be considered a net purchased option and is subject to the test in ASC 815-20-25-94. For example, if a collar includes a written floor based on the 3-month treasury rate and a purchased cap based on 3-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.

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 fluctuate over the life of the respective components, ASC 815-20-55-179 should be followed to determine if the combined instrument represents a net written option subject to the written option test.

The written-option test is a quantitative test that can be very difficult to apply. In practice, written options (or a combination of options that are considered a net written option) are not frequently used for cash flow hedges, since often; the hedged item in a cash flow hedge is a forecasted transaction. Because ASC 815-20-25-94 applies specifically to recognized assets, liabilities, or unrecognized firm commitments, we do not believe that a written option (or a net written option) can qualify as a hedging instrument for forecasted transactions.

Because of the complexity associated with options and combinations of options, companies should carefully examine the nature of combined instruments that they decide to enter into for hedging purposes to ensure that the appropriate guidance is applied.

Refer also to DH 6.8, Question No. 6-11.

6.2.3.1 Redesignating a Zero-cost Collar or Net Purchased Option

Entities should exercise caution when redesignating a hedging relationship involving a zero-cost collar or a combination of options that is considered a net purchased option. A zero-cost collar (for example, an interest rate collar) consists of a combination of a purchased option and a written option that have different strike prices but that have the same underlying, notional amounts, and maturity dates, and have equal and offsetting values at inception. As a result of fluctuations in the underlying and other market inputs, the fair value of the collar can change, with either the purchased option or the written option having a greater fair value than the other at a point in time over the life of the instruments. Similarly, a combination of options that was originally considered a net purchased option may also have fluctuations in its fair value, causing it to become a net written option as further described below.

It is possible that if a hedge involving a collar is dedesignated, the collar could be in a liability position (i.e., a net written option). When redesignating a hedging relationship involving a collar instrument, entities should reassess the criteria in ASC 815-20-25-89, which includes assessing whether a “net premium” has been received. In order to determine if a “net premium” has been received, the fair value of the purchased and written options should be compared. This approach should be followed because if the entity had entered into a new combination of purchased and written options having the same original terms, it would have received a net premium for the amount by which the fair value of the written option exceeded the fair value of the purchased option.

If the fair value of the written option is greater than that of the purchased option, the combination of options should be viewed as a net written option and is subject to the written option test as part of the redesignation and documentation of the new hedge.

6.2.4 Modifying Interest Receipts/Payments From One Variable Rate to Another Variable Rate

ASC 815-20-25-50 states:

If a hedging instrument 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, 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 continues:

For purposes of paragraph 815-20-25-50, a link exists if both of the following conditions 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 interest receipts for the designated asset**
- b. The basis of the other leg of the swap is the same as the basis of the 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.

In this context, the term “same basis” means that the leg of the swap and the interest receipt or payment related to the asset or liability, respectively, are *based* on the same index, such as LIBOR or the Prime rate; it does not mean that receive or pay amounts have to be identical. For example, it would be acceptable if the pay leg of the swap was 3-month LIBOR and the receive rate on the hedged item was 3-month LIBOR plus 100 basis points.

This type of hedging instrument (typically referred to as 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, such a hedging instrument will generally qualify for hedge accounting treatment.

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. Likewise, a swap that exchanges the variability of prices on commodities such as light and heavy crude oil would not qualify for hedge accounting, because the assets (i.e., inventories of light and heavy crude oil) are nonfinancial assets. Furthermore, commodity basis swaps intending to hedge the variability of prices and fix a margin would not qualify. Refer to Question 6.4 at the end of this chapter.

Consistent with the discussion in DH 6.2.3, hedge strategies may involve combinations of instruments such as basis swaps and fixed-for-floating swaps on the same or similar commodities. These strategies may qualify for hedge accounting if the relevant criteria are met. Refer to DH 6.8 question 6-1 and Example 6-7.

6.3 Qualifying Criteria Specific to Cash Flow Hedges—the Hedged Forecasted Transaction

Other than those items specifically noted as being ineligible for designation (see ASC 815-20-25-43), forecasted transactions may be designated as hedged transactions in a cash flow hedge, provided the additional criteria in ASC 815-20-25-15 are met. Each of these criteria is discussed below.

6.3.1 Specific Identification

ASC 815-20-25-15 states:

The forecasted transaction is specifically identified as either of the following:

- a. A single transaction**
- b. 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.**

6.3.1.1 Specificity

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 an entity is hedging a future sale of gold, it must specify the exact time period and units—for instance, “the first 1,000 pounds of gold sold in the month of December 20XX,” or “the 1,000 pounds of gold to be sold on December 15, 20XX, to Company X identified in contract #X.” It would be inadequate to identify the hedged item in this scenario as “1,000 pounds of gold to be sold in December 20XX,” or “the last 1,000 pounds of gold to be sold to Company X in the fourth quarter of 20XX,” because it would be unclear exactly which sales were being hedged—until after the fact.

ASC 815-20-55-80 illustrates the requirement that the hedged transaction be specifically identified, and states in part:

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, Company 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 the issuance has not been determined. The assessment of whether a forecasted transaction qualifies for hedge accounting (in particular, the assessment of the specificity and probability of the hedged transaction as further discussed below under DH 6.3.2) must be based on the facts and circumstances of each transaction and will require judgment. 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, refer to ASC 815-20-25-16(c) and the illustrative example at ASC 815-20-55-100 through 55-104.

Provided that the forecasted transactions are identified with sufficient specificity, one could also hedge a series of forecasted transactions (such as a series of variable interest payments).

Entities may hedge the variable interest payments on a group of floating-rate interest-bearing loans provided that, at inception, the forecasted transactions (interest payments) are identified with sufficient specificity to make it clear whether a particular transaction is a hedged transaction when it occurs. For example, an entity that expects to receive variable interest may identify the hedged forecasted transaction as the *first* LIBOR-based interest payments received during a 4-week period that begins 1 week before each quarterly due date for the next 5 years on its \$100 million LIBOR-based loan.

Refer also to DH 6.8, Question Nos. 6-2 and 6-3.

6.3.1.2 Hedging a Group of Assets, Liabilities, or Forecasted Transactions

A group of assets, liabilities or forecasted transactions may be designated as the hedged item in a cash flow hedge. ASC 815-20-55-22 states:

Under the guidance in this Subtopic, 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**
- c. Forecasted interest payments on several variable-rate debt instruments within a specified time period**

If the hedged transaction is a group of individual transactions, 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 benchmark interest rate). The Board considered this requirement necessary to ensure that a single derivative will actually be effective as a hedge of the aggregated transactions. Thus, if a particular forecasted transaction does not share the risk exposure that is germane to the group of transactions that is being hedged, that transaction should not be part of the group that is being hedged.

PwC Observation: ASC 815-20-55-14 describes the criterion that must be met to support whether a portfolio of similar assets or liabilities may be designated in qualifying fair value hedging relationships. While ASC 815-20-25-15 does not specifically require that companies perform a “similar assets test,” we believe that the fair value hedge guidance is analogous for cash flow hedging relationships and should be similarly applied in a cash flow hedge where the hedged item is a portfolio of assets, liabilities, or forecasted transactions. See DH 5.3.1 for guidance on applying that test.

Consistent with the requirement for hedged items to share the same risk exposure in a hedging transaction, the guidance also precludes a forecasted purchase and a forecasted sale from being grouped together since the risk exposures are different.

6.3.2 The Occurrence of the Forecasted Transaction Is Probable

The term *probable* is defined as “the future event or events are *likely* to occur.” The term *probable* requires that the likelihood of occurrence be significantly greater than “more likely than not.”

PwC Observation: Assessing the probability that a forecasted transaction will occur requires judgment. While ASC 815 and ASC 450 do not establish “bright lines,” we believe that a transaction may be considered probable of occurring when there is at least an eighty percent chance that it will occur on the specified date. There should be compelling evidence to support management’s assertion that it is probable that a forecasted transaction will occur, and, in compiling that evidence, management should bear in mind that this assertion is more difficult to support than an assertion that it is more-likely-than-not that a transaction will occur.

ASC 815-20-55-24 provides the following additional guidance on determining the probability of a forecasted transaction:

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 the length of time that is expected to pass before a forecasted transaction is projected to occur and the quantity of products or services that are involved in the forecasted transaction are considerations when probability is being determined:

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.

Companies 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 contract, companies are required to perform a similar assessment of the creditworthiness of the counterparty to the hedged forecasted transaction to determine whether the forecasted transaction is probable.

We understand that the SEC staff believes that (i) management should specify in its formal hedge documentation the circumstances that were considered in concluding that a transaction is probable and (ii) the auditors must gather sufficient, verifiable evidence in assessing management's assertion that the transaction is probable. Additionally, the SEC staff believes that registrants should disclose in management's discussion and analysis (MD&A), any events or circumstances that may determine whether a forecasted transaction is probable of *not* occurring if it may result in a material gain or loss. If an 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.

The SEC staff has taken a hard line with respect to changes in assertions such that it is no longer probable that a transaction will occur, saying that although one instance of a changed assertion does not constitute a pattern, recurrence will quickly raise a red flag. The consequences (e.g., possible restatement) are serious; therefore, management needs to be sure it can support the assertion that the forecasted transactions are probable of occurring if cash flow hedge accounting is desired.

Refer also to DH 6.8, Question No. 6-12.

6.3.3 Earnings Exposure

Another condition applicable to cash flow hedges is that the forecasted transaction presents earnings exposure. Specifically, ASC 815-20-25-15(c) states that the forecasted transaction must meet both of the following conditions to be eligible for designation in a cash flow hedge:

- 1. It is a transaction with a party external to the reporting entity (except as permitted by ASC 815-20-25-30 and ASC 815-20-25-38 through 25-40)**
- 2. It presents an exposure to variations in cash flows for the hedged risk that could affect reported earnings**

Except for certain intercompany foreign currency exposures, cash flow hedge accounting is appropriate only when there is a hedgeable risk arising from a transaction with an external party. 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.

The earnings-exposure criterion specifically precludes hedge accounting for derivatives that are used to hedge (i) transactions with shareholders, such as dividend payments or projected purchases of treasury stock, (ii) intercompany transactions (except for foreign-currency-denominated forecasted intercompany transactions) between entities whose financial information is included in the consolidated financial statements, and (iii) forecasted stock issuances that are related to a stock option plan for which no compensation expense (based on changes in

stock prices) is recognized. 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.

For hedged risks other than foreign-currency exposure, a subsidiary can always apply hedge accounting to a hedge of a forecasted intercompany transaction in its stand-alone financial statements, because such a transaction is with a party “external to” the reporting entity in the stand-alone financial statements.

While a company cannot apply hedge accounting for intercompany forecasted transactions at the consolidated level (except for foreign currency hedges), it is acceptable to hedge different exposures at different reporting levels. For instance, a wholly-owned subsidiary may enter into an interest rate swap and designate that swap as a cash flow hedge of forecasted interest payments on variable-rate debt issued to third parties by its parent (provided the swap agreement meets all the criteria for hedge accounting). In this scenario, the parent company may apply hedge accounting in the consolidated financial statements, as the swap was designated to hedge a risk exposure at the consolidated reporting level, and the forecasted transaction is with an external party. However, given that the wholly-owned subsidiary is not the entity with the earnings exposure, hedge accounting would be precluded at the subsidiary stand-alone reporting level.

6.3.4 No Remeasurement for Changes in Fair Value

ASC 815-20-25-15(d) and (e) state:

The forecasted transaction is not the acquisition of an asset or incurrence of a liability that will subsequently be remeasured with changes in fair value attributable to the hedged risk reported currently in earnings.

If the forecasted transaction relates to a recognized asset or liability, the asset or liability is not remeasured with changes in fair value attributable to the hedged risk reported currently in earnings.

The hedged item cannot be an asset or liability that is (or the forecasted acquisition of an asset or the incurrence of a liability that will subsequently be) remeasured with changes in the fair value that are attributable to the hedged risk reported currently in earnings. As a consequence, one cannot hedge forecasted cash flows from current derivative instruments or the planned acquisition of derivatives in the future. In addition, forecasted transactions related to debt and equity securities classified as trading securities or financial instruments designated under the fair value option similarly do not qualify as hedged items since changes in the fair value of these instruments are reported in earnings.

6.3.5 Debt and Equity Securities (ASC 320)

ASC 815-20-25-15(f) states:

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**

The Board believed that hedge accounting for a held-to-maturity security conflicts with the concept underlying that classification under ASC 320, particularly if the risk being hedged is variability in total cash flows or interest rate risk. This view has been held due to the belief that when an entity classifies a security as held-to-maturity, it implies that future decisions about whether to hold that security are not impacted by changes in interest rates. As such, it was deemed that a hedge of those risks should be precluded.

The following table summarizes the ASC 815 provisions as they apply to cash flow hedge transactions involving investment securities. DH Chapters 5 and 7 provide further analysis on specific hedge criteria that must be satisfied when an entity is entering into a fair-value or foreign-currency exchange rate hedge of ASC 320 securities, respectively.

Hedged Risk	Hedge Accounting Permitted?		
	Held-to-Maturity Security	Available-for-Sale Security	Trading Security ¹
Overall	No	Yes	No
Interest rate	No	Yes	No
Foreign currency	Yes	Yes	No
Credit ²	Yes	Yes	No

¹ A security that is classified as trading or that is elected under ASC 825-10-15 for the fair value option does not qualify as a hedged item under ASC 815, since the security is re-measured with the changes in fair value (for all risks) reported currently in earnings.

² Although hedge accounting is permitted, it often will be difficult for a derivative instrument to satisfy the effectiveness criteria.

6.3.6 Business Combinations and Subsidiary Interests

ASC 815-20-25-15(g) and (h) states:

The forecasted transaction does not involve a business combination subject to the provisions of ASC 805

The forecasted transaction is not a transaction (such as a forecasted purchase, sale, or dividend) involving either of the following:

- 1. A parent entity's interests in consolidated subsidiaries**
- 2. An entity's own equity instruments**

An issue related to the hedge of certain transactions related to a business combination was raised in DIG Agenda Item 14-13 in the year 2000 and was never formally resolved. In that DIG Agenda Item, questions were raised as to whether (i) the forecasted interest expense associated with the debt to be issued to fund an acquisition and (ii) the forecasted sales associated with the target entity could be hedged prior to consummation of the business combination. While one may be able to argue that theoretically, hedge accounting for these transactions should be acceptable despite the guidance cited above, practically it is difficult to be achieved. A forecasted transaction can only qualify for hedge accounting if it is probable of occurring. Given the number of conditions that typically must be met before an acquisition can be consummated (e.g., satisfactory due diligence, no adverse changes/developments, shareholder votes, regulatory approval, etc.), we believe it will be very difficult to support an assertion that the hedged transaction associated

with an acquisition is probable of occurring. Accordingly, a careful evaluation of the specific facts and circumstances would be necessary if an entity asserts that the forecasted acquisition is probable of occurring.

Refer also to DH 6.8, Question Nos. 6-5, 6-6 and 6-15.

6.3.7 Hedging a Nonfinancial Asset or Liability

ASC 815-20-25-15(i) states in part:

If the hedged transaction is the forecasted purchase or sale of a nonfinancial asset, the designated risk being hedged is either 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 function currency or a foreign currency), not the risk of changes in the cash flows relating to the purchase or sale of a similar asset in a different location or of a major ingredient**

Cash flow hedges associated with nonfinancial assets and liabilities are limited to hedging overall changes in expected cash flows, such as hedging the risk of changes in the overall price of the entire hedged item to be purchased. Similar to fair value hedging restrictions, entities are not permitted to designate as the hedged risk the changes in cash flows attributable only to the market-price risk of an ingredient or a component of a nonfinancial hedged item, because changes in the price of an ingredient or component generally do not have a predictable, separately measurable effect on the price of the nonfinancial item.

For example, if a derivative were used as a cash flow hedge of the exposure to changes in the cash flows related to forecasted purchases or sales of tire inventory, the entity could not designate the market price (or changes in cash flows related to changes in the market price) of rubber as the hedged risk, even though rubber is a component of the tires.

The fair value of the tire inventory is based on the market price of tires at a specific location, including all applicable costs such as taxes and delivery costs, not the market price of rubber, even though the price of rubber may have an effect on the fair value of the tires. Had the Board decided to permit an entity to designate as the hedged risk the market price of rubber or the changes in cash flows related to changes in the market price of rubber, it would have been ignoring the other components of the price of the tires, such as steel and labor.

The use of a rubber-based derivative (e.g., a futures contract for rubber) as a cash flow hedge of the forecasted purchase or sale of tires may qualify for hedge accounting. However, (i) the entire change in the fair value of the derivative must be expected to be highly effective at offsetting the overall change in the expected cash flows of the hedged item and (ii) all other hedge criteria must be met. Any ineffectiveness must be included in earnings.

See Example 6-3 for an illustration of hedging an anticipated purchase of gold inventory for a jewelry manufacturer. In this example, the manufacturer utilizes a

call option on gold futures to mitigate the risk of rising prices of gold. While gold represents the primary source of identified variability in the production of its jewelry, the manufacturer designated variability in total cash flows as part of its hedge designation.

6.3.8 Hedging a Financial Asset or Liability

ASC 815-20-25-15(j) states:

If the hedged transaction is the forecasted purchase or sale of a financial asset or liability (or the interest payments on that financial asset or liability) or the variable cash inflow or outflow of an existing financial asset or liability, the designated risk being hedged is any of the following:

- 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)**
- 2. The risk of changes in its cash flows attributable to changes in the designated benchmark interest rate (referred to as interest rate risk)**
- 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)**
- 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 benchmark interest rate with respect to the hedged item's credit sector at inception of the hedge**

If the risk designated as being hedged is not the risk in paragraph 815-20-25-15(j)(1), two or more of the other risks (interest rate risk, foreign exchange risk, and credit risk) simultaneously may be designated as being hedged.

The Board's focus on the aforementioned types of risks is consistent with its belief that the largest amount of hedging activity for financial assets and liabilities is aimed at protecting entities against market-price risk, credit risk, foreign-exchange risk, or interest rate risk. Although entities may engage in various activities to control or reduce other kinds of economic risks, those activities do not pertain to risks that are eligible for hedge accounting.

The Board has another reason for focusing on the four specified risks inherent in financial assets and liabilities, which is that a change in the price associated with one of those risks will ordinarily have a direct effect on (i) the fair value of an asset or liability or (ii) the cash flows of a future transaction in a determinable or predictable manner. The effect of price changes associated with other risks may not be as direct. For example, price changes associated with "strategic risk" exposures do not have a direct impact on the fair value of a hedged item or the cash flow of a forecasted transaction and, thus, cannot be designated as a hedged risk.

6.3.8.1 Hedging the Benchmark Interest Rate

One of the risks that may be hedged in a cash flow hedge of a financial asset or liability is the benchmark interest rate (refer to Appendix A for a definition of benchmark rate). When designating the risk of changes in a hedged item's cash flows attributable to changes in the benchmark interest rate, an entity needs to consider specific nuances of ASC 815. Any cash flows related to the credit spread or changes in the spread over the benchmark rate would be excluded in a hedge of the changes in the benchmark rate.

In a cash flow hedge of an existing or forecasted variable-rate financial asset or liability, the benchmark interest rate can be the designated risk being hedged only when the cash flows of the hedged item are explicitly based on an index that qualifies as a benchmark rate. Changes in the benchmark rate cannot be designated as the hedged risk if the cash flows of the hedged variable-rate asset or liability are based on a different index (e.g., the Prime rate) that is not a benchmark rate.

This restriction does not preclude an entity from designating the benchmark interest rate when hedging the anticipated rollover of short-term debt at different fixed rates, such as commercial paper. In other words, the restriction is not intended to apply to cash flow hedges of the forecasted issuance of fixed-rate debt. Accordingly, an entity may hedge the risk of changes in either (i) the coupon payments (or the interest element of the final cash flow, if interest is paid only upon the debt's maturity) or (ii) the total issuance proceeds attributable to changes in the benchmark interest rate related to the forecasted issuance of fixed-rate debt. The derivative that is used to hedge either of these risks must produce offsetting cash flows in order for the hedging relationship to be effective. When changes in the benchmark interest rate are designated as the hedged risk, the basis difference difference between the benchmark rate and short-term debt rates (e.g., rates for commercial paper and certificates of deposit) does not result in ineffectiveness.

Assets or liabilities with interest payments that are explicitly and contractually based on an index other than a benchmark rate (e.g., the prime rate) can still qualify as hedged items in cash flow hedges. However, the risk that is designated as being hedged must be the risk of overall changes in the hedged cash flows. If, however, the cash flows from the hedging instrument and the hedged item are based on different indexes, the basis difference between those indexes would impact the assessment of effectiveness and the measurement of hedge ineffectiveness (i.e., there would be ineffectiveness due to the basis difference). For example, in a cash flow hedge of a prime rate loan, the risk designated as being hedged must be the risk of overall changes in the hedged cash flows, including any spread and changes in the spread over the prime rate. If the entity used a LIBOR swap as the hedging instrument, the difference in basis would result in ineffectiveness.

ASC 815-20-55-42 to 55-43 formalized the guidance above in that it states that hedges of variable-rate financial assets or liabilities that are reset through an auction process or otherwise have interest payments based upon anything other than the benchmark rate represent hedged items that are not based upon a benchmark interest rate and are therefore precluded from being the designated hedged risk. Example 6-4 provides an illustration of the use of Treasury-based futures to hedge the potential variability in cash flows associated with changes in the 90-day certificate of deposit (CD) interest rate, in a bank's CD rollover program. In that

case, because the hedged item is not a benchmark interest rate, the company must hedge the variability in total cash flows, and a basis difference exists, causing some ineffectiveness (the CD rate compared with the Treasury bill rate).

Refer also to DH 6.8, Question No. 6-13.

6.3.8.2 Using Proportions of Derivatives to Hedge Risk Exposures

ASC 815-20-25-45 states in part:

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). Subsequent references in the Derivatives and Hedging Topic to a derivative instrument as a hedging instrument include the use of only a proportion of a derivative instrument as a hedging instrument.

As such, it is acceptable for an entity to, for instance, designate 50 percent of the notional amount of a swap to hedge the variability in its interest payments on its variable rate debt or to designate two swaps on a combined basis as the hedging instrument. Note that “adding” a new derivative instrument to an existing designated hedging instrument at a date later than the initial designation generally results in a new hedging relationship that must be assessed for effectiveness and re-documented. Refer to DH 9 for further discussion of dedesignation of hedging relationships.

An entity may use proportions of a derivative in separate hedging relationships. The entity would (i) designate different proportions of that derivative as the hedging instrument and (ii) document its designation of a percentage of the notional amount of the derivative as the hedging instrument in each hedging relationship. Each separate hedging relationship would have to be assessed separately to determine whether it meets the requirements for hedge accounting.

In using a proportion of a derivative, the entity would be required to designate that proportion as a percentage of the notional amount (i.e., designate across the tenor of the swap) and not designate based on time (e.g., designating the last 2 years of a five-year swap). Only the designation of a proportion across the entire derivative is permitted, because separating a portion of a derivative into different risks would essentially result in creating a “synthetic” derivative for which use as a hedging instrument is not permitted.

PwC Observation: ASC 815-20-25-45 requires that the proportion of the derivative being designated be expressed as a percentage. In some instances, that percentage may not be *explicitly* documented. If (i) the designated proportion of the notional amount and (ii) the total notional amount of the derivative hedging instrument are documented in such a way that the percentage can be calculated,

(continued)

then the hedge designation would meet the requirements. We believe that “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. For example:

Consider two \$1 million interest-bearing assets being hedged with a single derivative that has a \$2 million notional. 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 (and the total derivative notional is documented as \$2 million) would comply with the requirements, as there is no uncertainty about what is being hedged (i.e., it is clear what proportion of the derivative is intended to hedge each asset).

Conversely, if the documentation refers only to the total derivative notional amount designated in the hedging relationship, although it agrees to the sum of the principal amounts of the assets hedged, the conditions would not be met. Nothing in that documentation would specify what percentage is allocated to each hedged item.

Refer also to DH 6.8, Question Nos. 6-1 and 6-16.

6.3.8.3 Other Considerations Associated With the Designated Risk Being Hedged

Under the effectiveness criteria, 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, since that risk is already hedged by the first derivative. However, if an entity were to hedge only 75 percent of a designated risk with one derivative, it could use a second derivative to hedge the remaining 25 percent of the designated risk.

Further, the guidance permits an entity to follow a dynamic hedging strategy and, therefore, to either (i) increase or decrease the quantity of hedging instruments that is necessary to the entity achieving its objective of hedging a specific risk at a specific level or (ii) change the percentage of the hedged item that is designated. For example, an entity may hedge the price risk on 80 percent of next year's forecasted sales and later adjust the hedge strategy so that only 50 percent of next year's forecasted sales are hedged. However, the entity could never designate more than 100 percent of the forecasted transaction. The complexity of dynamic strategies in cash flow hedging should not be underestimated. Dedesignating and redesignating relationships create complexities in measuring and assessing hedge effectiveness, as the hedging instruments will be unlikely to have a fair value of zero at the redesignation date. This could cause hedges to be ineffective upon redesignation. Therefore, companies should carefully consider whether these hedging strategies meet all of the criteria for cash flow hedge accounting.

6.3.9 Impact of Discontinued Operations

If an entity has derivative instruments that have been designated as cash flow hedges of cash flows related to a recognized asset or liability or of forecasted transactions of a component of an entity, and that component has met the requirements for classification as a discontinued operation, management should assess whether the realized gains and/or losses resulting from the cash flow hedges in prior periods should be classified as discontinued operations or as part of continuing operations. This assessment should be performed even if the derivative instruments are not included in the disposal group to be sold by the entity. Specifically, management

should consider the original hedge documentation of the cash flows being hedged in determining whether the prior year effects of the derivative instruments should be reclassified into discontinued operations. Based on the documentation, management should assess whether the hedged cash flows specifically relate to the group of assets and liabilities being disposed. In some cases, management will need to use judgment in order to determine the appropriate presentation in the income statement. Due to the judgment involved, engagement teams should consider consultation with the Accounting Services Group within PwC's National Professional Services Group.

6.4 Accounting for Cash Flow Hedges

Under the accounting guidance for cash flow hedges, the effective portion of a derivative's gain or loss should be reported in other comprehensive income net of related tax effects, and the ineffective portion is generally reported in earnings. That is, ineffectiveness from a derivative that overcompensates for changes in the hedged cash flows is recorded in earnings. However, the ineffectiveness from a derivative that under compensates is not recorded in earnings. More specifically, ASC 815-30-35-3 sets forth the treatment for a qualifying cash flow hedge (subparagraphs (d) through (f) are excluded, as they pertain specifically to foreign exchange hedges, refer to DH 7) and states in part:

- a. If an entity's defined risk management strategy for a particular hedging relationship excludes a specific component of the gain or loss, or related cash flows, on the hedging derivative from the assessment of hedge effectiveness (as discussed in paragraphs 815-20-25-81 through 25-83), that excluded component of the gain or loss shall be recognized currently in earnings. For example, if the effectiveness of a hedging relationship with an option is assessed based on changes in the option's intrinsic value, the changes in the option's time value would be recognized in earnings**
- b. Accumulated other comprehensive income associated with the hedged transaction shall be adjusted to a balance that reflects the lesser of the following (in absolute amounts):**
 - 1. The cumulative gain or loss on the derivative instrument from inception of the hedge less both of the following:**
 - i. the excluded component discussed in (a)**
 - ii. 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**
 - 2. The portion of the cumulative gain or loss on the derivative instrument necessary to offset the cumulative change in expected future cash flows on the hedged transaction from inception of the hedge less 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**
- c. A gain or loss shall be recognized in earnings, as necessary, for any remaining gain or loss on the hedging derivative or to adjust other comprehensive income to the balance specified in (b)**

Refer also to DH 6.8, Question No. 6-9.

6.4.1 Excluding Certain Components From Hedge Effectiveness

ASC 815-30-35-3(a) and ASC 815-20-25-82 allow entities, as part of their risk management strategy, to exclude certain components of a hedging instrument's change in fair value from the assessment of hedge effectiveness. Changes in those excluded components (e.g., the exclusion of time value of an option contract or spot/forward differences) would be included currently in earnings, together with any ineffectiveness.

See Example 6-3 for an illustration of the hedging of an anticipated purchase of gold inventory for a jewelry manufacturer. In this example, the manufacturer utilizes a call option on gold futures to mitigate the risk of rising prices of gold. The manufacturer determined and documented, at inception of the hedge, that effectiveness would be assessed based upon the intrinsic value of the call option and recorded the change in fair value of the derivative attributed to the changes in time value in earnings.

Refer also to DH 6.8, Question No. 6-14.

6.4.2 Recording Effectiveness and Ineffectiveness

ASC 815-30-35-3(b) presents a key provision that must be fulfilled when entities are accounting for cash flow hedges. In addition to tracking the flow of activity in accumulated other comprehensive income, for all hedges that are not 100 percent effective, entities must also track, from the *inception* of the hedge, the cumulative change in the expected cash flows of the hedged item, less any gains or losses on the derivative that were previously reclassified from accumulated other comprehensive income to earnings.

An entity must then compare (in absolute amounts) the cumulative gain or loss on the hedging instrument with the cumulative loss or gain on the expected future cash flows of the hedged item to determine the ultimate amount that is to be deferred in accumulated other comprehensive income.

The FASB staff has addressed how entities should apply ASC 815-30-35-3(b) to calculate the amount of ineffectiveness that is to be recognized in earnings for a cash flow hedge that is not eligible for the shortcut method and that involves either (i) a receive-floating, pay-fixed interest rate swap that is designated as a hedge of the variable interest payments on an existing floating-rate liability or (ii) a receive-fixed, pay-floating interest rate swap that is designated as a hedge of the variable interest receipts on an existing floating-rate asset. Three different methods for measuring ineffectiveness are discussed in detail in ASC 815-30-35-10 through 35-32.

PwC Observation: The guidance in ASC 815-30-35-10 through 35-32 is applicable specifically for measuring ineffectiveness of hedging relationships involving variable interest receipts or payments for existing financial assets or liabilities when the cash flow hedge does not meet the requirements for use of the shortcut method. We believe this guidance also applies to cash flow hedges of the variability of future interest payments on (i) interest-bearing assets that are to be acquired or (ii) interest-bearing liabilities that are to be incurred, such as the rollover of an entity's short-term debt. In addition, we believe this guidance may also be used by analogy for assessing effectiveness of other non-interest-bearing assets and liabilities. For example, it is not uncommon for the hypothetical derivative method to be used when assessing effectiveness of hedging relationships involving commodities.

Refer to DH 8 for a detailed discussion regarding the application of ASC 815-30-35-10 through 35-32.

6.5 Subsequent Accounting for Cash Flow Hedges

ASC 815-30-35-38 through 35-41 specifies the following subsequent accounting for cash flow hedges:

Amounts in accumulated other comprehensive income 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).

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 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).

However, 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 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.

For example, a loss shall be reported in earnings for a derivative instrument that is designated as hedging the forecasted purchase of inventory to the extent that the cost basis of the inventory plus the related amount reported in accumulated other comprehensive income exceeds the amount expected to be recovered through sales of that inventory. (Impairment guidance is provided in [paragraph 815-30-35-42] and paragraph 815-30-35-43.)

Entities utilizing cash flow hedge accounting should have a good understanding of how and when the hedged item impacts earnings. For example, in a hedge of inventory purchases, it is important to understand the way that inventory turns over and impacts cost of sales (e.g., first-in, first-out; last-in, first-out; or weighted average) to ensure that amounts in accumulated other comprehensive income are being reclassified appropriately. Refer to Example 6-3, which illustrates the timing of reclassification of amounts recorded in accumulated other comprehensive income (AOCI) based upon different methods of inventory turnover. Refer also to Example 6-4, which demonstrates the proper timing of reclassifying amounts recorded in AOCI for a hedge of expected changes in interest payments on a certificate of deposit program.

Refer also to DH 6.8, Questions No. 6-7, 6-8 and 6-10.

6.6 Discontinuation of a Cash Flow Hedge

ASC 815-30-40-1 through 40-6 and ASC 815-30-55-100 provide the guidance that should be followed when a cash flow hedge is discontinued. A cash flow hedge may be required to be discontinued as a result of (i) any of the criteria in ASC 815-

30-25 no longer being met; (ii) the derivative expiring or being sold, terminated, or exercised; or (iii) the entity dedesignating the hedge.

Entities should monitor the circumstances that would cause a prospective discontinuation of the hedging relationship. A pattern of determining that hedged forecasted transactions are probable of not occurring by the end of the originally specified time period or within an additional 2-month period of time thereafter will call into question an entity's ability to accurately predict forecasted transactions and the propriety of applying hedge accounting for similar forecasted transactions in the future.

See DH 9 for a detailed discussion and examples of discontinuing cash flow hedging relationships and the related accounting.

6.6.1 Change in Accounting When a Forecasted Transaction Becomes a Firm Commitment

ASC 815 prescribes different accounting provisions for hedges of forecasted transactions and firm commitments. This raises the question of how a company should account for a change in circumstances that results in the conversion of a forecasted transaction to a firm commitment (e.g., when a company enters into a purchase order specifying penalties that will apply in the event that 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 will generally 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). Once there is a firm commitment, however, the price will be fixed, and the objective of the hedge will change from offsetting variability in future cash flows to 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 will be discontinued. An entity could subsequently designate this now-firm commitment as the hedged item in a fair value hedge and use a derivative instrument that is different from the one that the entity had used for the cash flow hedge. Regardless of the subsequent accounting for the firm commitment, the amount accumulated in other comprehensive income as a result of the initial cash flow hedge may be reclassified to earnings *only* when the original forecasted transaction (which has now become a firm commitment) impacts earnings.

6.7 Impairment

ASC 815-30-35-42 and 35-43 provide guidance on considering the impairment of assets (or an increase in an obligation) that has been designated as hedged items. Essentially, the guidance points to other applicable GAAP for the impairment analyses and states that the impairment assessments should be applied after hedge accounting has been applied. However, the fair value or expected cash flows of the hedging instrument should not be incorporated into any impairment analysis. Furthermore, if an impairment loss is recognized on a hedged item, any offsetting gains that have been deferred into accumulated other comprehensive income should be immediately reclassified into earnings.

Refer to DH 9 for a detailed discussion on impairment considerations and related examples.

6.8 Questions and Interpretive Responses

Use of Two or More Derivatives in a Hedge of a Single Item

Question No. 6-1: A company with variable-rate debt that is based on a bank's prime rate would like to hedge the variability of its interest payment cash flows, but it would be more expensive to obtain a prime-rate-to-fixed-rate interest swap of the appropriate term. Could the company enter into (i) a prime-to-LIBOR (pay-LIBOR, receive-prime) interest rate basis swap and (ii) a LIBOR-to-fixed (pay-fixed, receive-LIBOR) interest rate swap and qualify for cash flow hedge accounting?

PwC Interpretive Response: Yes, assuming that the entity satisfies all of the hedge criteria. ASC 815-20-25-45 clarifies that two or more derivatives (e.g., two interest rate swaps), or proportions thereof, may be viewed in combination and jointly designated as the hedging instrument. Accordingly, the two swaps, viewed in combination, would essentially achieve the company's objective of hedging the variability of its interest-payment cash flows on the prime-based debt.

Specific Identification of a Forecasted Transaction

Question No. 6-2: If an entity wishes to hedge probable sales or purchases that are forecasted to occur over an identified time frame but is unable to determine when the individual sales or purchases will take place, how would the forecasted date of the individual sales or purchases have to be specified in order for them to qualify for hedge accounting?

PwC Interpretive Response: As discussed in ASC 815-20-55-20 and 55-21, the hedged forecasted transaction must be described with sufficient specificity so that when a transaction occurs, it is clear whether that transaction is or is not the hedged transaction. ASC 815-20-55-21 states:

For example, an entity that expects to sell at least 300,000 units of a particular product in its next fiscal quarter might designate the sales of the first 300,000 units as the hedged transaction. Alternatively, it might designate the first 100,000 sales in each month as the hedged transaction. It could not, however, simply designate any sales of 300,000 units during the quarter as the hedged transaction because it then would be impossible to determine whether the first sales transaction of the quarter was a hedged transaction. Similarly, an entity could not designate the last 300,000 sales of the quarter as the hedged transaction because it would not be possible to determine whether sales early in the quarter were hedged or not.

By designating the purchase or sale of the first x number of units during the period, the entity will not be locked into a specific date, and if for some reason the transaction does not occur on that date, the entity will have more flexibility in assessing whether the forecasted transaction occurred. It is important to note that even though an exact date of the forecasted transaction need not be specified, an entity still must satisfy the ASC 815 high-effectiveness criteria. See discussion of potential sources of ineffectiveness pertaining to dates not matching exactly, and use of the critical terms match approach in DH 8.

Hedging a Series of Forecasted Transactions

Question No. 6-3: Would the designation of a five-year interest rate swap as a hedge of the variable-rate interest payments for the first 5 years of a fifteen-year debt instrument qualify for cash flow hedge accounting?

PwC Interpretive 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. That view would be used for both the assessment of effectiveness and the accounting for the cash flow hedge.

Using Commodity Basis Swaps to Hedge Separate Risks

Question No. 6-4: Company A enters into an agreement to sell specific quantities of a commodity to Company B at a floating price based on index A during a preestablished period of time. Simultaneously, Company A enters into a separate agreement to purchase the same quantity of the commodity from Company C based on a different floating index (index B) during the same time. Neither the sale nor the purchase meets the definition of a derivative. In an attempt to hedge the differential between the two indexes and fix its margin, Company A enters into a commodity basis swap to pay Index A – B and receive a fixed price. Can this hedging relationship qualify for cash flow hedge accounting under ASC 815?

PwC Interpretive Response: No. The forecasted transaction includes both a purchase and sale of a commodity. The basis swap is used to fix the spread between the purchase and sale prices. As the hedged item involves the forecasted purchase and sale of the same commodity, it does not qualify for hedge accounting because the group of individual transactions does not share the same risk exposure. ASC 815-20-25-15(a2) specifically states that a forecasted purchase and sale cannot both be included in the same hedged transaction.

Hedging a Forecasted Transaction Between a Parent and Its Equity-Method Investee

Question No. 6-5: Can a forecasted transaction (either a purchase or a sale) between an entity and its equity-method investee qualify as a hedgeable risk exposure in light of the cash flow hedge requirement that the forecasted transaction be a transaction with a party external to the reporting entity?

PwC Interpretive 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, as long as all of the other criteria for cash flow hedging are fulfilled. In its discussion of a transaction with an external third party, the FASB specifically states that forecasted transactions between members of a consolidated entity (except for intercompany transactions that are denominated in foreign currency) are not hedgeable transactions, except for the purpose of the financial statements of stand-alone subsidiaries. Equity-method investees are not consolidated entities; therefore, we do not believe that this prohibition is applicable to forecasted transactions with equity-method investees.

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Furthermore, we do not believe that the restriction in ASC 815-20-25-46A that a forecasted transaction is not eligible for designation as a hedged transaction in a cash flow hedge when the transaction involves an equity-method investment precludes a transaction between an entity and its equity-method investee from qualifying for cash flow hedge accounting.

However, an entity should consider the normal elimination entries as discussed in ASC 323-10-35, when preparing the consolidated financial statements.

Hedging a Forecasted Transaction of an Equity-Method Investee

Question No. 6-6: Can an entity hedge a forecasted transaction of its equity-method investee? For example, can an entity that holds a 20 percent interest in Company A, which the entity accounts for by using the equity method, hedge the forecasted cash flows (e.g., the forecasted sales of gold) of Company A by entering into a forward contract that would otherwise qualify for hedge accounting?

PwC Interpretive Response: No. A forecasted transaction is not eligible for designation as a hedged transaction in a cash flow hedge by the reporting entity when the transaction (such as a forecasted purchase, sale, or dividend) is between the reporting entity's equity method investee and a third party. Given that the forecasted transaction is that of the entity's equity investee, it would not qualify for hedge accounting by the reporting entity.

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 and that the corresponding guidance in ASC 815 cannot be applied directly or by analogy to an equity-method investee. As a result, an 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.

Computation of "Cumulative Gains or Losses"

Question No. 6-7: How does ASC 815 define the "cumulative gain or loss" on the derivative from the inception of the hedge, as discussed in ASC 815-30-35-3(b)?

PwC Interpretive Response: ASC 815 does not specifically define the term "cumulative gain or loss," as it is used in ASC 815-30-35-3(b). However, the cumulative gain or loss on a hedging instrument generally should be all or a part of the instrument's gains and losses since the inception of the hedge (which would be equal to changes in the derivative's fair value, including changes that are due to the passage of time and periodic cash settlements). If an entity excludes all or part of a derivative's time value for measuring effectiveness, the cumulative gain or loss should also exclude this change in value.

In certain circumstances where a hedge relationship continues even though hedge accounting was not permitted for a specific period or if hedge accounting has not been applied to a cash flow hedge in a previous effectiveness assessment period because the entity's retrospective evaluation indicated that the relationship had not been highly effective in that period, the cumulative gains or losses under ASC 815-30-35-3(b)(2) would exclude the gains or losses occurring during that period. That situation may arise if the entity had previously determined that there was an expectation in which the hedge relationship would be highly effective on a prospective basis, for example, using a regression or other statistical approach.

Measuring the Ineffectiveness of a Cash Flow Hedge

Question No. 6-8: A company has a cash flow hedge involving a receive-floating, pay-fixed interest rate swap that is designated as a hedge of the variable interest payments on an existing floating-rate liability. Additionally, the company has a receive-fixed, pay-floating interest rate swap that is designated as a hedge of the variable interest receipts on an existing floating-rate asset. The hedging relationships do not qualify for the shortcut method. Can the company measure the ineffectiveness of these cash flow hedges under ASC 815-30-35-3(b) by using a method that is different from one of the three methods of measuring ineffectiveness as described in ASC 815-30-35-10?

PwC Interpretive Response: No. Either the (1) “change-in-variable-cash-flows” method, (2) “hypothetical-derivative” method, or (3) “change-in-fair-value” method must be used to measure the ineffectiveness for a cash flow hedge that does not qualify for the shortcut method. As noted in ASC 815-30-35-17, there are certain circumstances in which the “change-in-variable-cash-flows” method cannot be used.

Deferring Derivatives’ Gains and Losses as a Basis Adjustment of the Item Acquired in a Forecasted Purchase

Question No. 6-9: Can a change in the fair value of a derivative that is used to hedge price changes of anticipated inventory purchases be deferred as a basis adjustment of the inventory?

PwC Interpretive Response: No. Changes in the fair value of a derivative that is used to hedge an anticipated inventory purchase must be deferred in AOCI until *earnings* are impacted by the purchased item. In this situation, the effective portion of the gain or loss on the derivative would be deferred in AOCI until the inventory is sold or consumed in production. The amount deferred in AOCI should be reclassified to earnings based on the accounting policies related to the hedged inventory (e.g., last-in, first-out; first-in, first-out; average cost). The method that an entity will use to calculate the gain or loss to be reclassified to earnings should be documented at the inception of the hedging relationship.

Similarly, when a transaction involves the purchase of equipment, the gain or loss on the derivative that is deferred in (and classified as) 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.

Effect of Derivative Gains and Losses on the Capitalization of Interest

Question No. 6-10: If a company enters into various hedges that are associated with outstanding debt that may economically alter the effective interest rate on the debt, should the amount of interest expense that is eligible for capitalization under ASC 835-20 include gains and losses from derivatives that hedge outstanding debt?

PwC Interpretive Response: ASC 815-25-35-14 addresses this issue and states that the amounts an entity records as interest costs in its income statement should be reflected in the capitalization rate. Those amounts could include the amortization of the adjustments of the hedged liability's carrying amount under fair value hedge accounting if an entity elects to begin amortizing those adjustments during the period in which the interest is eligible for capitalization. However, the ineffective portion of the fair value hedge should not be reflected in the capitalization rate.

ASC 815 prohibits the capitalization of the gain or loss on the hedging instrument in a cash flow hedge. That is, ASC 815 prohibits reporting such gains and losses as basis adjustments of the qualifying assets. Accordingly, ASC 815 requires reclassification of amounts recorded in AOCI into earnings in the same period or periods during which the hedged forecasted transaction affects earnings. The FASB staff believes that when 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 AOCI related to a cash flow hedge of the variability of that interest should be reclassified into earnings over the depreciable life of the constructed asset, since that depreciable life coincides with the amortization period for the capitalized interest cost on the debt. In cases where the swap is terminated early or the debt term extends beyond the construction period, entities need to closely scrutinize amounts capitalized as interest to ensure that the amounts are interest during the construction period under ASC 815-25-35-14, and not the fair value (i.e., the estimated present value of future settlements) of the derivative.

Using a Three-Way Zero-Cost Collar as a Hedging Instrument

Question No. 6-11: A company hedges its forecasted sales of natural gas by entering into a combination option strategy with one counterparty when the spot price is \$5.75 per unit. The company enters into a zero-cost collar consisting of (a) a collar (a written call option for \$8.00 and a purchased put option for \$4.00) and (b) in a separate contract, a written put option for \$3.75. The combination of (a) and (b) does not result in any premium paid or received by the company. The notional amount (10,000 mmbtus) on each option is the same. Is the written option test in ASC 815-20-25-94 required to be performed in order to determine if the collar is eligible to be designated as the hedging instrument in a hedge relationship of the company's forecasted natural gas sales?

PwC Interpretive Response: Yes. While the exercisability of the written call option and the written put option are mutually exclusive (i.e., if one was to be exercised, the other would not have any value associated with it and would not operate at that time), the fourth criterion in ASC 815-20-25-89 has not been met, which states:

The notional amount of the written option component is not greater than the notional amount of the purchased option component.

The above combination of options provides for a total notional on the written options of 20,000 mmbtus compared with 10,000 mmbtus on the purchased option component. As such, the hedging instrument does not meet the criteria in ASC 815-20-25-89 and is subject to the written option test.

Assessing the Probability of Forecasted Transactions in a Cash Flow Hedge of Interest Payments on Variable Rate Debt for Which the Rate May Be Selected (i.e., “You Pick’em Debt ”)

Question No. 6-12: An entity enters into a variable rate borrowing with a bank. In order to hedge the variability in cash flows associated with its interest payments, it enters into a pay-fixed, receive-variable interest rate swap. The debt’s interest rate resets every 3 months. At each reset date, the entity has the ability to change the interest rate index between 3-month LIBOR and prime. However, if the entity is in default of its debt, the bank may deny the entity its choice of interest rate on the debt. At inception of the hedge, the entity elects 3-month LIBOR as its interest rate and intends to elect that index for all subsequent reset periods during the hedge period. The entity considers that all possible events of default are remote, and designates the interest rate swap as the hedging instrument in a cash flow hedge of the variability of future interest payments on its debt. It designates the risk being hedged as the 3-month LIBOR benchmark interest rate risk. May the entity designate the swap in a hedging relationship despite the bank’s ability to deny the entity’s choice of interest rate upon default?

PwC Interpretive Response: Yes, ASC 815-20-25-15(b) requires that in order for a hedging relationship to qualify for cash flow hedge accounting, the forecasted transaction must be probable of occurring. The forecasted transaction in this hedging relationship is the future interest payments at 3-month LIBOR on the entity’s debt. As long as the entity can assert that the occurrence of the forecasted 3-month LIBOR interest payments is probable, considering the likelihood of default on the debt and the entity choosing the prime interest rate, and all other hedge criteria are met, it can designate the hedging relationship.

The entity must re-assess on an ongoing basis the probability of occurrence of the forecasted transaction, including the likelihood of default and the rate to be selected.

If the likelihood of default increases to a level that the entity can no longer assert that the forecasted 3-month LIBOR interest payments is probable of occurring, it should dedesignate the hedging relationship in accordance with ASC 815-30.

Hedging the Total Variability in Cash Flows of Certain Variable-Rate Financial Assets and Liabilities With Interest Rate Resets Based on an Index Other Than a Designated Benchmark Interest Rate

Question No. 6-13: An entity in the financial services industry offers to its customers a variable-rate money market deposit account (“MMDA”) with a rate that resets daily at the entity’s discretion but that is expected to track a market rate of interest based on its internal policies. The entity considers each rate reset to be economically equivalent to a new issuance of fixed-rate debt based on current market interest rates and the customer can withdraw its money at will, effectively implying a fixed maturity date where one does not contractually exist.

The entity desires to hedge its exposure to changes in interest rates and meet the qualifications for hedge accounting under ASC 815. Must the entity identify the risk being hedged as the overall changes in cash flows or may it identify the risk as the changes in cash flows attributable to changes in a designated benchmark interest rate?

PwC Interpretive Response: The entity must identify the risk being hedged as the overall changes in cash flows. ASC 815-20-55-43 provides that the designated hedged risk of variable rate assets and liabilities that have long-term nominal maturities and interest rates that reset periodically based on a non-benchmark interest rate may be the variability in the overall changes in cash flows, but may *not* be the risk of changes in cash flows attributable to changes in the designated benchmark interest rate.

Designating the Hedged Forecasted Transaction When Its Timing Involves Uncertainty Within a Range

Question No. 6-14: At hedge inception, all critical terms of a forward contract to buy foreign currency match the critical terms of the hedged transaction: an expected foreign-currency-denominated future payment. However, there is some uncertainty in the timing of the forecasted payment which may result in some ineffectiveness.

May an entity assume, by designating the hedged risk as the risk of changes in the spot foreign exchange rate, that no ineffectiveness will occur if the forecasted payment date changes (assuming all other critical terms match)?

PwC Interpretive Response: Assuming the forecasted payment remains expected to occur by the end of the originally specified time period (ASC 815-20-25-16(c)) no ineffectiveness will be recorded if the forecasted payment date changes (assuming all other critical terms match). By selecting the spot rate method, without discounting, as opposed to the forward rate method, the entity's effectiveness assessment and ineffectiveness measurement will be based on the comparison of:

- The changes in the fair value of the forward contract, which are measured using changes in the spot foreign exchange rate, and
- The changes in the functional currency equivalent forecasted payments, which are measured using changes in the spot foreign exchange rate.

Accordingly, the spot/forward difference will be recognized in earnings, but will be excluded from the reported hedge ineffectiveness.

When all critical terms of the hedged item and the hedging instrument match, the changes in the fair value of the forward contract due to changes in the spot rate will exactly offset the changes in the forecasted foreign currency payments due to changes in the spot rate, regardless of the mismatch in the payment dates. Specifically, a change from the original forecasted transaction date to a revised date that differs from the hedging instrument maturity date will not affect the fair value changes or hedge effectiveness.

Hedging Future Interest Payments on the Forecasted Issuance of Debt in Conjunction With an Acquisition

Question No. 6-15: Company A is contemplating the acquisition of 100 percent of Company B. In conjunction with the anticipated acquisition, Company A is planning to issue variable rate debt to fund the acquisition. In an effort to mitigate its future exposure of its forecasted debt issuance to changes in interest rates, Company A enters into a forward starting interest rate swap. The terms of the interest rate swap provide for Company A to receive a variable rate (6-month LIBOR) and pay 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 Company A 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 B?

PwC Interpretive Response: Generally no. ASC 815-20-25-15 provides the criteria to be met in order for a forecasted transaction to be eligible as a hedged transaction. ASC 815-20-25-15(g) indicates, “The forecasted transaction does not involve a business combination...”

In this case, the forecasted transactions (the future interest payments associated with Company A's expected issuance of variable rate debt) are contingent on the consummation of a business combination; that is, Company A 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 order to meet the hedging criteria in ASC 815-20-25.

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 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 in fact patterns where the contingencies above 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. In some cases, as the date of consummation approaches and contingencies are resolved, the forecasted transaction may become probable of occurring.

Many times, a company may enter into the derivative prior to 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, ineffectiveness may exist due to the derivative being off-market at the designation date.

Partial Term Foreign Currency Cash Flow Hedge

Question No. 6-16: A company expects to sell goods in a foreign currency in 2 years. Consistent with its risk management strategy, the company enters into a 1-year forward contract to sell the foreign currency in order to hedge its foreign currency exposure over the first year period. May the company designate the 1-year forward contract in a foreign currency cash flow hedge relationship to hedge the risk of changes in the cash flows of the forecasted sale due to changes in the foreign exchange rate during the first year of the 2-year forecasted period?

PwC Interpretative Response: Yes, the company may designate a portion of the forecasted transaction period as the hedged item. As originally described in paragraph 468 of FAS 133, *Accounting for Derivative Instruments and Hedging Activities* (not codified), the Board concluded that “Prohibiting hedges of a portion of a forecasted transaction term from qualifying for cash flow hedge accounting would have been inconsistent with permitting fair value hedge accounting for hedges of a portion of the life of a hedged asset or liability.” However, in order for the hedging relationship to be highly effective, the company must specify that effectiveness and ineffectiveness of the hedge with the forward contract will be assessed and measured using the method based on changes in spot exchange rates in accordance with ASC 815-35-35-5 through 35-15, and on an undiscounted basis. Any ineffectiveness due to the spot to forward difference of the 1-year forward contract will be excluded from the effectiveness assessment and recognized in earnings.

Difference Between Hedging Future Interest Payments on Specific Debt Issued and Hedging Future Interest Payments Relating to Variable-Rate Debt

Question No. 6-17: Company A is contemplating hedging the cash flow variability of its forecasted interest payments on variable rate debt. To execute its hedge strategy, the company will enter into a pay-fixed, receive-variable interest rate swap based on 3-month LIBOR. Their current ten-year variable rate debt is based on the same rate. What is the difference between executing a strategy to hedge variable rate interest rate payments on a specific piece of variable rate debt versus hedging the first \$x million worth of forecasted interest payments starting in January 20x2 and paid quarterly for the next ten years?

PwC Interpretative Response: ASC 815-20-25 provides guidance on the qualifying criteria for cash flow hedges, including the requirement for formal designation and documentation at hedge inception. As discussed in DH 6.2.1.2, one of the requirements in documenting a cash flow hedge is documentation of the forecasted transaction in sufficient specificity so that it is clear whether a transaction is hedged when it occurs. Additionally, as discussed in DH 6.3.2, ASC 815-20-25-15(b) requires that the forecasted transaction is probable of occurring.

The guidance does not require a specific type of hedging strategy, so companies have flexibility in the way the hedge is documented as long as the documentation meets all of the requirements in ASC 815. If the company documented the interest rate swap as a hedge of variability in interest rate payments on a specific debt instrument, management must assess whether the forecasted interest payments on that specific debt instrument are probable of occurring throughout the life

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of the hedging relationship. If the specific debt is refinanced or prepaid, any amounts remaining in OCI would have to be recognized immediately in earnings. Since many variable rate debt instruments are pre-payable, the assessment at the hedge's inception would need to consider the probability of the company exercising the prepayment option. As discussed in ASC 815-20-55-24, the assessment of probability should not be based solely on management's intent and should be supported by observable facts and circumstances.

However, if the company were to designate the interest rate swap as hedging the first \$X million of quarterly variable rate interest payments beginning in January 20X1, even if the debt was prepaid, the forecasted transaction would still be considered probable of occurring if new 3-month LIBOR based debt was issued and resulted in variable rate payments during the same months as specified in the hedge documentation. In this case hedge accounting could continue and amounts deferred in OCI would not be released until the forecasted interest payments affect earnings. As a result, management should carefully consider their hedging strategy when documenting the specific forecasted transaction being hedged.

Hedging Strategies Available in a Cash Flow Hedge of Interest Payments on Variable-Rate Debt for Which the Rate May Be Selected (i.e., "You Pick'em Debt")

Question No. 6-18: An entity enters into a variable rate borrowing with a bank. In order to hedge the variability in cash flows associated with its interest payments, it enters into a pay-fixed, receive-variable interest rate swap. The debt's interest rate resets every 3 months. At each reset date, the entity has the ability to designate the interest rate index as 3-month LIBOR or 6-month LIBOR. At inception of the hedge, the entity elects 3-month LIBOR as its interest rate and intends to elect that index for all subsequent reset periods during the hedge period. The entity designates the interest rate swap as the hedging instrument in a cash flow hedge of the variability of future interest payments on the specific debt. What are the differences between designating the risk being hedged as 3-month LIBOR benchmark interest rate risk as opposed to LIBOR benchmark interest rate risk?

PwC Interpretive Response: ASC 815-20-25-15(b) requires that in order for a hedging relationship to qualify for cash flow hedge accounting, the forecasted transaction must be probable of occurring. If the forecasted transaction in this hedging relationship is designated as the future interest payments at 3-month LIBOR on the entity's debt, then it can designate the hedging relationship as long as the entity can assert that the occurrence of the forecasted 3-month LIBOR interest payments is probable and all other hedge criteria are met. The entity must re-assess on an ongoing basis the probability of occurrence of the forecasted transaction, including the likelihood of the rate to be selected. If at some point, the company determines that the 3-month LIBOR interest payments are no longer probable, then the company would be required to dedesignate the hedging relationship in accordance with ASC 815-30.

In contrast, if the company designates the risk being hedged as LIBOR, the forecasted transactions would continue to be expected to occur, even if the company resets or expects to reset the rate to 6-month LIBOR. If the rate is changed, the company, however, will be subject to additional ineffectiveness as

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the forecasted transaction is based on 6-month LIBOR and the hedging instrument is based on 3-month LIBOR. As a result, the hedge may fail the effectiveness assessments on an ongoing basis, which may result in a dedesignation of the hedging relationship in accordance with ASC 815-30. Furthermore, even if dedesignation does not occur, the hedging relationship may be subject to additional hedge ineffectiveness being recognized in accordance with ASC 815-30-35-10 through 35-32.

Hedging a Forecasted Issuance of Fixed-Rate Debt With a Treasury Rate Lock

Question No. 6-19: A company expects to issue, at par, ten-year fixed-rate debt in 6 months on June 15, 20X3, 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. Consistent with its risk management policy, the company wants to hedge the changes in the benchmark interest rate from January 15, 20X3, to June 15, 20X3, that will impact the debt's fixed interest rate. The company executes a treasury rate lock on January 15, 20X3. May the company designate the treasury rate lock in a cash flow hedge relationship 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 Interpretive Response: Yes assuming the company meets all of the appropriate requirements of ASC 815 to ensure that the hedge relationship qualifies as a hedge. A treasury rate lock agreement is a financial instrument that allows a company to "lock in" the current benchmark interest rate applicable to U.S. 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. As a treasury rate lock agreement locks-in the current benchmark treasury rate, the agreement may act 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, as 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 a company uses a treasury rate lock agreement as the hedging instrument, due to the nature of how a treasury rate lock agreement is valued and settled, the treasury rate lock generally will not qualify as the "perfect hypothetical" derivative instrument. Management will need to determine if the hedge relationship qualifies as being highly effective at the inception of the hedge and continues to qualify as highly effective throughout the life of the hedge relationship through quantitative long-haul hedge effectiveness calculations, which can be complex.

The valuation and settlement of a treasury rate 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 rate lock agreement will be priced based on this new security. Normally, securities underlying the treasury rate lock contract (i.e., the current or any future treasury issuance of the appropriate maturity) will not have

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cash flows that identically match those of the forecasted debt issuance. For example, assume a treasury rate 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 rate lock will therefore most likely create a certain amount of ineffectiveness from the beginning of the hedge relationship, as even at hedge inception it is highly unlikely that the timing of the interest payments relating to the treasury security underlying the treasury rate lock agreement will exactly match the timing of the interest payments relating to the forecasted debt issuance. Additionally, subsequent issuances of treasury securities may impact the amount of ineffectiveness and will result in more complex calculations to perform the required effectiveness assessments and the calculation of the amount of ineffectiveness. Using a treasury rate lock, or another derivative instrument that is not the theoretical perfectly effective hedge, will not automatically result in the disallowance of hedge accounting under ASC 815, as the hedge may still be highly effective. However, a company will need to both quantitatively assess hedge effectiveness and measure the ineffectiveness resulting from using a treasury rate lock in the accounting of the hedge.

On at least a quarterly basis, the company would be required to perform their prospective and retrospective effectiveness assessments to ensure the hedged relationship was, and continues to be, highly effective. Additionally, the amount of ineffectiveness, if any, within the cash flow hedge relationship will need to be measured and recorded appropriately in current period earnings.

6.9 Examples

Example 6-1: Use of a Plain-Vanilla Interest-Rate Swap to Hedge Variable-Rate Debt (Shortcut Method)

On June 30, 20X1, Company C (the Company), a manufacturer with high quality credit, borrows \$10,000,000 of 3-year, variable-rate interest-only, nonprepayable debt at par with interest payments indexed to the 6-month U.S. LIBOR. It concurrently enters into a 3-year interest-rate swap with Bank B to economically convert the debt's variable rate to a fixed rate. Under the swap contract, the Company pays interest at a fixed rate of 7.5 percent and receives interest at a variable rate indexed to the 6-month U.S. LIBOR, based on a notional amount of \$10,000,000. Both the debt and the swap require that payments be made or received semiannually, on December 31 and June 30 (no premium or discount was incurred upon the Company's entering into the swap, because the pay and receive rates on the swap represent prevailing rates for each counterparty; in this example, the forward yield curve is assumed to be upward sloping). The 6-month U.S. LIBOR on each reset date of December 31 and June 30, determines the variable interest-rate on the debt and the swap for the following 6-month period. Company C immediately designates the swap as a cash-flow hedge, which hedges the exposure to variability in the cash flows of the variable-rate debt, with changes in cash flows that are due to changes in the 6-month LIBOR being the specific risk that is hedged.

(continued)

Initial Hedge Documentation

The hedging relationship and entity's risk management objective and strategy for undertaking the hedge

This is a cash flow hedge of future interest payments on the Company's \$10 million loan entered into on June 30, 20X1, using a pay-fixed receive-variable interest rate swap. The hedge designation date is June 30, 20X1. The Company's risk management objective is to fix its cash flows associated with the risk of variability in the 6-month U.S. LIBOR. In order to meet its risk management objective, the Company has decided to enter into the interest rate swap described below for the same notional amount and period of the \$10 million loan entered into on June 30, 20X1. It is expected that this swap will fix the cash flows associated with the forecasted interest payments on the entire notional amount of the debt.

The hedging instrument

Swap contract X with Bank B dated June 30, 20X1, ending June 30, 20X4: pay 7.5 percent, receive 6-month U.S. LIBOR. Reset dates of December 31 and June 30 (determines the 6-month U.S. LIBOR variable leg for the following 6-month period). Payment dates of December 31 and June 30.

The hedged item or transaction

Forecasted interest payments on the \$10 million loan entered into June 30, 20X1, ending June 30, 20X4. Reset dates of December 31 and June 30 (determines the 6-month U.S. LIBOR variable leg for the following 6-month period). Payment dates of December 31 and June 30.

The nature of the risk being hedged

The Company is hedging the risk of variability in cash flows indexed to 6-month U.S. LIBOR. The Company is hedging interest rate risk (benchmark rate).

The method that will be used to retrospectively and prospectively assess the hedging instrument's effectiveness¹

The Company is using the shortcut method outlined in ASC 815-20-25-102 and has determined that all of the requirements have been met. As such, it assumed that the hedge is perfectly effective.

The method that will be used to measure hedge ineffectiveness¹

The Company is using the shortcut method outlined in ASC 815-20-25-102. As such, it is assuming no ineffectiveness. Therefore, all changes in fair value of the interest rate swap will be recorded through other comprehensive income, and there will be no measurement of ineffectiveness. However, should circumstances change in the hedging relationship including an adverse change in Bank B's creditworthiness, the Company will be required to calculate the fair value of the interest rate swap and the present value of the future cash flows associated with the future interest payments on the hedged debt and determine effectiveness and ineffectiveness.

As documented above, both at the inception of the hedge and on an ongoing basis, Company C assumes there is no ineffectiveness in the hedging relationship of

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¹ Actual documentation should be more specific than what is described in this illustrative example. In general, reperformance of effectiveness assessments and ineffectiveness measurements should be possible based on the initial hedge documentation.

interest rate risk involving the recognized interest-bearing debt and the interest-rate swap because all of the applicable conditions as specified in ASC 815-20-25-104 and 25-106 are met:

- 104a. The notional amount of the swap matches the principal amount of the interest-bearing debt (\$10 million).
- 104b. 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 hedge 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 ASC 820-10-35-7). 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 the other conditions are met.
- 104c. Not applicable.
- 104d. The formula for computing net settlements under the interest-rate swap is the same for each net settlement. (That is, the fixed rate is the same throughout the term, and the variable rate is based on the same index and includes the same constant adjustment or no adjustment; fixed rate of 7.5 percent throughout the term of the swap, 6-month U.S. LIBOR for variable leg throughout the term of the swap/debt.)
- 104e. The interest-bearing debt is not prepayable.
- 104f. The index on which the variable leg of the swap is based (i.e., 6-month U.S. LIBOR) matches the benchmark interest rate designated as the interest rate risk being hedged for the hedging relationship. (The U.S. LIBOR rate represents one of the benchmark rates permitted to be used in a short-cut method hedge).
- 104g. Any other terms in the interest-bearing debt or the interest-rate swap are typical of those instruments and do not invalidate the assumption of no ineffectiveness. (There are no terms noted that are atypical or that would invalidate the assumption of no ineffectiveness).
- 106a. All interest payments on the variable-rate debt during the term of the swap are designated as hedged.
- 106b. No interest payments beyond the term of the interest rate swap are designated as hedged.
- 106c. There is no floor or cap on the variable interest rate of the swap or the variable-rate debt.

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106d. The repricing dates match those of the variable-rate debt (i.e., both December 31 and June 30, for the following 6-month period).

1046e. Not applicable.

106f. Not applicable.

Note that this example assumes the cash flow hedge criteria are met. The Company needs to assess and document these criteria as part of its hedge documentation.

Application of Hedge Accounting

The interest payments on the debt are variable, which will subject the future interest cash flows on the debt to gains or losses should the general level of market interest rates change. The hedge of the changes in cash flows (attributable to a particular risk) on a recognized liability (i.e., the variable-rate debt) is considered a cash-flow hedge, provided that it meets the eligibility requirements. Accordingly, the fair value of the swap (the hedging instrument) is recorded on the balance sheet as an asset or a liability. The effective portion of the swap's gain or loss (change in fair value) is reported in other comprehensive income, and the ineffective portion is reported in earnings (ASC 815-20-35-1 and ASC 815-30-35-3). Amounts accumulated in other comprehensive income are reclassified to earnings when the related interest payments (that is, the hedged forecasted transactions) affect earnings (ASC 815-30-35-38 through 35-41).

The period analyzed in this example is from June 30, 20X1, to December 31, 20X1. Information and journal entries pertaining to dates beyond this period are not presented.

The 6-month U.S. LIBOR rates and the swap's fair values are assumed to be as follows for the first 6 months of the swap agreement:

Date	6-month U.S. LIBOR Rate²	Swap Fair Value Asset (Liability) (Includes Accrued Interest)³
06/30/X1	6.0%	\$ — ⁴
09/30/X1	5.5	(55,000)
12/31/X1	7.0	323,000

² All rate changes are assumed to take place on the date indicated.

³ These fair values were obtained from dealer quotes, and assume that the semiannual swap settlements have occurred.

⁴ Represents transaction price versus fair value under 815-20-25-104 (b).

Company C's interest payments on the variable-rate debt and net payments (receipts) on the interest-rate swap are as follows for the first semiannual period:

	12/31/X1
Variable-rate debt	\$300,000
Interest-rate swap payment	75,000
Total cash payment	\$375,000

(continued)

Application of Shortcut Method

The shortcut method involves the following steps:

1. Determine the difference between the variable rate to be received on the swap and the variable rate to be paid on the debt ((a) below).
2. Combine that difference with the fixed rate to be paid on the swap ((b) and (c) below).
3. Compute and recognize interest expense using that combined rate and the variable-rate debt's principal amount. (Amortization of any premium or discount on the debt must also be considered, if applicable)((d) and (e) below).

Quarter Ending	(a) Difference Between Variable Rates	(b) Fixed Rate on Swap	(c) Sum (a) + (b)	(d) Debt's Principal Amount	(e) Quarterly Interest Expense ((c) x (d)) / 4
9/30/X1	0.00%	7.50%	7.50%	\$10,000,000	\$187,500
12/31/X1	0.00%	7.50%	7.50%	10,000,000	187,500

4. Determine the fair value of the interest rate swap. See footnote 3.
5. Adjust the carrying amount of the swap to its fair value and adjust other comprehensive income by an offsetting amount.

Accounting Entries	Debit	Credit
June 30, 20X1⁵		
1. Cash	\$10,000,000	
Debt		\$10,000,000
To record the issuance of the debt		
September 30, 20X1⁶		
2. Interest expense	150,000	
Accrued interest payable		150,000
To accrue quarterly interest on the debt at a variable rate of 6.0 percent		
3. Other comprehensive income	55,000	
Swap contract		55,000
To record the change in the fair value of the swap at the end of Company C's first reporting period		
4. Interest expense	37,500	
Other comprehensive income		37,500
To record the accrual of the semiannual swap amount payable at 7.50 percent, less amount receivable at LIBOR, 6.00 percent as an adjustment of interest expense and other comprehensive income for the first quarter amount		

⁵ No entry is made to record the fair value of the swap contract at its inception, because at the time of initiation its fair value is zero.

⁶ Each quarter, the entity should assess and document whether there were any changes in the terms of the hedging instrument or hedged item, including an assessment of the swap counterparty creditworthiness.

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Accounting Entries	Debit	Credit
December 31, 20X1		
5. Interest expense	\$150,000	
Accrued interest payable		\$150,000
To accrue the quarterly interest on the debt at a variable rate of 6.0 percent		
6. Accrued interest payable	300,000	
Cash		300,000
To record the semiannual debt-interest payment		
7. Swap contract	378,000	
Other comprehensive income		378,000
To record the change in the fair value of the swap at the end of Company C's second reporting period		
8. Interest expense	37,500	
Other comprehensive income	37,500	
Cash		75,000
To record the payment of the semiannual swap amount payable at 7.50%, less amount receivable at LIBOR, 6.00% as an adjustment of interest expense and other comprehensive income for the second quarter amount		

Analysis

The swap contract is measured at fair value on the balance sheet. The swap's gain or loss, which is assumed to be 100 percent effective as a hedge, is reported in other comprehensive income. Amounts accumulated in other comprehensive income are indirectly recognized in earnings as periodic settlements of the swap occur and the fair value of the swap declines to zero. Semi-annual debt interest payments, including swap settlements, are fixed at \$375,000, or 7.50 percent.

Example 6-1a: Ineffectiveness Measurement of a Plain-Vanilla Interest-Rate Swap to Hedge Variable-Rate Debt (Long-Haul Method)

On June 30, 20X1, Company A (the Company), a manufacturer with high quality credit, borrows \$10,000,000 of 3-year, variable-rate interest-only debt at par with interest payments equal to the 6-month U.S. LIBOR. The debt includes a typical prepayment option which allows the Company to prepay the debt at par any time after the first 6 months. It concurrently enters into a 3-year interest-rate swap with Bank B to economically convert the debt's variable rate to a fixed rate. Under the swap contract, the Company pays interest at a fixed rate of 5.9817 percent and receives interest at a variable rate equal to the 6-month U.S. LIBOR, based on a notional amount of \$10,000,000. The swap is not contractually prepayable. Both the debt and the swap require that payments be made or received semiannually, on December 31 and June 30 (a \$5,000 premium was paid upon the Company's entering into the swap, because the pay and receive rates on the swap did not represent prevailing rates. In this example, the yield curve is assumed to be flat). The 6-month U.S. LIBOR on each reset date of December 31 and June 30, determines the variable interest-rate on the debt and the swap for the following 6-month period. Company A immediately designates the swap as a cash-flow hedge, which hedges

(continued)

the exposure to variability in the cash flows of the variable-rate debt, with changes in cash flows that are due to changes in the 6-month LIBOR being the specific risk that is hedged.

Initial Hedge Documentation

The hedging relationship and entity's risk management objective and strategy for undertaking the hedge

This is a cash flow hedge of future interest payments on the Company's \$10 million loan entered into on June 30, 20X1, using a pay-fixed receive-variable interest rate swap. The hedge designation date is June 30, 20X1. The Company's risk management objective is to fix its cash flows associated with the risk of variability in the 6-month U.S. LIBOR. In order to meet its risk management objective, the Company has decided to enter into the interest rate swap described herein for the same notional amount and period of the \$10 million loan entered into on June 30, 20X1. It is expected that this swap will fix the cash flows associated with the forecasted interest payments on the entire notional amount of the debt.

The hedging instrument

Swap contract X with Bank B dated June 30, 20X1, ending June 30, 20X4: pay 5.9817 percent, receive 6-month U.S. LIBOR. Reset dates of December 31 and June 30 (determines the 6-month U.S. LIBOR variable leg for the following 6-month period). Payment dates of December 31 and June 30.

The hedged item or transaction

Forecasted interest payments on the \$10 million loan entered into June 30, 20X1, ending June 29, 20X4. Reset dates of December 31 and June 30 (determines the 6-month U.S. LIBOR variable leg for the following 6-month period). Payment dates of December 31 and June 30. In a separate document, the Company has appropriately concluded and documented that the forecasted transaction is probable of occurring (i.e., the loan will not prepay) and this assessment will be subsequently updated each period.

The nature of the risk being hedged

The risk of variability in 6-month U.S. LIBOR. The Company is hedging interest rate risk (benchmark rate).

The method that will be used to retrospectively and prospectively assess the hedging instrument's effectiveness¹

The Company is using a cumulative dollar-offset analysis, in accordance with its policy, to assess the effectiveness of the interest rate swap on a retrospective and prospective basis throughout the term of the hedging relationship. The initial prospective effectiveness assessment has not been replicated herein.

The method that will be used to measure hedge ineffectiveness¹

Because the debt has a prepayment option and the swap contract does not, the hedging relationship does not qualify for use of the short-cut method. Therefore, the Company is using the long-haul method known as the Hypothetical-Derivative Method outlined in ASC 815-30-35-25 through 35-30, to measure ineffectiveness, in accordance with its policy. The Company will compare the change in fair value of the actual interest rate swap to the change in fair value of a perfectly effective interest

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¹ Actual documentation should be more specific than what is described in this illustrative example. In general, reperformance of effectiveness assessments and ineffectiveness measurements should be possible based on the initial hedge documentation.

rate swap, which would have terms that identically match the critical terms of the debt. To the extent the interest rate swap is effective, changes in its fair value will be recorded through other comprehensive income. To the extent the interest rate swap is not effective, changes in its fair value will be recorded in earnings.

Application of Hedge Accounting

The interest payments on the debt are variable, which will subject the future interest cash flows on the debt to gains or losses should the general level of market interest rates change. The hedge of the changes in cash flows (attributable to a particular risk) on a recognized liability (i.e., the variable-rate debt) is considered a cash-flow hedge, provided that it meets the eligibility requirements of ASC 815-20-25. Accordingly, the fair value of the swap (the hedging instrument) is recorded on the balance sheet as an asset or a liability. The effective portion of the swap's gain or loss (change in fair value) is reported in other comprehensive income, and the ineffective portion is reported in earnings (ASC 815-30-35-3). Amounts accumulated in other comprehensive income are reclassified to earnings when the related interest payments (that is, the hedged forecasted transactions) affect earnings (ASC 815-30-35-38 through 35-41).

As the hedging relationship does not meet all of the conditions of ASC 815-20-25-102 and ASC 815-20-25-106, the Company cannot assume that there will be no ineffectiveness and apply the shortcut method. Specifically, because the interest bearing debt is prepayable while the hedging interest rate swap does not contain an embedded written call option considered to be a mirror image of the call option embedded in the hedged debt and the swap has a fair market value that is not equal to zero at inception of the hedging relationship, the conditions are not met. However, as the notional amount, interest rate, reset dates and settlement dates match those of the interest bearing debt, the Company expects the hedging relationship to be highly effective. The Company elected to apply the "Hypothetical-Derivative Method" at ASC 815-30-35-25 through 35-30 to measure ineffectiveness.

Note that this example assumes the cash flow hedge criteria in ASC 815-20-25 are met. The Company needs to assess and document these criteria as part of its hedge documentation.

The period analyzed in this example is from June 30, 20X1, to December 31, 20X1. Information and journal entries pertaining to dates beyond this period are not presented.

The 6-month U.S. LIBOR rates and the swap's fair values are assumed to be as follows for the first 6 months of the swap agreement:

Date	6-month U.S. LIBOR Rate ²	Swap Fair Value Asset (Liability) ³
06/30/X1	6.0000%	\$ 5,000
09/30/X1	5.7955%	(47,000)
12/31/X1	7.4449%	331,000

² All rate changes are assumed to take place on the date indicated.

³ These fair values are subsequent to net swap settlements, if there are any, and were obtained from dealer quotes. Accrued interest is excluded from the swap's fair value.

(continued)

Company A's interest payments on the variable-rate debt and net payments (receipts) on the interest-rate swap are as follows for the first semiannual period:

	12/31/X1
Variable-rate debt	\$300,000
Interest-rate swap payment	(916)
Net cash payment	\$299,084

In measuring ineffectiveness under the Hypothetical-Derivative Method, the Company will compare the cumulative change in fair value of the actual swap to the cumulative change in fair value of a hypothetical swap that has terms that identically match those of the interest bearing debt, including having a zero fair value at the inception of the hedge. In a separate document, the Company has concluded that despite the prepayable nature of the debt being hedged, it is probable that it will remain outstanding during the term of the hedging relationship. Any cumulative change in fair value of the actual swap that exceeds the cumulative change in fair value of the hypothetical swap will be the amount of ineffectiveness recorded in earnings. The comparison is presented in the following table:

Period	Cumulative Change in Fair Value of the Actual Swap	Cumulative Change in Fair Value of a Hypothetical Swap	Ineffectiveness for the Period	AOCI
6/30/X1–9/30/X1	\$ (52,000)	\$ (50,000)	\$(2,000)	\$ (50,000)
9/30/X1–12/31/X1	326,000	330,000	2,000 ⁴	326,000

⁴ Hedge ineffectiveness in a cash flow hedge is considered to only occur if the cumulative gain or loss on the hedging instrument exceeds the cumulative change in the expected future cash flows of the hedged transaction. Under the Hypothetical-Derivative Method, changes in the fair value of the hypothetical derivative are regarded as a proxy for the cumulative change in the expected future cash flows of the hedged transaction. Accordingly, only \$2,000 of ineffectiveness is recognized for the first period. This amount reverses in the second period as on a cumulative basis, the derivative was “under” effective.

Accounting Entries	Debit	Credit
June 30, 20X1		
1. Cash	\$10,000,000	
Debt		\$10,000,000
To record the issuance of the debt		
2. Swap contract	5,000	
Cash		5,000
To record the premium payment on the swap which represents the fair market value at inception		
September 30, 20X1		
3. Interest expense	150,000	
Accrued interest payable		150,000
To accrue quarterly interest on the debt at a variable rate of 6.0 percent		

(continued)

Accounting Entries	Debit	Credit
4. Other comprehensive income	\$ 50,000	
Other income/expense	2,000	
Swap contract		\$ 52,000
To record the change in the fair value of the swap at the end of Company A's first reporting period and related ineffectiveness		
5. Swap contract	458	
Other comprehensive income		458
To record the quarterly accrual of the swap amount receivable at LIBOR, 6.00 percent, less amount payable at 5.9817 percent, as an adjustment of other comprehensive income for the quarter		
6. Accumulated other comprehensive income	458	
Interest expense		458
To record the applicable reclassification from accumulated other comprehensive income to interest expense for the quarter		
December 31, 20X1		
7. Interest expense	150,000	
Accrued interest payable		150,000
To accrue the quarterly interest on the debt at a variable rate of 6.0 percent		
8. Accrued interest payable	300,000	
Cash		300,000
To record the semiannual debt-interest payment		
9. Swap contract	378,000	
Other comprehensive income		376,000
Other income/expense		2,000
To record the change in the fair value of the swap at the end of Company A's second reporting period		
10. Swap contract	458	
Other comprehensive income		458
To record the quarterly accrual of the swap amount receivable at LIBOR, 6.00 percent, less amount payable at 5.9817 percent, as an adjustment of other comprehensive income for the quarter		
11. Accumulated other comprehensive income	458	
Interest expense		458
To record the applicable reclassification from accumulated other comprehensive income to interest expense for the quarter		
12. Cash	916	
Swap contract		916
To record the receipt of the semiannual swap amount receivable at LIBOR, 6.00 percent, less amount payable at 5.9817 percent		

(continued)

Analysis

The swap contract is measured at fair value on the balance sheet. To the extent the swap is effective, gains and losses are reported in other comprehensive income. To the extent the swap is not effective, gains and losses are recognized in earnings. Amounts accumulated in other comprehensive income are indirectly recognized in earnings as periodic settlements of the swap occur and the fair value of the swap declines to zero. Net interest expense (i.e., debt interest payments net of swap settlements) is fixed at \$299,084 for the semi-annual period, or 5.9817 percent per annum.

Example 6-2: Use of a Swaption to Hedge a Forecasted Issuance of Debt

On January 1, 20X1, Company A anticipates that on January 1, 20X2, it will issue \$10,000,000 of 2-year, fixed rate debt with the coupon set at the market interest rates at that date. Interest will be paid annually on December 31 each year.

In order to protect itself from an increase in the market interest rate for the 2-year forward period of January 1, 20X2, to December 31, 20X4, during the 1-year period from January 1, 20X1, to January 1, 20X2, Company A purchases, for a premium of \$20,000, an option that gives it the right, but not the obligation, to enter into a 2-year, receive-variable (6-month U.S. LIBOR), pay-fixed (8 percent) interest-rate swap (a “swaption”) as of January 1, 20X2, based on a notional amount of \$10,000,000. Fixed interest payments on the swap are made on an annual basis on December 31. The Company designates the swaption as a cash flow hedge of the variability of interest payments on the forecasted issuance of fixed-rate debt due to changes in the benchmark interest rate (e.g., 6-month U.S. LIBOR).

This example assumes the interest rate curve is flat and that the 6-month U.S. LIBOR interest rate is 8 percent on January 1, 20X1, and 10 percent on December 31, 20X1. The interest rate change from 8 to 10 percent occurred on the last day of the year (December 31, 20X1).

On January 1, 20X2, the swaption is settled with the original counterparty at a fair value of \$347,107.¹ The swaption is terminated at the debt issuance date, January 1, 20X2, since the Company will no longer be exposed to interest rate variability after the date of the fixed-rate debt issuance.

Initial Hedge Documentation

The hedging relationship and entity’s risk management objective and strategy for undertaking the hedge

This is a cash flow hedge of the variability of future interest payments on the forecasted issuance of \$10 million fixed-rate debt on January 1, 20X2, using a pay-fixed receive-variable interest rate swaption. The hedge designation date is January 1, 20X1. The Company’s risk management objective is to limit its potential cash outflows on the forecasted issuance of \$10 million fixed-rate debt on January 1, 20X2. Those cash flows are subject to risk associated with the risk of variability in benchmark interest rates as measured by changes in the yield curve for the 6-month U.S. LIBOR rate from January 1, 20X1, to January 1, 20X2. In order to meet

(continued)

¹ See also footnote 4 for the fair value calculation of the swaption.

its risk management objective, the Company has decided to enter into the interest rate swaption described herein for the same notional amount and period of the \$10 million fixed-rate debt that it anticipates entering into on January 1, 20X2. It is expected that this swaption will fix the cash flows associated with the forecasted interest payments on the entire notional amount of the debt.

The hedging instrument

Swaption contract X with Bank B dated January 1, 20X1, ending January 1, 20X2: pay fixed 8 percent, receive 6-month U.S. LIBOR as of January 1, 20X2. Fixed payment date is December 31, 20X2, and December 31, 20X3; floating payments reset on July 1, 20X2, and January 1 and July 1, 20X3, with payments on June 30 and December 31, 20X2, and 20X3.

The hedged item or transaction

Forecasted interest payments on the \$10 million fixed-rate debt anticipated to be entered into on January 1, 20X2. Payment dates are December 31, 20X2, and December 31, 20X3. In a separate document, the Company has appropriately concluded and documented that the forecasted transaction is probable of occurring and this assessment will be subsequently updated each period.

The nature of the risk being hedged

The risk of variability in blended 6-month spot and forward U.S. LIBOR for a 2-year period beginning January 1, 20X2, being above 8 percent at January 1, 20X2. The Company is hedging interest rate risk (benchmark rate).

The method that will be used to retrospectively and prospectively assess the hedging instrument's effectiveness²

The Company is using a cumulative dollar-offset analysis, to assess the effectiveness of the interest rate swaption at inception and on a retrospective and prospective basis throughout the term of the hedging relationship. The Company has elected to assess hedge effectiveness based on the intrinsic value of the interest rate swaption and has decided to exclude the time-value element of the derivative. Changes in the excluded component will be recorded directly in earnings as they occur. The Company will compare the cumulative changes in the intrinsic value of the swaption with the cumulative changes in the intrinsic value of a "perfectly effective" hypothetical derivative. Results of this comparison of between 80 and 125 percent will be deemed highly effective.

The method that will be used to measure hedge ineffectiveness²

Ineffectiveness will be measured by comparing the changes in the intrinsic value of the swaption with the change in the fair value of the forecasted interest payments due to changes in the forward LIBOR interest curve where LIBOR is greater than 8 percent. Therefore, to the extent the interest rate swaption is effective, changes in its intrinsic value will be recorded through other comprehensive income. Any ineffectiveness as well as changes in the time value of the swaption will be recorded directly into earnings.

Note that this example assumes the cash flow hedge criteria in ASC 815-20-25 are met. The Company also needs to assess and document these criteria as part of its hedge documentation.

(continued)

² Actual documentation should be more specific than what is described in this illustrative example. In general, reperformance of effectiveness assessments and ineffectiveness measurements should be possible based on the initial hedge documentation.

Application of Hedge Accounting

The Company's forecasted interest payments on the \$10 million fixed-rate debt anticipated to be entered into on January 1, 20X2, is considered a forecasted transaction. A derivative instrument that hedges the cash flows associated with a forecasted transaction is considered a cash-flow hedge (ASC 815-20-25). The designated risk of the forecasted transaction is the risk of changes in cash flows attributable to changes in the benchmark interest rate, and management has determined that the other eligibility requirements of ASC 815-20-25 have been satisfied. Accordingly, the fair value of the swaption contract (hedging instrument) is recorded on the balance sheet as an asset or liability. The effective portion of the swaption's gain or loss is reported in other comprehensive income, and the ineffective portion is reported currently in earnings. The amount of the gain or loss that may be deferred in other comprehensive income is limited to the lesser of (1) the cumulative gain or loss in the intrinsic value on the swaption contract from the inception of the hedge (does not include the excluded components of the hedge transaction or any gains or losses on the swaption that were previously reclassified from accumulated other comprehensive income to earnings) or (2) the cumulative change in fair value of the forecasted interest payments due to changes in the forward LIBOR interest curve above the fair value of the forecasted interest payments that would yield 8 percent from the inception of the hedge, less any gains or losses on the swaption that were previously reclassified from accumulated other comprehensive income to earnings. Amounts accumulated in other comprehensive income are reclassified to earnings when interest expense on the debt is accrued (ASC 815-30-35-38 through 35-41).

Prospective Hedge Effectiveness Analysis

Period	Change in Swaption's Intrinsic Value Gain (Loss)	Change in Expected Interest Outflows Gain (Loss) Above 8%	Effectiveness Ratio	
			For the Period	Cumulative
Increase in LIBOR rates by 100 basis points	\$161,386 ³	\$(161,386)	1.00	1.00

³ $161,386 = (9\% - 8\%) \times \$10,000,000 \times \text{discount rate} = \$100,000 \text{ discounted from December 31, 20X3, and December 31, 20X2, at } 9\%. [100,000 / (1.09)^3 + 100,000 / (1.09)^2]$

The Company determines hedge effectiveness based on changes in the option's intrinsic value, and has determined that the hedging relationship between the swaption and the interest outflows on the forecasted issuance of fixed-rate debt will be highly effective in achieving the offset of changes in cash flows that are attributable to the interest-rate risk. The prospective effectiveness test should normally be based on multiple interest rate scenarios. The number of such scenarios tested should be a function of the nature and extent of the differences between the hedging instrument and the hedged item. The more closely the terms of the hedging instrument match the critical terms of the hedged item, the fewer the number of scenarios that may need to be tested. In situations where such terms are almost identical, a test of one scenario may be sufficient. To simplify this example, only one scenario has been presented.

(continued)

Retrospective Hedge Effectiveness Analysis

Date	Change in Swaption's Intrinsic Value Gain (Loss)	Change in Expected Interest Outflows Gain (Loss) Above 8%	Effectiveness Ratio	
			For the Period	Cumulative
December 31, 20X1	\$347,107 ⁴	\$(347,107)	1.00	1.00

⁴ $347,107 = (10\% - 8\%) \times \$10,000,000 \times \text{discount rate} = \$200,000$ discounted from December 31, 20X3, and December 31, 20X2, at 10%. $[200,000 / (1.10) + 200,000 / (1.10)^2]$

The Company determines hedge effectiveness based on changes in the option's intrinsic value, and has determined that the hedging relationship between the swaption and the interest outflows on the forecasted issuance of fixed-rate debt was highly effective in achieving the offset of changes in cash flows that are attributable to the interest-rate risk.

Accounting Entries	Debit	Credit
January 1, 20X1		
1. Swaption	\$ 20,000	
Cash		\$ 20,000
To record the purchase of the swaption		
December 31, 20X1⁵		
2. Loss on the hedge activity	20,000	
Swaption		20,000
To record the change in the time value of the swaption		
3. Swaption	347,107	
Other comprehensive income		347,107
To record the change in the intrinsic value (gain) of the swaption		
January 1, 20X2		
4. Cash	347,107	
Swaption		347,107
To record the settlement of the swaption		
5. Cash	10,000,000	
Debt		10,000,000
To record the issuance of the fixed-rate debt		
December 31, 20X2		
6. Interest expense	1,000,000	
Cash		1,000,000
To record the interest payment on the debt		

⁵ This analysis does not include quarterly hedge effectiveness and ineffectiveness assessments and journal entries. Entities would be required to perform those assessments and record the fair value of the swaption each quarter between January 1, 20X1, and December 31, 20X1. Note that changes in time value of the swaption may result in volatility in earnings because it is excluded from the effectiveness assessment.

(continued)

Accounting Entries	Debit	Credit
7. Accumulated other comprehensive income ⁶	\$ 166,837	
Interest expense		\$ 166,837
To amortize the gain on the swaption as an adjustment of the interest expense on the debt [i.e., the hedged item]		
<hr/>		
December 31, 20X3		
8. Interest expense	1,000,000	
Cash		1,000,000
To record the interest payment on the debt		
9. Accumulated other comprehensive income ⁶	180,270	
Interest expense		180,270
To amortize the gain on the swaption as an adjustment of the interest expense on the debt [i.e., the hedged item]		
10. Debt	10,000,000	
Cash		10,000,000
To record the repayment of the fixed-rate debt		

⁶ The figures are calculated based on the effective yield method of releasing accumulated other comprehensive income (AOCI) using the debt's effective rate of 8.05 percent (i.e., similar to amortization of a premium of \$347,107). The effective rate of the debt is slightly greater than 8 percent, because the example does not incorporate interest income earned on the swaption proceeds of \$347,107 that were received at the date of debt issuance. Other methods of releasing AOCI to earnings may also be acceptable.

Example 6-3: Use of Options to Hedge an Anticipated Purchase of Inventory

A commercial user of gold (e.g., a jewelry manufacturer) believes that it is subject to the risk of gold price increases in the coming months. Therefore, it decides to purchase New York COMEX call options on gold futures as price-risk insurance (i.e., the call-option contracts are intended to hedge the price-risk of an anticipated purchase of inventory). If gold prices increase, the profit on the purchased call options will approximately offset the higher price that the manufacturer must pay for the gold to be used in its manufacturing process. If gold prices decline, the manufacturer will lose the premium it paid for the call options, but can then buy gold at the lower price. The manufacturer purchases gold from its suppliers based on the market COMEX spot price plus basis plus delivery charges to the manufacturer's facility.

In January 20X1, the jewelry manufacturer purchases two at-the-money spot April \$291/ounce calls for a premium of \$7.50 an ounce and four June \$291/ounce calls for a premium of \$12.50 an ounce, since it expects to acquire at least 200 ounces of gold in April 20X1 and 400 ounces of gold in June 20X1. Each call option is for a notional amount of 100 ounces of gold. The call options represent derivative instruments because of their contractual provisions, which permit net cash settlement.

In April 20X1, the spot price of gold rises to \$316 an ounce, and the April call value is at \$25 an ounce (\$316 spot price, less \$291 strike price). The jewelry manufacturer settles its two April calls and buys 200 ounces of gold from its suppliers. In June 2001, the spot price of gold is \$325 an ounce, and the June call value is at \$34 an ounce (\$325 spot price, less \$291 strike price). The manufacturer again settles its

(continued)

options position and buys gold from its suppliers. These transactions are illustrated as follows:

Hedging Instrument

Date	Spot Price	Strike Price	Option Premium
January 20X1	\$291	April Gold \$291 June Gold \$291	April Option \$ 7.50 June Option \$12.50
April 20X1	316		
June 20X1	325		

Hedged Item

Date	Gold Spot Price	Spot Basis and Delivery Charges	Total Gold Spot Price Delivered to the Manufacturer's Facility
January 20X1	\$291	\$3	\$294
April 20X1	316	4	320
June 20X1	325	5	330

The manufacturer's hedging strategy is to assess effectiveness based on the option's intrinsic value. Accordingly, changes in the option's time value are recognized currently in earnings. The manufacturer assesses effectiveness using the rates of cumulative changes in cash flows of anticipated gold purchases to the difference between the current spot price and the option's strike price, times the notional value of options purchased.

Initial Hedge Documentation

The hedging relationship and entity's risk management objective and strategy for undertaking the hedge

This is a cash flow hedge of future gold purchases by purchasing COMEX call options on gold futures. The hedge designation date is January 20X1. The Company requires purchases of gold for the production of its inventory. Gold prices are at risk of rising. The Company's risk management objective is to protect its cash flows associated with the risk of variability in the price of gold purchased for its production above \$294 per ounce. In order to meet its risk management objective, the Company has decided to purchase call options on gold futures to protect it from the risk of increasing gold prices above \$291 per ounce.

The hedging instrument

Two and four purchased call options on COMEX gold for April 20X1 and June 20X1, respectively. The hedge designation date is January 1, 20X1. The options have a notional of 100 ounces each, have strike prices of \$291/ounce for April 20X1 and June 20X1, and option premiums of \$7.50/ounce and \$12.50/ounce for the April 20X1 and June 20X1 call options, respectively.

The hedged item or transaction

The first 200 ounces of forecasted gold purchases during the month of April 20X1 at the then-spot gold price delivered to the Company's facility and the first 400 ounces of forecasted gold purchases during the month of June 20X1 at the then-spot gold price delivered to the Company's facility. In a separate document, the Company has appropriately concluded and documented that the forecasted transaction is probable of occurring and this assessment will be subsequently updated each period.

(continued)

The nature of the risk being hedged

The risk of variability in the total purchase price of gold delivered to the Company's facility above \$294 per ounce.

The method that will be used to retrospectively and prospectively assess the hedging instrument's effectiveness¹

The Company has determined that the hedge will be highly effective. The Company is assessing the hedge's effectiveness using the intrinsic value only in accordance with ASC 815-20-25-82 and ASC 815-30-35-3. Retrospective and prospective assessments are being performed using cumulative dollar offset of the changes in the intrinsic value of the options to the cumulative change in the expected cash flows of the anticipated gold purchases based on the difference between the current spot price and the option's strike price. The hedge will be considered to be highly effective if the ratio is between 0.80 and 1.25. See determination of effectiveness below.

Note that both the initial prospective effectiveness assessment, and the first quarter effectiveness assessment and ineffectiveness measurement have not been replicated herein.

The method that will be used to measure hedge ineffectiveness¹

Ineffectiveness will be measured and recorded as any additional change in the intrinsic value over that amount necessary to offset the cumulative change in the expected cash flows of the anticipated gold purchases from January 1, 20X1 (less the options' gains or losses previously reclassified from accumulated other comprehensive income).

Note that this example assumes the cash flow hedge criteria in ASC 815-20-25 are met. The Company needs to assess and document these criteria as part of its hedge documentation.

Application of Hedge Accounting

The jewelry manufacturer's projected purchases of gold for April and June, 20X1 are considered forecasted transactions. A derivative instrument that hedges the cash flows associated with forecasted purchases is considered a cash-flow hedge. ASC 815-20-25-15 (i)(2) specifies that, in a cash-flow hedge of a forecasted purchase of a nonfinancial asset (gold in this example), the designated risk that is being hedged is the risk of changes in the cash flows relating to all changes in the purchase price of the asset (not the risk of changes in cash flows relating to a major ingredient of the asset). Accordingly, the effective portion of the call options' gain or loss is reported in other comprehensive income, and the ineffective portion is reported currently in earnings. Amounts accumulated in other comprehensive income are reclassified to earnings when the related inventory is sold or otherwise impacts earnings (ASC 815-30-35-38 through 35-41).

The use of an option contract as protection against a loss only qualifies for cash-flow hedge accounting, provided that it is highly effective. Management has elected to assess and measure effectiveness based on changes in the intrinsic value of the options.

The manufacturer must record the fair value of the options on its balance sheet. Changes in the time value of the options are recorded currently in earnings. Time value is considered the excess of the fair value of the options over their intrinsic value

(continued)

¹ Actual documentation should be more specific than what is described in this illustrative example. In general, reperformance of effectiveness assessments and ineffectiveness measurements should be possible based on the initial hedge documentation.

(ASC 815-20-25-82). Changes in the options' intrinsic value, to the extent that they are effective as a hedge, are recorded in other comprehensive income. That is, the amount in accumulated other comprehensive income is brought to a balance that is equal to the lesser of (1) the cumulative increase in the intrinsic value of the options (less any excluded components of the hedge transaction or any gains or losses on the options that were previously reclassified from accumulated other comprehensive income to earnings), or (2) the cumulative change in the expected cash outflows for the inventory purchase that are measured at the current spot rate in excess of the designated hedge threshold, less any gains or losses on the options that were previously reclassified from accumulated other comprehensive income to earnings. Any additional change in the intrinsic value of the options is recorded in earnings. The balance in accumulated other comprehensive income is reclassified to earnings when the related inventory is sold or otherwise impacts earnings (ASC 815-30-35-38 through 35-41).

Hedge Effectiveness Analysis

Date	Change in the Cash Flows of		
	Anticipated Inventory Purchases	Call Options (Intrinsic Value)	Cumulative Effectiveness Ratio
April 20X1	\$15,600 ²	\$15,000 ³	0.962
June 20X1	14,400 ⁴	13,600 ³	0.944

² April purchases = 200 x (\$320 spot price – \$294 designated hedge threshold) = \$ 5,200
June purchases = 400 x (\$320 spot price – \$294 designated hedge threshold) = 10,400
\$15,600

³ See table below.

⁴ June purchases = 400 x (\$330 spot price – \$294 designated hedge threshold) = \$14,400

Option Fair Value Analysis

Date	Changes in the Fair Value of Call Options ⁵		
	Time Value	Intrinsic Value	Total Fair Value Prior to Exercise
January 20X1	\$6,500 ⁶	\$ — ^{6a}	\$ 6,500
April 20X1	1,500 ⁷	15,000 ⁸	16,500
June 20X1	—	13,600 ⁹	13,600

⁵ All fair values were obtained from dealer quotes.

⁶ 2 April calls = 200 x \$7.50 = \$1,500
4 June calls = 400 x \$12.50 = 5,000
\$6,500

^{6a} Intrinsic value calculated as \$291 spot price – \$291 strike price for all April and June calls = —

⁷ 4 June calls – estimated remaining time value = \$1,500

⁸ 2 April calls = 200 x (\$316 spot price – \$291 strike price) = \$5,000

4 June calls = 400 x (\$316 spot price – \$291 strike price) = 10,000
\$15,000

⁹ 4 June calls = 400 x (\$325 spot price – \$291 strike price) = \$13,600

(continued)

Accounting Entries	Debit	Credit
January 20X1		
1. Purchased call options	\$6,500	
Cash		\$6,500
To record the purchase of call options		
April 20X1¹⁰		
2. Loss on hedge activity	5,000	
Purchased call options		5,000
To record the change in the time value of the purchased call options (\$6,500 less \$1,500)		
3. Purchased call options	15,000	
Other comprehensive income		15,000
To record the change in the intrinsic value of the purchased call options		
4. Cash	5,000	
Purchased call options		5,000
To record the cash settlement of the April call options – \$25 x 200 ounces		
5. Gold inventory	64,000	
Cash		64,000
To record the purchase of 200 ounces of gold at the purchase price of \$320 per ounce		
June 20X1		
6. Loss on hedge activity	1,500	
Purchased call options		1,500
To record the change in the time value of the purchased June call options		
7. Purchased call options	3,600	
Other comprehensive income		3,600
To record the change in the intrinsic value of purchased June call options (\$13,600 less \$10,000)		
8. Cash	13,600	
Purchased call options		13,600
To record the cash settlement of the June call options – \$34 x 400 ounces		
9. Gold inventory	132,000	
Cash		132,000
To record the purchase of 400 ounces of gold at the purchase price of \$330 per ounce		

¹⁰ This analysis does not include quarterly hedge effectiveness and ineffectiveness assessments and journal entries. Entities would be required to perform those assessments on at least a quarterly basis over the term of the hedge.

(continued)

Analysis

As of June 30, 20X1, the entity has deferred in accumulated other comprehensive income \$18,600 of gains that have resulted from changes in the intrinsic value of the call-option contracts. The gains deferred in accumulated other comprehensive income will be reclassified to earnings when the inventory is sold (i.e., when earnings are impacted). ASC 815 does not however, specify a method by which the deferred gains are to be reclassified from accumulated other comprehensive income. In this situation, it is likely that the deferred gains would be reclassified according to how the manufacturer accounts for its inventory. For example, if the manufacturer had an inventory of 500 ounces of gold on March 31, 20X1, and added to that inventory the April and June purchases of 200 and 400 ounces, respectively, the deferred gains might be relieved from AOCI under different accounting methods, as follows:

Sales after July 1, 20X1	Amount Reclassified per Ounce Sold		
	FIFO	LIFO	Avg. Cost
First 200 ounces sold	\$—	\$34	16.91 ^a
Next 200 ounces sold	—	34	16.91
Next 100 ounces sold	—	25	16.91
Next 100 ounces sold	25	25	16.91
Next 100 ounces sold	25	—	16.91
Next 200 ounces sold	34	—	16.91
Next 200 ounces sold	34	—	16.91

^a \$18,600 / 1,100 ounces. The above illustration assumes that there were no sales from March 31, 20X1, to June 30, 20X1, and that gold inventory will be liquidated before additional purchases are made.

Example 6-4: Use of Futures Contracts to Hedge an Anticipated Certificate-of-Deposit Repricing

A bank (the Company) rolls over approximately \$5,000,000 of 90-day certificates of deposit (CDs) every 3 months. Accordingly, it is exposed to interest-rate risk, since an increase in the rate it must pay on CDs would increase its cost of funds and potentially reduce its existing interest-rate spread. The 90-day CD rate is 5.58 percent on March 4, 20X1, at which time the Company decides to hedge against the risk of an increase in interest rates during the next 3 months.

To hedge its interest-rate risk, the Company sells five June 20X1 Treasury-bill¹ futures contracts. Management assesses the hedge's effectiveness based on the entire change in the value of the futures contracts and formally documents its objectives and strategy for undertaking the hedge as follows:

Initial Hedge Documentation

The hedging relationship and entity's risk management objective and strategy for undertaking the hedge

This is a cash flow hedge of future interest payments on the Company's \$5 million 90-day CD program when it rolls over, using sales of 90-day Treasury bill futures.

(continued)

¹ Treasury-bill futures contracts are sold in contract units of \$1,000,000. Therefore, five contracts are needed to cover the next CD rollover in June 20X1.

Hedge designation date is at March 4, 20X1. The Company's risk management objective is to protect its cash flows associated with the risk of variability in the 90-day CD rate when the CDs rollover. In order to meet its risk management objective, the Company is selling the Treasury bill futures described below for the same notional amount and period of the \$5 million CDs sold on March 4, 20X1. It is expected that the spread difference on the Treasury bill futures at June 2, 20X1, will offset the cash flows associated with the forecasted interest payments on the entire notional amount of the rollover CDs.

The hedging instrument

Sale of five \$1 million denominated 90-day Treasury bill futures dated March 4, 20X1, ending June 2, 20X1, at 93.74.

The hedged item or transaction

The forecasted transaction is the rollover on June 2, 20X1, of the first \$5 million in 90-day CDs issued on March 4, 20X1. In a separate document, the Company has appropriately concluded and documented that the forecasted transaction is probable of occurring.

The nature of the risk being hedged

The risk of variability in the interest rate of 90-day CDs at June 2, 20X1, as compared to March 4, 20X1. The Company is hedging variability in total cash flows.

The method that will be used to retrospectively and prospectively assess the hedging instrument's effectiveness²

The Company has determined that the hedge is expected to be highly effective at inception and throughout the term of the hedge. The Company will assess effectiveness based upon the entire change in fair value of the futures contracts. The Company will assess effectiveness retrospectively and prospectively by performing a cumulative dollar offset analysis by dividing the total change in the fair value of the Treasury-bill futures by the total change in expected cash outflows for interest payments on the rolled over CDs. The hedge will be deemed to be effective if the ratio is between 0.80 and 1.25. The initial prospective effectiveness assessment has not been replicated herein.

The method that will be used to measure hedge ineffectiveness²

The Company will measure ineffectiveness using the cumulative dollar offset results of its retrospective quarterly test. Any amounts of ineffectiveness will be recorded currently in earnings. Amounts to be recorded in other comprehensive income will be the lower of the total change in fair value of the futures contracts or the total change in cash outflows due to a rise in interest rates on the CDs. Any excess of the total change in fair value of the futures contracts over the total change in cash outflows of the hedged item will be recorded in earnings.

Note that this example assumes the cash flow hedge criteria in ASC 815-20-25 are met. The Company needs to assess and document these criteria as part of its hedge documentation.

(continued)

² Actual documentation should be more specific than what is described in this illustrative example. In general, reperformance of effectiveness assessments and ineffectiveness measurements should be possible based on the initial hedge documentation.

Application of Hedge Accounting

The Company's projected rollover of \$5 million in 90-day CDs on June 2, 20X1, is considered a forecasted transaction, because the interest rate to be offered on the rollover of the CDs is not known at March 4, 20X1 (i.e., due to the variability of market interest rates offered by the Company upon the rollover of a CD). The designated risk of the forecasted transaction is the risk of changes in its cash flows attributable to changes in market interest rates (ASC 815-20-25-6). A derivative instrument that hedges the cash flows associated with a forecasted transaction is considered a cash flow hedge. Management has determined that the other eligibility requirements for a cash-flow hedge (ASC 815-20-25) have been satisfied. Accordingly, the change in the fair value of the futures contracts (the hedging instrument) is recorded on the balance sheet as an asset or a liability. The effective portion of the futures' gain or loss is reported in other comprehensive income, and the ineffective portion is reported currently in earnings. The amount of the gain or loss that may be deferred in other comprehensive income is limited to the lesser of (1) the cumulative gain or loss on the futures contracts from the inception of the hedge (less any excluded components of the hedge transaction and gains or losses on the derivative hedging instrument that were previously reclassified from accumulated comprehensive income into earnings) or (2) the portion of the cumulative gain or loss on the futures contracts that is necessary to offset the cumulative change in expected future cash flows on the rollover of the CDs from the inception of the hedge less the derivative's gains or losses that were previously reclassified from accumulated other comprehensive income to earnings. Amounts accumulated in other comprehensive income are reclassified to earnings when the related interest expense on the CDs impacts earnings (ASC 815-30-35-38 through 35-41).

Additional Assumptions

Date	Certificates of Deposit	Futures Position	Margin	
			Initial	Variation
03/04/X1	\$5,000,000 in 90-day CDs at 5.58 percent	Sell five June 20X1 Treasury-bill contracts at 93.74 ³	\$5,000 ⁴	
03/31/X1	\$5,000,000 in 90-day CDs at 5.80 percent	Price for June 20X1 Treasury-bill contracts is at 93.50		3,000 ⁵
06/02/X1	\$5,000,000 in 90-day CDs at 6.33 percent	Buy five June 20X1 Treasury-bill contracts at 92.97		6,625 ⁶

³ Treasury-bill futures contracts are quoted by the use of an index of 100, minus the annualized yield-to-maturity. A quotation of 93.74 means that the annualized yield-to-maturity is 6.26 percent. A price change of one basis point (.01 percent) equals \$25 ($1,000,000 \times .0001 \times 90 / 360$).

⁴ A margin deposit of \$1,000 per contract was deposited with the broker, as required by the futures exchange. Income earned on the initial margin deposit and variation margin (open trade equity) are ignored for purposes of this example.

⁵ $93.74 - 93.50 = 24 \text{ bp}$ ($24 \times \$25 \times 5 \text{ contracts} = \$3,000$).

⁶ $93.50 - 92.97 = 53 \text{ bp}$ ($53 \times \$25 \times 5 \text{ contracts} = \$6,625$).

(continued)

The net futures gains realized by the bank reduced its overall interest costs from those that would have resulted had the bank not hedged. The impact of the hedge results can be summarized as follows:

Calculating Cumulative Hedge Effectiveness⁷

	March 31, 20X1	June 20X1
Spot rate of interest (5.58 percent)	\$69,750 ⁸	\$69,750 ⁸
Additional interest cost that will result from rate increases	2,750 ⁹	9,375 ¹⁰
Total expected interest to be paid	72,500	79,125
Gain on futures contracts	(3,000) ⁵	(9,625) ¹¹
Net final interest cost	\$69,750 ¹²	\$69,750 ¹²
Target rate on March 4	5.58%	5.58%
Hedged rate	5.58%	5.58%

⁷ The hedge effectiveness ratio at March 31, 20X1, and June 2, 20X1, is 1.09 and 1.03 respectively, and is due to the difference in the basis of the hedged item (certificates of deposit) and the hedging instrument (the futures contract). This ratio is calculated by dividing the increase in the fair value of the Treasury-bill futures by the total increase in cash outflows that is due to a rise in interest rates on the certificates of deposit (\$3,000 / \$2,750 for the period ended March 31, 20X1, and \$9,625 / \$9,375 for the 90 days ended June 2, 20X1).

⁸ $\$5,000,000 \times 5.58\% \times 90 / 360 = \$69,750$.

⁹ $5.80\% \text{ less } 5.58\% = 22 \text{ basis points on } \$5 \text{ million for } 90 \text{ days}$.

¹⁰ $6.33\% \text{ less } 5.58\% = 75 \text{ basis points on } \$5 \text{ million for } 90 \text{ days}$.

¹¹ $93.74 - 92.97 = 77\text{bp} (77 \times \$25 \times 5 \text{ contracts} = \$9,625)$.

¹² The amount of the gain or loss that may be deferred in accumulated other comprehensive income is limited to the lesser of (1) the cumulative gain or loss on the derivative from inception of the hedge, less any excluded components of the hedge transaction (\$3,000) or (2) the cumulative change in expected future cash flows on the hedged transaction from the inception of the hedge (\$2,750).

Accounting Entries	Debit	Credit
March 4, 20X1		
1. Due to/from broker	\$ 5,000	
Cash		\$ 5,000
To record the initial margin deposit		
March 31, 20X1		
2. Interest Expense	20,925	
Accrued interest payable		20,925
To record the accrued interest payable on the CDs for the quarter ended March 31, 20X1: \$5 million x 5.58 percent for 27 days		
3. Futures contract	3,000	
Other comprehensive income ¹²		2,750
Unrealized gain on futures contract ¹²		250
To record the fair value of the June 20X1 futures contracts as of the quarter ended March 31, 20X1		

(continued)

Accounting Entries	Debit	Credit
June 2, 20X1¹³		
4. Interest expense	\$48,825	
Accrued interest payable		\$48,825
To record the remaining accrued interest		
5. Accrued interest payable	69,750	
Cash		69,750
To record the payment of accrued interest payable		
6. Cash	14,625	
Other comprehensive income		6,625
Due to/from broker		5,000
Futures contract		3,000
To record the settlement of the futures contract – \$5,000 margin deposit is returned		
August 31, 20X1¹⁴		
7. Interest expense	79,125	
Accrued interest		79,125
To record the accrued interest payable on the rollover CDs for the 90-day period then ended at 6.33 percent		
8. Accrued interest payable	79,125	
Cash		79,125
To record the payment of the accrued interest payable		
9. Accumulated other comprehensive income	9,375	
Interest expense		9,375
To reclassify the hedge gain in accumulated other comprehensive income that is related to current-period interest expense		

¹³ Each quarter, the bank should perform and document its retrospective and prospective hedge effectiveness. See footnote 7.

¹⁴ This entry represents the interest accrual and payment on the CD for the entire 90-day period, (i.e., June 4, 20X1 through August 31, 20X1). The entries above do not include those of the quarter ended June 30, 20X1, which would include recording of interest accrual for the period of June 4, 20X1, through June 30, 20X1, and a partial reclassification out of accumulated other comprehensive income, to earnings, of the gains on the futures contracts that were previously deferred in other comprehensive income.

Analysis

The effective portion of the hedge gain realized by the Company on the futures contracts is recorded in other comprehensive income and the ineffective portion is recorded in current earnings. After the Bank issues CDs in June, it will recognize the gains deferred in other comprehensive income as an offset of interest expense over the 90-day term of the CDs.

Example 6-5: Use of a Commodity Swap to Hedge Anticipated Sales of Crude Oil

A crude-oil producer in Texas produces and sells four million barrels of crude oil per month. All sales are assumed to occur on the last day of each month. It forecasts that this volume of activity will continue for the next 6 months. In order to protect itself against declining prices, on July 1, 20X1, the producer enters into a 6-month swap agreement to receive \$19 a barrel and pay a variable price per barrel based on the average monthly spot price for light sweet crude oil on the New York Mercantile Exchange (NYMEX) on a notional amount of three million barrels. The Company's risk management strategy is to hedge approximately 75 percent of its expected monthly crude oil sales which equals three million barrels per month. The swap requires a monthly net settlement based on average spot prices for the prior month. For example, the first swap settlement would be on July 31, 20X1, and be based on average spot prices for July 20X1.

Initial Hedge Documentation

The hedging relationship and entity's risk management objective and strategy for undertaking the hedge

This is a cash flow hedge of future crude oil sales by entering into a 6-month receive-fixed, pay variable cash-settled swap. The Company sells crude oil. The price of light sweet crude oil is subject to significant volatility. The Company's risk management objective is to protect its cash inflows associated with the risk of variability in the price of crude oil that it sells at spot. In order to meet its risk management objective, the Company has decided to enter into a pay-variable, receive-fixed crude oil cash-settled swap contract. The Company intends to hedge approximately the first 75 percent (or three million barrels of its anticipated sales of four million barrels) per month over the next 6 months.

The hedging instrument

The hedge designation date is July 1, 20X1. The hedging instrument is swap X dated July 1, 20X1, for 6 months. The variable leg of the swap is based on the average monthly price of NYMEX sweet crude oil on a notional amount of three million barrels and settles monthly. The fixed price to be received is \$19 per barrel per month.

The hedged item or transaction

Forecasted sales of the first three million barrels of crude oil per month over the next 6 months, beginning July 1, 20X1. In a separate document, the Company has appropriately concluded and documented that the forecasted transaction is probable of occurring.

The nature of the risk being hedged

The risk of variability in the spot price of crude oil. The Company is hedging variability in total cash flows of its crude oil sales.

The method that will be used to retrospectively and prospectively assess the hedging instrument's effectiveness¹

The Company has determined that the hedge is and will be highly effective. The Company is assessing the hedge's effectiveness prospectively and retrospectively using the discrete period (quarterly) dollar-offset method, in accordance with

(continued)

¹ Actual documentation should be more specific than what is described in this illustrative example. In general, reperformance of effectiveness assessments and ineffectiveness measurements should be possible based on the initial hedge documentation.

ASC 815-20-35-5(a). Therefore, the Company will compare the change in the fair market value of the swap with the change in the fair market value of the perfectly effective hypothetical derivative, similar to the guidance in ASC 815-30-35-25 through 35-30. In order for the swap to be highly effective, it must have a periodic effectiveness ratio of at least 0.80 and not more than 1.25. For the initial prospective hedge effectiveness assessment, the Company compared the effects of a 10 percent movement in the future market rates of oil on both the fair value of the actual derivative and on the fair value of the hypothetical derivative to determine if the hedge is expected to be highly effective in the future.² The perfectly effective hypothetical derivative was constructed as to have terms that identically match the critical terms of the hedged item (e.g., notional, location, pricing index). In order to create the perfectly effective hypothetical derivative, the company uses the market NYMEX swap rate as the starting point and adds the market future basis associated with the location at which its oil is expected to be sold.

The method that will be used to measure hedge ineffectiveness¹

Ineffectiveness will be measured and recorded using the cumulative dollar-offset method; that being the cumulative change in the fair market value of the swap compared to the cumulative change in the fair market value of the perfectly effective hypothetical derivative.

Note that this example assumes the cash flow hedge criteria in ASC 815-20-25 are met. The Company needs to assess and document these criteria as part of its hedge documentation.

Application of Hedge Accounting

The Company's projected sales of three million barrels of crude oil a month for the next 6 months are considered forecasted transactions. A derivative instrument that hedges the cash flows associated with forecasted sales is considered a cash flow hedge. The effective portion of the swap's gain or loss is reported in other comprehensive income, and the ineffective portion is reported currently in earnings. Amounts that are accumulated in other comprehensive income are reclassified to earnings when the related crude oil is sold (ASC 815-30-35-38 through 35-41).

Once the Company has performed the hedge effectiveness assessment and determined that the hedge relationship is highly effective, ASC 815 requires that the Company measures the ineffective part of a hedge each quarter and recognize in current earnings the gain or loss associated with the ineffective portion of the hedge. Thus, even if a hedge is determined to be highly effective, there may be an impact on current earnings to the extent the changes in the hedged item and the hedging instrument do not offset exactly. For a cash flow hedge, the hedge ineffectiveness that the Company recognizes in current earnings is limited to the excess of the cumulative change in the fair value of the hedging instrument over the cumulative change in the hypothetical derivative. For September 30, 20X1, no ineffectiveness was recognized in current earnings since the cumulative change in the fair value

(continued)

¹ Actual documentation should be more specific than what is described in this illustrative example. In general, reperformance of effectiveness assessments and ineffectiveness measurements should be possible based on the initial hedge documentation.

² The prospective effectiveness test should normally be based on multiple commodity price scenarios. The number of such scenarios tested should be a function of the nature and extent of the differences between the hedging instrument and the hedged item. The more closely the terms of the hedging instrument match the critical terms of the hedged item, the fewer the number of scenarios that may need to be tested. In situations where such terms are almost identical, a test of one scenario may be sufficient. To simplify this example, only one scenario has been presented.

of the hedging instrument was less than the cumulative change in the hypothetical derivative. For December 31, 20X1, \$390,000 was recognized in current earnings as ineffectiveness since the cumulative change in the fair value of the hedging instrument was greater by \$390,000 than the cumulative change in the hypothetical derivative.

Assume the following market data as obtained from broker quotes and actual purchase records.

Date	NYMEX Light Sweet Crude-Oil Spot Price (per Barrel)	Average Spot Price Received by the Texas Crude-Oil Producer (per Barrel)
July 1, 20X1	\$18.60	\$18.50
July average	18.50	18.60
August average	18.60	18.60
September average	18.50	18.40
October average	19.90	19.90
November average	19.20	19.20
December average	17.20	17.30

Assume the following market data as obtained from broker quotes and the Company's determination of the value of the perfectly effective hypothetical derivative.

Date	NYMEX Light Sweet Crude-Oil Swap Market Rate (per Barrel)	Hypothetical Derivative Swap Market Price (per Barrel)
July 1, 20X1	\$19.00	\$18.99
September 30, 20X1	18.40	18.35
December 31, 20X1	17.20	17.30

Hedging Instrument

Settlement Amounts			
Month	Number of Barrels	Price Differential	Gain (Loss)³
July	3,000,000	\$19.00 – \$18.50 =	\$ 1,500,000
August	3,000,000	\$19.00 – \$18.60 =	1,200,000
September	3,000,000	\$19.00 – \$18.50 =	1,500,000
			<u>\$ 4,200,000</u>
October	3,000,000	\$19.00 – \$19.90 =	\$(2,700,000)
November	3,000,000	\$19.00 – \$19.20 =	(600,000)
December	3,000,000	\$19.00 – \$17.20 =	5,400,000
			<u>\$ 2,100,000</u>

³ Settlement amounts determined by number of barrels x (swap rate – settlement rate).

(continued)

Swap Unrealized Gains or Losses

Month	Number of Barrels	Swap Contract Rate	Swap Market Rate ⁴	Unrealized Gain (Loss) Undiscounted ⁵	Unrealized Gain (Loss) Discounted
July	18,000,000	\$19.00	\$19.00	\$ 0	\$ 0
September	9,000,000	19.00	18.40	5,400,000	5,346,622**
December	0	19.00	17.20	0	0

⁴ Assumes that the swap market rate for each remaining month is the same.

⁵ Unrealized gain/loss determined by number of barrels x (swap rate at inception – current swap rate).

** Assumes a flat 6 percent annual discount rate $(\$1,800,000 / (1+.06 / 12)) + (\$1,800,000 / (1+.06 / 6)) + (\$1,800,000 / (1+.06 / 4)) = \$5,346,622$.

Swap Fair Market Value

Month	Unrealized Gain (Loss) Discounted	Realized Gain (Loss)	Swap Fair Market Value ⁶
July	\$ 0	\$ 0	\$ 0
September	5,346,622	4,200,000	9,546,622
December	0	2,100,000	2,100,000

⁶ Swap Fair Market Value determined based on Dirty Pricing (i.e., includes the most recent settlement period) such that the Company needs to perform only one retrospective assessment for the entire derivative. If the Company had determined fair value based on Clean Pricing, then a separate retrospective test would need to be performed for the period that just ended as well as the unrealized portion.

Hedged Item

Actual Crude-Oil Sales

Month	Quantity (Barrels)	Average Spot Price	Total Sales
July	3,000,000	\$18.60	\$ 55,800,000
August	3,000,000	18.60	55,800,000
September	3,000,000	18.40	55,200,000
		Quarter total	<u>\$166,800,000</u>
October	3,000,000	\$19.90	\$ 59,700,000
November	3,000,000	19.20	57,600,000
December	3,000,000	17.30	51,900,000
		Quarter total	<u>\$169,200,000</u>

(continued)

Settlement Amounts—Perfectly Effective Hypothetical Derivative

Month	Number of Barrels	Price Differential	Gain (Loss)
July	3,000,000	\$18.99 – \$18.60 =	\$ 1,170,000
August	3,000,000	\$18.99 – \$18.60 =	1,170,000
September	3,000,000	\$18.99 – \$18.40 =	1,770,000
			<u>\$ 4,110,000</u>
October	3,000,000	\$18.99 – \$19.90 =	\$(2,730,000)
November	3,000,000	\$18.99 – \$19.20 =	(630,000)
December	3,000,000	\$18.99 – \$17.30 =	5,070,000
			<u>\$ 1,710,000</u>

Perfectly Effective Hypothetical Derivative for Purchase Price by Texas Crude-Oil Producer—Unrealized Gains or Losses

Month	Number of Barrels	Contract Rate	Swap Market Rate ⁴	Gain (Loss) Undiscounted	Gain (Loss) Discounted
July	18,000,000	\$18.99	\$18.99	\$ 0	\$ 0
September	9,000,000	18.99	18.35	5,760,000	5,703,063**
December	0	18.99	17.30	0	0

⁴ Assumes that the swap market rate for each remaining month is the same.

** Assumes a flat 6 percent annual discount rate. $(\$1,920,000 / (1+.06 / 12)) + (\$1,920,000 / (1+.06 / 6)) + (\$1,920,000 / (1+.06 / 4)) = \$5,703,063$.

Perfectly Effective Hypothetical Derivative—Fair Market Value

Month	Unrealized Gain (Loss) Discounted	Realized Gain (Loss)	Swap Fair Market Value
July	\$ 0	\$ 0	\$ 0
September	5,703,063	4,110,000	9,813,063
December	0	1,710,000	1,710,000

Hedge-Effectiveness Analysis—Initial Prospective Assessment

The Company has elected to perform a sensitivity analysis for its very first prospective assessment by assuming a 10 percent change in market rates. For simplicity's sake, only a 10 percent increase in rates has been presented.²

(continued)

² The prospective effectiveness test should normally be based on multiple commodity price scenarios. The number of such scenarios tested should be a function of the nature and extent of the differences between the hedging instrument and the hedged item. The more closely the terms of the hedging instrument match the critical terms of the hedged item, the fewer the number of scenarios that may need to be tested. In situations where such terms are almost identical, a test of one scenario may be sufficient. To simplify this example, only one scenario has been presented.

Swap Unrealized Gains or Losses

Month	Number of Barrels	Contract Rate	10% Shift in Market Rates	Gain (Loss) Undiscounted	Gain (Loss) Discounted
Swap	18,000,000	\$19.00	\$20.90	\$(34,200,000)	\$(33,040,686)*
Hypothetical Derivative	18,000,000	18.99	20.889	(34,182,000)	(33,023,296)**
Effectiveness Ratio (33,614,161) / (33,596,470) = 1.00					

* Assumes a flat 6 percent annual discount rate. $(\$5,700,000 / (1+.06 / 12)) + (\$5,700,000 / (1+.06 / 6)) + (\$5,700,000 / (1+.06 / 4)) + (\$5,700,000 / (1+.06 / 3)) + (\$5,700,000 / (1+.06 / 2.4)) + (\$5,700,000 / (1+.06 / 2)) = \$33,614,161$.

** Assumes a flat 6 percent annual discount rate. $(\$5,697,000 / (1+.06 / 12)) + (\$5,697,000 / (1+.06 / 6)) + (\$5,697,000 / (1+.06 / 4)) + (\$5,697,000 / (1+.06 / 3)) + (\$5,697,000 / (1+.06 / 2.4)) + (\$5,697,000 / (1+.06 / 2)) = \$33,596,470$.

Hedge Effectiveness Analysis — Prospective and Retrospective

Month	Fair Value of Swap ⁷	Fair Value of Perfectly Effective Derivative ⁸	Effectiveness Ratio	
			For the Period Cumulative	
September	\$9,546,622	\$9,813,063	0.97	0.97
December	2,100,000	1,710,000	0.92	1.23

⁷ For a computation of the swap gain or loss, see the previous page.

⁸ See computation of gain (loss) in the table above.

Quarterly Analysis to Determine the Amount in Accumulated Other Comprehensive Income (AOCI)

Quarter Ending	Cumulative Gain (Loss) on the Swap	Cumulative Gain (Loss) on Hypothetical Derivative	Balance Needed in AOCI
	(1)	(2)	Lesser of (1) or (2)
September 30, 20X1	\$9,546,622	\$9,813,063	\$9,546,622
December 31, 20X1	2,100,000	1,710,000	1,710,000

Accounting Entries	Debit	Credit
July 1, 20X1⁹		
No entry is required		
September 30, 20X1		
1. Cash	\$166,800,000	
Sales		\$166,800,000
To record the sales for the quarter		

⁹ Quarterly entries are presented. Many companies, however, would record transactions at least monthly.

(continued)

Accounting Entries	Debit	Credit
2. Swap receivable	\$ 9,546,622	
Other comprehensive income ¹⁰		\$ 9,546,622
To record the change in the fair value of the swap, including the September 30, 20X1, settlement receivable		
3. Other comprehensive income	4,200,000	
Sales		4,200,000
To reclassify the gain on the swap that was deferred in OCI in the period that earnings are impacted		
4. Cash	4,200,000	
Swap receivable		4,200,000
To record the monthly settlements of the swap		
December 31, 20X1		
5. Cash	169,200,000	
Sales		169,200,000
To record the sales for the quarter		
6. Other comprehensive income	3,636,622	
Swap receivable		3,246,622
Gain on hedging activity ¹¹		390,000
To record change in the fair value of the swap — including the December 31, 20X1, settlement receivable		
7. Other comprehensive income	1,710,000	
Sales		1,710,000
To reclassify the gain on the swap that is deferred in OCI in the period that earnings are impacted		
8. Cash	2,100,000	
Swap receivable		2,100,000
To record the quarterly settlement of the swap		

¹⁰ The entire change in swap's fair value is recorded in OCI because it is less than the estimated loss in future cash flows – refer to the “Quarterly Analysis to Determine the Amount in Accumulated Other Comprehensive Income” table.

¹¹ \$390,000 is recorded in current earnings because it represents the excess of the swap's cumulative gains (\$2,100,000) over the cumulative gains of the perfectly effective hypothetical derivative (\$1,710,000) – refer to the “Quarterly Analysis to Determine the Amount in Accumulated Other s Income” table.

Example 6-6: Using a Bifurcated Embedded Derivative as a Hedging Instrument in a Cash Flow Hedge

On January 1, 20X1, Airline Company A (the Company) purchases a 1-year \$10,000,000 heating oil knock-in note that guarantees the repayment of the principal and has a one percent coupon plus a potential additional return if the heating oil average price during December 20X1 increases over \$0.66 per gallon. Assume that

(continued)

the contingent payment feature is not contractually separable from the note and pays the price differential times the par value of the debt. In this situation, the note should be viewed as combining an interest-bearing instrument with an embedded purchased option contract. Because the purchased-option contract is indexed to the price of heating oil (and not related to interest rates), it is not *clearly and closely related* to a fixed-rate note. Therefore, the embedded purchased-option contract should be separated from the host contract and accounted for separately. Assume the following:

	1/1/20X1
Fair value of a plain-vanilla fixed-rate note (6.316 percent yield to maturity)	\$ 9,500,000
Fair value of heating-oil purchased option (all time value)	500,000
Total fair value of heating-oil knock-in note	\$10,000,000

Airline Company A designates the purchased option (heating oil feature) as a hedge of the first 10,000,000 gallons of its anticipated jet fuel purchases on January 1, 20X2. The Company has a floating-rate fixed delivery contract, so the only changes in future cash flows on the forecasted transaction will be attributable to changes in the U.S. Gulf Coast jet fuel spot price. The Company has determined that there is high effectiveness between changes in the intrinsic value of the option and the variability of total cash flows for its jet fuel purchases.

Assume that, at the note's maturity, the embedded option has an intrinsic value of \$1,000,000 and therefore the issuer will pay total interest of \$1,100,000 (\$100,000 per coupon plus \$1,000,000 for increases in heating-oil prices).

Initial Hedge Documentation

The hedging relationship and entity's risk management objective and strategy for undertaking the hedge

This is a cash flow hedge of future jet fuel purchases by entering into a 1-year purchased-option indexed to the price of heating oil. The Company purchases jet fuel. The price of jet fuel is subject to significant volatility. The Company's risk management objective is to limit its potential total cash outflows for the purchases of jet fuel, associated with the risk of variability in the price of jet fuel above \$0.71 per gallon. In order to meet its risk management objective, the Company has decided to purchase a note with an embedded a 1-year purchased-option contract indexed to the price of heating oil. The Company intends to hedge the first 10 million gallons of its purchases of jet fuel on January 1, 20X2.

The hedging instrument

The hedge designation date is January 1, 20X1. The hedging instrument is the purchased-option feature embedded within the \$10 million heating oil knock-in note entered into on January 1, 20X1. The purchased-option contract is indexed to the price of heating oil on a notional amount of 10 million gallons.

The hedged item or transaction

Forecasted purchases of the first 10 million gallons of jet fuel on January 1, 20X2, at location X. In a separate analysis, the Company has determined that the delivery charges and other basis risk is fixed over the life of the derivative and will be ignored for purposes of the assessment. Further, in a separate document, the Company has appropriately concluded and documented that the forecasted transaction is probable of occurring and this assessment will be subsequently updated each period.

(continued)

The nature of the risk being hedged

The risk of variability in the spot price of jet fuel above \$0.71 per gallon. The Company is hedging variability in total cash flows of its jet fuel purchases.

The method that will be used to retrospectively and prospectively assess the hedging instrument's effectiveness¹

The Company has determined that the hedge will be highly effective. The Company is assessing the hedge's effectiveness using the intrinsic value only in accordance with ASC 815-20-25-82 and ASC 815-30-35-3 (a). Retrospective and prospective assessments are being performed using cumulative dollar-offset of the changes in the intrinsic value of the options to the cumulative change in the expected cash flows of the anticipated jet fuel purchases. The hedge will be considered to be highly effective if the ratio is between 0.80 and 1.25. The Company will compare the change in the fair market value of the option with the change in the fair market value of the perfectly effective hypothetical derivative, similar to the guidance in ASC 815-30-35-25 through 35-30.

The method that will be used to measure hedge ineffectiveness¹

Ineffectiveness will be measured and recorded as any additional change in the intrinsic value over that amount necessary to offset the cumulative change in the expected cash flows of the anticipated jet fuel purchases on January 1, 20X2 (less the option's gains or losses previously reclassified from accumulated other comprehensive income).

Note that this example assumes the cash flow hedge criteria in ASC 815-20-25 are met. The Company needs to assess and document these criteria as part of its hedge documentation.

Application of Hedge Accounting

The option is bifurcated and separately recognized on the balance sheet, because it is not *clearly and closely related* to the economic characteristics and risks of the host contract (ASC 815-15-25-1). The example assumes that the bifurcated purchased option qualifies as a cash-flow hedge of the anticipated jet fuel purchases made by the airline company. The entity has elected to assess hedge effectiveness based on changes in the option's intrinsic value, as permitted by ASC 815-20-25-82. Accordingly, the option's time value is charged to earnings (ASC 815-30-35-3). The discount on debt resulting from the bifurcation of the option is recognized as a yield adjustment (i.e., as a part of interest income). Changes in the intrinsic value of the option are initially recorded in other comprehensive income and later reclassified to earnings when the cost of jet fuel purchases is recognized in earnings (ASC 815-30-35-38 through 35-41).

Once the Company has performed the hedge effectiveness assessment and determined that the hedge relationship is highly effective, ASC 815-30-35-3 requires that the Company measure the ineffective part of a hedge each quarter and recognize in current earnings the gain or loss associated with the ineffective portion of the hedge. Thus, even if a hedge is determined to be highly effective, there may be an impact on current earnings to the extent the changes in the hedged item and the hedging instrument do not offset exactly. For a cash flow hedge, the hedge ineffectiveness that the Company recognizes in current earnings is limited to the

(continued)

¹ Actual documentation should be more specific than what is detailed in this illustrative example. In general, reperformance of effectiveness assessments and ineffectiveness measurements should be possible based on the initial hedge documentation.

excess of the cumulative change in the fair value of the hedging instrument over the cumulative change in the fair value of the hedged item. For December 31, 20X1, no ineffectiveness was recognized in current earnings since the cumulative change in the fair value of the hedging instrument was less than the cumulative change in the fair value of the hedged item.

Assume the following:

Date	NYMEX Heating Oil Spot Price (per Gallon)	NYMEX Heating Oil Purchased Option Intrinsic Value	NYMEX Heating Oil Purchased Option Time Value	Fair Value of Heating Oil Purchased Option
January 1, 20X1	\$0.66	\$ —*	\$500,000	\$ 500,000
December 31, 20X1	0.76	1,000,000**	—	\$1,000,000

* (Heating Oil Spot Price – Strike price) x Notional Amount = Intrinsic Value (\$0.66 – \$0.66) x 10,000,000 = \$ —.

** (\$0.76 – \$0.66) x 10,000,000 = \$1,000,000.

Date	U.S. Gulf Coast Jet Fuel Spot Price (per Gallon)
January 1, 20X1	\$0.71
December 31, 20X1	0.82

The following effectiveness assessments are examples of prospective and retrospective analyses performed over the life of the hedging relationship. Both prospective and retrospective analyses should be performed every reporting period during the hedging relationship. The prospective effectiveness test should normally be based on multiple scenarios. The number of such scenarios tested should be a function of the nature and extent of the differences between the hedging instrument and the hedged item. The more closely the terms of the hedging instrument match the critical terms of the hedged item, the fewer the number of scenarios that may need to be tested. In situations where such terms are almost identical, a test of one scenario may be sufficient. To simplify this example, only one scenario has been presented.

Hedge Effectiveness Analysis—Initial Prospective Assessment

	Number of Gallons	Strike Price	Spot Prices	10% Shift in Market Prices	Gain (Loss)
Option	10,000,000	\$0.66	\$0.66	\$0.726	\$ 660,000*
Hedged Item	(10,000,000)	0.71	0.71	0.781	(710,000)**
Effectiveness Ratio \$660,000 / (\$710,000) = -0.9295					

* (\$0.726 – \$0.66) x 10,000,000 gallons = \$660,000.

** (\$0.781 – \$0.71) x 10,000,000 gallons = (\$710,000).

(continued)

Hedge-Effectiveness Analysis—4th Quarter Retrospective Cumulative Assessment

Month	Intrinsic Value of Purchased Option ²	Intrinsic Value of Hedged Item ³	Effectiveness Ratio Cumulative
December	\$1,000,000	\$1,100,000	1.1

² For a computation of the option's gain or loss, see the table above.

³ $(\$0.82 - \$0.71) \times 10,000,000 = \$1,100,000$.

The following journal entries will be made:

Accounting Entries	Debit	Credit
January 1, 20X1		
1. Investment in debt security	\$ 9,500,000	
Purchased option ⁴	500,000	
Cash		\$10,000,000
To record the purchase of the heating-oil knock-in note and the embedded option		
December 31, 20X1⁵		
2. Investment in debt security	500,000	
Interest income		500,000
To record the amortization of the discount on the debt security		
3. Interest receivable	100,000	
Interest income		100,000
To accrue the coupon interest on the debt security		
4. Purchased option	1,000,000	
Other comprehensive income		1,000,000
To record the change in the intrinsic value of the purchased option		
5. Loss on hedging activity	500,000	
Purchased option		500,000
To record the excluded portion of the hedge [i.e., the change in the time value of the purchased option] in the income statement		
January 1, 20X2		
6. Cash	11,100,000	
Investment in debt security		10,000,000
Purchased option		1,000,000
Interest receivable		100,000
To record the amount received at maturity of the debt security		

⁴ The fair value of the option is determined by obtaining a dealer quote on the date of purchase.

⁵ This analysis does not include quarterly hedge effectiveness and ineffectiveness assessments and journal entries. Entities would be required to perform those assessments on at least a quarterly basis over the term of the hedge.

(continued)

Accounting Entries	Debit	Credit
7. Jet fuel	\$8,200,000	
Cash		\$8,200,000
To record the purchase 10 million gallons of jet fuel at \$0.82		
April 30, 20X2		
8. Accumulated other comprehensive income	1,000,000	
Fuel expense	7,200,000	
Jet fuel		8,200,000
To record the usage of jet fuel and the related reclassification of accumulated other comprehensive income to earnings. This entry assumes that all jet fuel purchased and subject to the hedge was consumed and affected earnings in April 20X2		

Analysis

The effective portion of the hedge gain realized by the airline on the option is recorded in other comprehensive income and the time value of the option is recorded in current earnings. The airline was hedging potential cash outflows for the purchase of jet fuel, associated with the risk of variability in the price of jet fuel purchase above \$0.71 per gallon. Actual purchases were made at \$0.82 per gallon. The derivative's intrinsic value was \$1 million as compared with the \$1.1 million change in the forecasted purchase price above the hedged threshold. Therefore, the net fuel expense associated with the hedged jet fuel purchases was recognized at \$.72 per gallon instead of the target threshold of \$.71 per gallon due to the hedging instrument being under-effective by \$100,000.

Example 6-7: Use of Commodity Swap and Basis Swap Contracts to Hedge Forecasted Purchases of Natural Gas by a Manufacturer

Company A, a steel manufacturer (the Company), would like to hedge its natural gas cost in months of increased operations, such as October and November. Historical records show that the Company uses at least 50,000 mmbtus during these months to support its operations. Company A purchases natural gas at the first of the month SoCal Border index price. As the Company expects natural gas prices to increase over the next ten months, on January 1, 20X1, the Company enters into a commodity swap contract indexed to the fixed purchase price of 50,000 mmbtus at \$.75/mmbtu in October and \$.80/mmbtu in November and the variable sales price of 50,000 mmbtus at the spot price in October and November at Henry Hub. There will be no physical deliveries under this swap 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, the Company also entered into a basis swap between Henry Hub and SoCal Border, to fix the forward price at SoCal Border during October and November. The basis spreads at the time of execution were \$(0.50) and \$(0.60), respectively. The Company has designated the commodity swap and the basis swap in combination as a cash flow hedge of the variability of total cash flows associated with the purchase of natural gas at SoCal Border during October and November.

(continued)

Initial Hedge Documentation

The hedging relationship and entity's risk management objective and strategy for undertaking the hedge

This is a cash flow hedge of the forecasted purchase of natural gas for the months of October 20X1 and November 20X1 using a pay fixed receive floating natural gas commodity swap at Henry Hub, and a basis swap converting Henry Hub to SoCal Border. The hedge designation date is January 1, 20X1. The Company's risk management objective is to limit its cash outflows associated with the risk of fluctuations in the market price of natural gas at SoCal Border. It is expected that the combination of these derivative instruments will be highly effective as a hedge of the variability of the cash flows associated with its forecasted purchase of natural gas during October and November.

The hedging instrument

Basis swap X and commodity swap Y, each for a notional amount of 50,000 mmbtus, with Broker B dated January 1, 20X1, maturing with the scheduled purchases of natural gas during October and November 20X1 (the first 50,000 mmbtus in October 20X1 and November 20X1, respectively). Under the natural gas swap, the Company will pay \$7.50/mmbtu and \$8.00/mmbtu (Henry Hub's forward rate at inception for October and November, respectively), and receive the first of month floating Henry Hub price. The basis swap will economically convert the January 1, 20X1, Henry Hub forward price to the January 1, 20X1, SoCal Border forward price for October and November. Payment dates for both swaps are during October and November, 20X1 (see attached schedule of payment dates).

The hedged item or transaction

Forecasted purchase of natural gas at SoCal Border (the first 50,000 mmbtus on October 10, 20X1, and November 10, 20X1, respectively). The purchase price hedged will be the entire purchase price of the gas, which includes fixed transportation costs. The Company has a fixed transportation contract, so the only changes in future cash flows on the forecasted transaction will be attributable to the change in first of month spot prices at SoCal Border. In a separate document, the Company has appropriately concluded and documented that the forecasted transaction is probable of occurring.

The nature of the risk being hedged

The risk of variability in the total purchase price of natural gas at SoCal Border.

The method that will be used to retrospectively and prospectively assess the hedging instrument's effectiveness and to measure ineffectiveness¹

The Company has performed an assessment and has determined that all of the critical terms of the hedging instrument and the hedged forecasted transaction match and as such has qualitatively concluded that changes in the cash flows attributable to the variability in the total purchase price of natural gas at SoCal Border are expected to be completely offset by the combination of the aforementioned commodity and basis swaps. In making that determination, the guidance within ASC 815-20-25-84 was used (see analysis below).

Future assessments will be performed utilizing the guidance in ASC 815-20-35-9 through 35-13. This will involve verifying and documenting whether the critical terms of the hedging instrument and the forecasted transaction continue to match, and

(continued)

¹ Actual documentation should be more specific than what is detailed in this illustrative example. In general, reperformance of effectiveness assessments and ineffectiveness measurements should be possible based on the initial hedge documentation.

the forecasted transaction remains probable, as well as assessing whether there have been any adverse developments regarding the risk of Broker B defaulting on its commitment. If there are no such changes in critical terms or adverse developments, the Company will continue to conclude that there is no ineffectiveness to be recorded. In the event that the Company's ongoing assessment demonstrates that critical terms of the hedging instrument or the hedged forecasted transaction have changed, or that there have been adverse developments regarding the risk of Broker B defaulting, the Company will use the Hypothetical-Derivative Method, outlined in ASC 815-30-35-25 through 35-30, in accordance with company policy, to measure ineffectiveness. Therefore, to the extent the combination basis swap and commodity swap is effective, changes in its fair value will be recorded through other comprehensive income. To the extent the combination basis swap and commodity swap is not effective, changes in its fair value will be recorded in earnings. The Company, in that instance, will also then be required to perform a quantitative assessment of hedge effectiveness, and will perform a regression analysis using historical fair values of the hypothetical derivative and the hedging derivative in accordance with its standard policies.

Assessment of ASC 815-20-25-84 criteria:

If the critical terms of the hedging instrument (the combination commodity and basis swap) and of the hedged forecasted transaction (the forecasted purchases of gas on October 10, 20X1, and November 10, 20X1) are the same, the Company may conclude that changes in cash flows attributable to the risk being hedged (the variability in the total purchase price of natural gas at SoCal Border) are expected to completely offset at inception and on an ongoing basis. The Company assessed the critical terms as follows under ASC 815-20-25-84:

The swap contracts are for purchase of the same quantity of the same commodity at the same time and location as the hedged forecasted purchase. *The combination commodity swap and basis swap is for the same notional (50,000 mmbtus), same commodity (natural gas), same time (October 10, 20X1, and November 10, 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 swap contracts at inception are zero. The fair value of the commodity and basis swaps are zero at inception. No amounts were paid or received and were entered into at market rates.

Either the change in the discount or premium on the forward contract is excluded from the assessment of effectiveness and included directly in earnings pursuant to ASC 815-20-25-81 through 25-83 or the change in expected cash flows on the forecasted transaction is based on the forward price for the commodity. *The change in the expected cash flows of the forecasted transaction is based on the forward prices for the natural gas at SoCal Border.*

Note that this example assumes the cash flow hedge criteria in ASC 815-20-25 are met. The Company needs to assess and document these criteria as part of its hedge documentation.

Application of Hedge Accounting

The Company's projected purchase of 50,000 mmbtus during October and November is considered a forecasted transaction. A derivative instrument that hedges the cash flows associated with a forecasted purchase is considered a cash flow hedge (ASC

(continued)

815-20-25). The effective portion of the forward contract's gain or loss is reported in other comprehensive income, and the ineffective portion is reported currently in earnings. Amounts that are accumulated in other comprehensive income are reclassified to earnings when the actual 50,000 mmbtus of natural gas purchased is expensed through cost of goods sold (ASC 815-30-35-38 through 35-41).

Hedge Effectiveness Assessment—First Quarter Ended March 31, 20X1

In accordance with our initial hedge documentation and ASC 815-20-25-84 the Company has analyzed the critical terms of the combined commodity and basis swaps, and the critical terms of the forecasted purchases of natural gas. The Company has noted that all critical terms remain unchanged and are matched and the transaction remains probable. Furthermore, the Company has reviewed current financial information available for Broker B, including credit ratings and has not noted any adverse developments regarding the risk of default. As such, the Company concludes that there is no ineffectiveness to record, and that changes in cash flows attributable to the variability in the total purchase price of natural gas at SoCal Border are expected to completely offset throughout the term of the hedge.²

The SoCal Border spot prices of natural gas for months October and November are \$7.40/mmbtu and \$7.60/mmbtu, respectively. The forward market prices for natural gas are as follows:¹

Date	Henry Hub Forward Prices— October	Henry Hub Forward Prices— November	SoCal Forward Prices— October	SoCal Forward Prices— November
January 1, 20X1	\$7.50	\$8.00	\$7.00	\$7.40
March 31, 20X1	7.75	8.50	7.10	7.30
June 30, 20X1	7.90	8.90	7.35	7.40
September 30, 20X1	8.10	9.00	7.50	7.80
October 31, 20X1		9.10		7.85

The fair market values of the commodity swap and basis swap, which have been obtained from a Broker, are as follows:

Date	NYMEX Swap October	Basis Swap October	NYMEX Swap November	Basis Swap November
March 31, 20X1	\$12,500	\$(7,500)	\$25,000	\$(30,000)
June 30, 20X1	20,000	(2,500)	45,000	(45,000)
September 30, 20X1	30,000	(5,000)*	50,000	(30,000)
October 31, 20X1	N/A	N/A	55,000	(32,500)

* Settlement price for NYMEX and FOM (First-of-month) indexes. For ease of calculation, amounts are not discounted for the ten day settlement period.

(continued)

² For purposes of illustration, only the first quarter assessment has been provided in this example. Companies are required to appropriately document their assessment on at least a quarterly basis. It is assumed that the remaining quarterly assessments over the term of the hedge in this example yielded the same results as this first quarter assessment.

Accounting Entries	Debit	Credit
January 1, 20X1³		
March 31, 20X1		
1. Commodity swap	\$37,500	
Basis swap		\$37,500
To record the change in the fair value of the commodity swap and basis swap for October and November ⁴		
June 30, 20X1		
2. Commodity swap	27,500	
Basis swap		10,000
Other comprehensive income		17,500
To record the change in the fair value of the commodity swap and the basis swap for October and November		
September 30, 20X1		
3. Commodity swap	15,000	
Basis swap	12,500	
Other comprehensive income		27,500
To record the change in the fair value of the commodity swap and the basis swap for October and November		
October 31, 20X1		
4. Cash	25,000	
Basis swap	5,000	
Commodity swap		30,000
To record the settlement of the commodity swap and the basis swap for the October purchase of inventory		
5. Natural gas expense ⁵	370,000	
Accounts payable		370,000
To record the October purchase and usage of natural gas		
6. Accumulated other comprehensive income ⁶	25,000	
Natural gas expense		25,000
To reclassify the gain on the swaps that is deferred in AOCI in the period that earnings are impacted		
7. Commodity swap	5,000	
Other comprehensive income		2,500
Basis swap		2,500
To record the change in the fair value of the commodity swap and the basis swap for November		

³ No entry is made to record the fair values of the commodity swap or the basis swap contracts, because at the time of purchase, their fair values are zero. Margin deposits are ignored in this example.

⁴ Because there was no net difference between the change in fair value of the commodity swaps and the basis swaps, there is no resulting amount to record in other comprehensive income.

⁵ 50,000 mmbtu's multiplied by the SoCal Border spot price of 7.40/mmbtu on October 10, 20X1.

⁶ Consists of credit balance of \$30,000 and debit balance of \$5,000 for the October commodity and basis swaps, respectively.

(continued)

Accounting Entries	Debit	Credit
8. Cash	\$ 22,500	
Basis swap	32,500	
Commodity swap		\$ 55,000
To record the settlement of the commodity swap and the basis swap		
9. Natural gas expense ⁷	380,000	
Accounts payable		380,000
To record the November purchase and usage of natural gas		
10. Accumulated other comprehensive income	22,500	
Natural gas expense		22,500
To reclassify the gain on the swaps that is deferred in AOCI in the period that earnings are impacted		

⁷ 50,000 mmbtu's multiplied by the SoCal Border spot price of 7.60/mmbtu on November 10, 20X1.

Example 6-8: Analysis of the Limitation on Derivative Instrument Gains and Losses That Can Be Deferred in Other Comprehensive Income

The following analyses illustrate ASC 815's provisions regarding the amount of gains and losses on a hedging instrument that are deferred and accumulated in AOCI. The first analysis addresses the gain/loss limitation for eight scenarios as of the end of the first reporting period. The second analysis treats each scenario as occurring in subsequent quarters and addresses the gain/loss limitation that must be applied on a *cumulative* basis.

Each analysis assumes that (1) the entity's defined risk-management strategy does not exclude from the assessment of hedge effectiveness any component of the gain or loss on the derivative instrument or related cash flows, (2) the fair value of the derivative instrument at the inception of the hedging relationship is zero, (3) the change in the expected future cash flows is solely attributable to the hedged risk, and (4) the hedging relationship is highly effective in offsetting cash flows.

(continued)

	(Gain) Loss on the Forecasted Transaction*	(Gain) Loss on the Derivative Instrument	(Gain) Loss on the Derivative Instrument Deferred in AOCI	(Gain) Loss on the Derivative Instrument Recorded in Earnings
Scenario 1	\$ 10	\$(15)	\$(10)	\$(5)
Scenario 2	10	(5)	(5)	0
Scenario 3	0	(5)	0	(5)
Scenario 4	0	5	0	5
Scenario 5	(10)	15	10	5
Scenario 6	(10)	5	5	0
Scenario 7	(5)	0	0	0
Scenario 8	5	0	0	0

* The amounts in this column are not recorded in financial statements but, rather, are used to comply with the limitation specified in ASC 815-30-35-3 and 35-4. These amounts represent the difference between the present values of (1) the expected purchase or sales price (for the item that is being purchased or sold) as of the end of the first reporting period and (2) the purchase or sales price that management expected to pay or receive on the date that the hedge was initiated.

In order to assess the effectiveness of a cash flow hedge, an entity must be able to estimate the changes in the cash flows of the hedged transaction. Accordingly, the expected future market price of the specifically identified forecasted transaction, both at the inception of the hedge and subsequent to it, is information that is necessary to an entity's determination of the change in expected cash flows.

As demonstrated by the preceding analysis, the amount deferred in AOCI is the *lesser of* (in absolute amounts) (1) the present value of estimated changes in the expected future cash flows of the hedged item that are attributable to the hedged risk or (2) the cumulative gain or loss on the derivative instrument, provided that the derivative's gain or loss offsets the hedged transaction. Accordingly, ASC 815-30-35-3 indicates that hedge ineffectiveness in a cash flow hedge occurs only when the cumulative gain or loss on the derivative exceeds the cumulative change in the expected future cash flows from the hedged transaction. This is sometimes referred to as an "overhedged" position or overperforming hedge. Underperforming hedges (i.e., hedges in which the cumulative gain or loss on the derivative is less than the cumulative change in the expected cash flows) do not result in ineffectiveness that must be recognized in earnings. Since only the first reporting period is presented in the preceding analysis, the cumulative gain or loss on the derivative instrument is always equal to the period gain or loss on the derivative instrument.

To demonstrate the complexity of ASC 815-30-35-3, assume that in the following analysis each scenario (from the preceding analysis) represents a single quarter over the course of a 2-year hedge instead of eight separate scenarios.

(continued)

The following table indicates the amount that should represent the ending balance that is deferred in AOCI at the end of each quarter:

Quarter	Current-Quarter (Gain) Loss on the Forecasted Transaction	Cumulative (Gain) Loss on the Forecasted Transaction ¹	Current-Quarter (Gain) Loss on the Derivative	Cumulative (Gain) Loss on the Derivative ¹	Cumulative (Gain) Loss on the Derivative Deferred in AOCI*	(Gain) Loss on the Derivative Deferred in OCI for the Quarter	Net P&L Impact
1	\$ 10	\$10	\$(15)	\$(15)	\$(10)	\$(10)	\$(5)
2	10	20	(5)	(20)	(20)	(10)	5
3	0	20	(5)	(25)	(20)	0	(5)
4	0	20	5	(20)	(20)	0	5
5	(10)	10	15	(5)	(5)	15	0
6	(10)	0	5	0	0	5	0
7	(5)	(5)	0	0	0	0	0
8	5	0	0	0	0	0	0

¹ Note that the purpose of this example is to illustrate the limitations on gains and losses that can be deferred and accumulated in AOCI. Certain periods in this table show a hedge, on a cumulative dollar offset basis, that is not effective. Those instances of ineffectiveness should be ignored for purposes of this example.

* This represents the lesser of the cumulative gain or loss on (1) the cash flows from the hedged transaction or (2) the derivative that should be deferred in AOCI.

This analysis illustrates the following:

- The amount that is deferred in AOCI is always the *lesser of* (in absolute amounts) (1) the cumulative gain or loss on the derivative from the inception of the hedge, less (a) the component of the derivative that is excluded from the assessment of hedge effectiveness, if there is any, and (b) the derivative's gains or losses that were previously reclassified from accumulated other comprehensive income to earnings, or (2) the portion of the cumulative gain or loss on the derivative that is necessary to offset the cumulative change in expected future cash flows on the hedged transaction from the inception of the hedge, less the derivative's gains or losses that were previously reclassified from accumulated other comprehensive income to earnings.
- The above formula can result in the need for derivative gains or losses that were recognized in prior periods and classified as earnings to be removed from earnings and deferred in other comprehensive income (e.g., as shown in quarter 2 above).

(continued)

The following analysis represents a roll-forward of activity (as recorded in the journal entries) to account for (1) changes in the fair value of the derivative on the balance sheet and (2) the amounts recorded in the income statement and AOCI for each quarterly reporting period.

	Balance Sheet		
	AOCI	Derivative DR (CR)	Income Statement DR (CR)
Beginning balance	\$ 0	\$ 0	\$ 0
Adjustment for current-quarter activity	(10)	15	(5)
Ending balance for quarter 1	(10)	15	(5)
Adjustment for current-quarter activity	(10)	5	5
Ending balance for quarter 2	(20)	20	0
Adjustment for current-quarter activity	0	5	(5)
Ending balance for quarter 3	(20)	25	(5)
Adjustment for current-quarter activity	0	(5)	5
Ending balance for quarter 4	(20)	20	0
Adjustment for current-quarter activity	15	(15)	0
Ending balance for quarter 5	(5)	5	0
Adjustment for current-quarter activity	5	(5)	0
Ending balance for quarter 6	0	0	0
Adjustment for current-quarter activity	0	0	0
Ending balance for quarter 7	0	0	0
Adjustment for current-quarter activity	0	0	0
Ending balance for quarter 8	\$ 0	\$ 0	\$ 0

Chapter 7:

Foreign Currency Hedges

Executive Takeaway

- A foreign currency hedge may be (i) a fair value hedge of an unrecognized firm commitment or a recognized asset or liability, (ii) a cash flow hedge of a forecasted transaction, an unrecognized firm commitment, the forecasted functional-currency-equivalent cash flows associated with a recognized asset or liability or a forecasted intercompany transaction, or (iii) a hedge of a net investment in a foreign operation.
- The application of hedge accounting for foreign-currency hedges includes careful consideration of the eligibility of the designated hedging instrument and the designated hedged item.
- Measuring hedge ineffectiveness and assessing hedge effectiveness associated with a designated foreign currency hedging relationship is required to establish and continue hedge accounting throughout a hedging relationship.
- Documentation requirements surrounding a designated hedging relationship should be established at the inception of the hedging relationship, and be detailed and comprehensive in nature.
- Foreign currency hedges have some unique aspects, different from other types of fair value and cash flow hedges, as ASC 815 retains certain hedge accounting provisions of ASC 830, *Foreign Currency Matters*.

7.1 Introduction

Entities with foreign currency risk that results in earnings exposure may be interested in hedging that risk under ASC 815. ASC 815 retains certain hedge accounting provisions of ASC 830. The Board decided that ASC 815 should not make comprehensive changes to previous methods of accounting for foreign-currency translation. ASC 815 permits hedge accounting for foreign currency exposures that involve (1) unrecognized firm commitments, (2) recognized assets or liabilities (including available-for-sale securities), (3) foreign currency forecasted transactions, (4) intercompany foreign currency forecasted transactions, and (5) net investments in foreign operations.

7.1.1 Unique Exceptions

The Board decided to waive aspects of its ASC 815 hedge accounting model for certain foreign currency hedging relationships in order to retain key provisions of ASC 830. The exceptions that the Board has made with respect to hedge accounting and foreign currency matters (discussed later in this chapter) permit entities to:

- Apply hedge accounting to a net investment in a foreign operation (not otherwise permitted, since assets and liabilities with dissimilar risks are being treated as a single hedged item);
- Designate nonderivative financial instruments that are denominated in a foreign currency as hedging instruments for hedges of (1) unrecognized firm commitments or (2) net investments in foreign operations (not otherwise permitted, since nonderivative instruments do not qualify as hedging instruments for any other fair value or cash flow hedge);
- Apply hedge accounting to intercompany foreign currency forecasted transactions (not otherwise permitted, since intercompany transactions do not affect consolidated earnings); and
- Use intercompany foreign-exchange derivatives as hedging instruments in consolidated financial statements under certain circumstances (not permitted for other types of intercompany derivatives, such as interest rate derivatives).

7.2 Common Foreign Currency Hedge Transactions

The following table presents a number of common foreign currency hedge transactions and summarizes the applicability of hedge accounting under ASC 815.

Type of Hedge	Hedge Accounting Permitted?	Explanation
Fair Value		
Hedge of a foreign-currency-denominated unrecognized firm commitment with an unrelated party.	Yes	
Hedge of a foreign-currency-denominated asset or liability.	Yes	
Hedge of a non-financial asset (e.g., inventory or a fixed asset).	No	ASC 815-20-25-12(e), the designated risk in a nonfinancial asset (other than a recognized loan-servicing right or a nonfinancial firm commitment with financial components) must be risk associated with the entire hedged item.

(continued)

Type of Hedge	Hedge Accounting Permitted?	Explanation
Hedge of a firm commitment to purchase a nonfinancial asset.	Yes	ASC 815-20-25-12(f) permits these to qualify because they have financial components.
Hedge of a firm commitment to purchase a foreign equity-method investment.	No	ASC 815-20-25-43(c)(5) specifically precludes entities from applying hedge accounting to firm commitments to purchase or acquire these assets.
Hedge of a firm commitment to acquire a foreign entity pursuant to a business combination.	No	ASC 815-20-25-43(c)(5) specifically precludes entities from applying hedge accounting to firm commitments to purchase or acquire these assets.
Cash Flow		
Hedge of a forecasted purchase or sale of a foreign currency-denominated financial asset with a third party.	Yes	
Hedge of a forecasted intercompany purchase or sale of a foreign currency-denominated financial asset.	Yes	
Hedge of a forecasted purchase or sale of a nonfinancial asset (e.g., inventory or a fixed asset) with an unrelated third party.	Yes	
Hedge of a forecasted intercompany purchase or sale of a nonfinancial asset.	Yes	
Hedge of a forecasted receipt or payment of service-related revenues denominated in a foreign currency (e.g., royalties or franchise fees).	Yes	
Hedge of a forecasted transaction related to a recognized asset or liability for which remeasurements are recognized in income (e.g., receipt or payment of interest on a foreign-currency-denominated debt instrument).	Yes	Permitted 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.
Hedge of a forecasted intercompany dividend.	No	Not permitted as earnings are not affected.
Hedge of a forecasted transaction to purchase an equity-method investment.	No	ASC 815-20-25-43(b)(1) specifically precludes entities from applying hedge accounting to forecasted transactions to purchase or sell these assets.
Hedge of a forecasted transaction to acquire a foreign entity pursuant to a planned business combination.	No	ASC 815-20-25-15(g) specifically precludes entities from applying hedge accounting to forecasted transactions involving a business combination.

(continued)

Type of Hedge	Hedge Accounting Permitted?	Explanation
Net Investments in Foreign Entities		
Hedge of the foreign currency exposure of a net investment in a consolidated foreign operation.	Yes	
Hedge of the foreign currency exposure of an investment accounted for by the equity method.	Yes	

Refer also to DH 7.15, Question Nos. 7-1, 7-2 and 7-11.

7.3 Unrecognized Firm Commitment

As defined in the Glossary of ASC 815-10-20, a firm commitment is a legally binding agreement with an unrelated party that (a) specifies all significant terms, including the quantity to be exchanged, the fixed price, and the timing of the transaction and (b) includes a disincentive for nonperformance that is sufficiently large to make performance probable. The fixed price may be expressed as a specified amount of an entity's functional currency or of a foreign currency. It may also be expressed as a specified interest rate or specified effective yield. The binding provisions of an agreement are regarded to include those legal rights and obligations codified in the laws to which such an agreement is subject. A price that varies with the market price of the item that is the subject of the firm commitment cannot qualify as a fixed price. For example, a price that is specified in terms of ounces of gold would not be a fixed price if the market price of the item to be purchased or sold under the firm commitment varied with the price of gold. In the legal jurisdiction that governs the agreement, the existence of statutory rights to pursue remedies for default equivalent to the damages suffered by the nondefaulting party, in and of itself, represents a sufficiently large disincentive for nonperformance to make performance probable for purposes of applying the definition of a firm commitment.

A derivative financial instrument or a foreign currency-denominated nonderivative financial instrument (i.e., a nonderivative instrument that gives rise to a foreign-currency transaction gain or loss under ASC 830, such as debt that is denominated in a foreign currency) can be designated as hedging the changes in the fair value of an unrecognized firm commitment (or an identified portion thereof) that are attributable to foreign currency exchange rates.

For a foreign currency-denominated nonderivative hedging instrument, the foreign-currency transaction gain or loss on the nonderivative hedging instrument should be determined pursuant to the guidance in ASC 830 (i.e., by applying the change in the spot exchange rates) and recognized currently in earnings.

PwC Observation: Example 14 in ASC 815-20-55-136 through 140 clarifies that entities can hedge these exposures by using either the fair-value hedging model or the cash flow hedging model. The cash flow hedging model is acceptable in this case because even though the amount that is to be received or paid under the firm commitment is fixed in terms of a foreign currency, the entity is still subject to a variability in cash flow when the amount is measured in terms of the entity's functional currency. If the hedging instrument eliminates this variability, the relationship qualifies as a foreign currency cash flow hedge. However, if an entity elects to use the cash flow hedging model for these exposures, a nonderivative instrument would not qualify as the hedging instrument (see the criteria for foreign currency cash flow hedges later in this chapter).

DH 7.16 Example 7-1 illustrates the use of a forward contract to hedge an unrecognized firm commitment. In this example, a U.S. company enters into a firm commitment with a foreign supplier to purchase equipment. The U.S. company designates a forward contract as a foreign currency fair value hedge of the unrecognized commitment.

7.4 A Recognized Foreign-Currency-Denominated Asset or Liability

Foreign-currency-denominated assets and liabilities are required to be remeasured based on spot exchange rates in accordance with ASC 830, with the resulting foreign currency included in determining net income for the period in which the exchange rate changes. As a result, foreign-currency-denominated assets or liabilities present earnings exposure to companies that they may want to hedge.

ASC 815 permits entities to use either the fair value hedging model or the cash flow hedging model to hedge the foreign currency related risks associated with recognized foreign-currency-denominated assets or liabilities. However, only a derivative instrument can be designated as the hedging instrument for a recognized foreign-currency-denominated asset or liability (or a specific portion thereof).

ASC 815 requires that all the variability in the hedged item's functional-equivalent cash flows of a recognized foreign-currency denominated asset or liability must be eliminated by the effect of a cash flow hedge. The guidance does not require perfect effectiveness in a foreign currency hedging relationship but does preclude the specific exclusion of a risk from the hedging relationship that will affect the variability in cash flows. See DH 7.7 Foreign Currency Cash Flow Hedges for details of the foreign currency hedging criteria.

Entities that have designated foreign-currency-denominated assets and liabilities as hedged items in a fair value hedge still must remeasure those items based on spot exchange rates in accordance with ASC 830. This results in different measurement criteria for the hedged item (measurement based on spot rates) and the hedging derivative instrument (measurement based on forward rates). Therefore, the gains or losses on the hedging instrument in a fair value hedge of foreign exchange risk will not completely offset the losses or gains on the hedged item (i.e., due to the spot-forward differences), even though the hedging instrument appears to be perfectly effective.

The Board concluded that for fair value hedges of both interest rate risk and foreign exchange risk, an entity should adjust the value of the foreign-currency-denominated asset or liability to reflect changes in its fair value that are attributable to changes in foreign interest rates before the entity remeasures the asset or liability at the spot

exchange rate. The Board believes that this remeasurement process will generate the same functional currency value that would result if the entity were to remeasure the instrument based on forward exchange rates. Therefore, although an entity may use different measurement criteria for the hedged item and the hedging instrument, any difference that the entity recognizes currently in earnings will be eliminated.

DH 7.16 Example 7-2 illustrates the use of a fixed-to-fixed cross-currency swap to hedge a recognized foreign-currency-denominated debt in a cash flow hedging relationship. By entering into the fixed-to-fixed cross-currency interest-rate swap, the company fixed, at the inception of the hedge, (1) the exchange rate at which the interest was calculated and (2) the interest expense throughout the life of the debt.

7.5 Available-for-Sale Securities

ASC 320, *Investments-Debt and Equity Securities* requires that changes in the fair value of available-for-sale securities be reported in a separate component of stockholders' equity until realized. For a foreign-currency-denominated available-for-sale security, the change in fair value expressed in an entity's functional currency is the total of (1) the change in market price of the security as expressed in the local currency and (2) the change in the exchange rate between the local currency and the entity's functional currency.

A derivative instrument can be designated as hedging the changes in the fair value of an available-for-sale *debt security* (or a specific portion thereof) that are attributable to changes in foreign currency exchange rates.

An available-for-sale *equity security* can be hedged for changes in its fair value that are attributable to changes in foreign currency exchange rates if

- The security is not traded on an exchange (or in an established marketplace) *in which trades are denominated in the investor's functional currency*; and
- Dividends or other cash flows received by holders of the security are all denominated in the foreign currency that is expected to be received upon the sale of the security.

A nonderivative financial instrument cannot be designated as the hedging instrument in a fair value hedge of the foreign currency exposure of an available-for-sale security.

DH 7.16 Example 7-3 illustrates the use of a forward-exchange contract to hedge the foreign currency risk related to an available-for-sale security. Under this qualifying fair value hedging relationship, changes in the fair value of the available-for-sale securities that are attributable to the hedged foreign currency risk are recorded in earnings. Changes in the fair value of the available-for-sale securities that are due to unhedged risks will continue to be recorded in other comprehensive income as required by ASC 320.

7.6 Forecasted Foreign-Currency Denominated Transactions

A forecasted transaction such as a forecasted sale to a third party, with the price to be denominated in a foreign currency, presents earnings exposure due to the movements in foreign exchange rates. A derivative instrument may be designated as hedging the foreign currency exposure to variability in the functional-currency-equivalent cash flows associated with a forecasted transaction as long as certain criteria are met (described in more detail in DH 7.7).

DH 7.16 Example 7-4 illustrates the use of a foreign currency forward to hedge a forecasted foreign currency sale in a cash flow hedging relationship. This example also illustrates the difference between assessing hedge effectiveness based on changes in spot rates versus forward rates.

DH 7.16 Example 7-5 illustrates the use of a foreign currency option to hedge forecasted foreign sales. Under this cash flow hedging relationship, the company decides to assess effectiveness on the basis of the option's intrinsic value (i.e., the value of the option that reflects the positive difference between the spot exchange rate and the strike exchange rate). Changes in the time value of the option are excluded from the assessment of effectiveness and thus are included in current earnings.

7.7 Foreign Currency Cash Flow Hedges

A derivative instrument that is designated as hedging the foreign currency exposure to variability in functional-currency-equivalent cash flows may qualify for cash flow hedge accounting when specified criteria (described later in this section) are met. The exposure may be associated with an existing recognized asset or liability, an unrecognized firm commitment, or a forecasted transaction. A nonderivative financial instrument cannot be designated as a hedging instrument in a foreign currency cash flow hedge. All qualifying foreign currency cash flow hedges must be accounted for in a manner consistent with ASC 815's general provisions for cash flow hedges.

Refer also to DH 7.15, Question No. 7-10.

7.7.1 “Probable” Criteria

Hedge documentation should describe with sufficient specificity (e.g., timing and expected quantity or amount) the hedged forecasted transaction such that one would be able to identify it when it occurs. In addition, an entity must be able to assert that the occurrence of the forecasted transaction is probable. ASC 815 employs the definition of probable that is used in ASC 450, *Contingencies*.

Specifically, the term *probable* means that “the future event or events are *likely* to occur.” The term *probable* requires that the likelihood of occurrence be significantly greater than that which is indicated by the phrase *more likely than not*. The transaction's probability should be supported by observable facts and the attendant circumstances. See DH 6.3.2, for further details on the probable criteria.

7.7.2 Risks That May Be Designated as the Hedged Risk

For financial assets or liabilities, cash flow hedge accounting is permitted for hedges of variability of future cash flows that result from changes, in four types of risk: market price risk (i.e., changes in the market price of the entire item), interest rate risk, foreign exchange risk, and credit risk. Two or more of these risks may be designated simultaneously as being hedged.

For non-financial assets or liabilities, the risk of changes in the functional-currency-equivalent cash flows attributable to changes in foreign exchange rates may be separately hedged in a cash flow hedge of the forecasted purchase or sale of a nonfinancial item. Otherwise, an entity is limited to hedge the risk of changes in the market price of the entire hedged item to be acquired or sold in a hedged forecasted transaction.

See DH 6.2 for details on the general qualifying criteria of cash flow hedges.

7.7.3 Additional Qualifying Criteria for Foreign Currency Cash Flow Hedges

Because foreign currency risk is defined in terms of an entity's functional currency, ASC 815-20-25-30 specifies additional qualifying criteria for foreign currency cash flow hedges as follows:

- 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.**

ASC 815-20-55-130 further illustrates the application of paragraph 815-20-25- 30(a) (2):

If a dollar- (USD-) functional, second-tier subsidiary has a euro (EUR) exposure, the USD-functional consolidated parent company could designate its USD-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 USD. 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 USD for consolidation), the consolidated parent company could not designate its USD-EUR derivative as a hedge of the second-tier subsidiary's exposure.

Under the functional-currency concept in ASC 830, each foreign operation of a multinational company is treated as a separate entity rather than as a subsumed part of one consolidated entity. Consistent with this concept, ASC 815's provisions for the consolidated financial statements of entities engaged in a foreign currency cash flow hedge specify that the operating unit (e.g., the foreign subsidiary that has the foreign currency exposure) or another member of the consolidated group that has the same functional currency as that of the operating unit (subject to specified restrictions) must be a party to the hedging instrument (which can be an intercompany contract, sometimes also referred to as an *internal derivative*). ASC 815 includes criterion ASC 815-20-25-30(a) above, because the Board wanted to ensure that its hedging model would be consistent with ASC 830's functional currency concept (i.e., the Board wanted to ensure that only the entity with the foreign currency risk, as defined under ASC 830, can be the hedging entity). In addition, when a parent company's functional currency differs from its subsidiary's functional currency, the parent is not directly exposed to the risk of exchange rate changes due to a subsidiary transaction denominated in foreign currency. Accordingly, a parent company that has a different functional currency may not directly hedge a subsidiary's recognized asset or liability, unrecognized firm commitment, or forecasted transaction denominated in a currency other than the subsidiary's functional currency.

Sometimes one operating unit such as a centralized treasury center (referred to as the *issuing affiliate*) enters into a third-party hedging instrument on behalf of another operating unit within the consolidated entity (referred to as the *hedging affiliate*). ASC 815 specifies that when the functional currencies of the two affiliates are not the same, an internal derivative contract must be issued to ensure that the component of the entity with the exposure enters into a qualifying hedging instrument. Although this requirement (that there be an internal derivative contract) may seem a mere formality, it has important implications. For example, the gain or loss on the third-party hedging contract that is executed by the issuing affiliate must be “pushed down” to the hedging unit (i.e., recorded in the foreign subsidiary’s financial statements). In addition, we understand from the FASB staff that the net gains and losses on these internal contracts are expected to be periodically settled by a transfer of funds between the hedging affiliate and the issuing affiliate.

Refer also to DH 7.15, Question No. 7-9.

- b. The hedged transaction is denominated in a currency other than the hedging unit’s functional currency.**

PwC Observation: The requirements in ASC 815-20-25-30(a) and (b) above apply not only to foreign currency cash flow hedges but also to foreign currency fair value hedges and net-investment hedges.

ASC 815-20-25-39 specifies additional qualifying criteria for foreign currency cash flow hedges:

- c. All of the other cash flow hedging criteria in ASC 815-20-25 are met, except for the criterion in ASC 815-20-25-15(c) that requires that the forecasted transaction be with a party external to the reporting entity.**
- d. 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.**
- e. 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 must be eliminated by the effect of the hedge.**

For purposes of item (e) above, ASC 815-20-25-40 specifies:

..., 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 based solely on changes in exchange rates because the derivative does not eliminate all the variability in the functional currency cash flows.

Hedge accounting for foreign-currency cash flow hedges of recognized foreign-currency-denominated financial assets or liabilities can be applied only to hedges that lock in, or “fix” the functional-currency cash flows from both the principal and interest payments on hedged items. In referring to the removal of “all” of the variability in the hedged item’s functional-currency-equivalent cash flows (see ASC 815-20-25-39(d) and 25-40 above), the Board does not mean that the hedging relationship must be perfectly (i.e., 100 percent) effective. A relationship qualifies

for hedge accounting as long as it is highly effective (i.e., as long as the offset of cash flows is within the range of 80 to 125 percent), as is required for any other hedge. The Board included the requirement regarding the removal of all variability simply as a means of preventing entities from specifically excluding from the hedge relationship a risk that will affect the variability in cash flows. For example, 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 cash flows is not eliminated. However, a currency swap that economically changes the hedged item from floating-rate foreign currency debt to fixed-rate functional currency debt qualifies as a cash flow hedge so long as the relationship is highly effective. In contrast to a hedge of foreign currency risk, an interest rate swap that economically changes floating-rate foreign currency debt into fixed-rate foreign currency debt also qualifies as a cash flow hedge, but is considered a hedge of interest rate risk, not a hedge of foreign currency risk.

7.7.4 Accounting for Cash Flow Hedges

All qualifying foreign currency cash flow hedges are accounted for in a manner consistent with ASC 815's general provisions for cash flow hedges. Under the accounting that ASC 815 prescribes for cash flow hedges, the effective portion of a derivative's gain or loss should be reported in other comprehensive income and is reclassified into earnings as the hedged transaction impacts earnings. The ineffective portion is generally reported in earnings. However, under the recognition model for cash flow hedges, ineffectiveness is recognized only to the extent the cumulative change in the fair value of the derivative instrument exceeds the cumulative change in the expected future cash flows on the hedged transaction. Therefore, ineffectiveness from an "overhedge" (i.e., where the cumulative change in fair value of the derivative is greater than the cumulative change in the expected future cash flows of the hedged transaction) is recorded in earnings, and ineffectiveness from an "underhedge" (i.e., where the cumulative change in fair value of the derivative is less than the cumulative change in the expected future cash flows of the hedged transaction) is not recorded in earnings. If an entity elects to exclude a component of the gain and loss on the hedging instrument (e.g., time value of an option), the excluded portion will be recognized in current earnings. See DH 6.9 Example 6-8 for an illustration of the concept discussed above.

7.7.5 Forward Contracts

The use of a forward contract in a foreign currency cash flow hedge of a forecasted transaction is relatively straightforward and follows the basic cash flow hedging model as described in the paragraph above. However, certain unique implementation issues arise when forward exchange contracts are used in a cash flow hedge of a recognized foreign-currency-denominated asset or liability. These issues result from the different bases for measuring the forward contract (measured based on forward rates) and the asset or liability (measured based on spot rates).

Each reporting period, the hedging instrument is measured at fair value; the effective portion of the gain or loss is initially recorded in other comprehensive income; and the hedged item is translated based on the current spot rate, as required by ASC 830. An amount is transferred from other comprehensive income to earnings for the purpose of offsetting the transaction gain or loss on the hedged item.

For non-interest-bearing hedged items, such as trade receivables and payables, the use of a forward exchange contract in a cash flow hedge necessitates that an entity amortize the spot-forward difference in the forward contract by using the interest

method throughout the life of the contract. The effect on the income statement depends on the rate that is implicit in the forward contract.

For interest-bearing hedged items, the functional currency interest rate that is implicit in the hedging instrument (such as a cross-currency swap) is used to determine the periodic interest income or expense associated with the hedged item. Interest expense is recorded based on the coupon rate on the debt—adjusted to the fixed rate of the swap—by transfers to or from other comprehensive income, to the extent the hedge is effective. As a result, the amount deferred in other comprehensive income may be more or less than the fair value of the hedging instrument. DH 7.16 Example 7-2 illustrates how this method may be applied to a cash flow hedge of fixed-rate foreign-currency-denominated debt that has been economically converted into a fixed-rate functional-currency debt via a cross-currency swap.

Application to a Single Cash Flow Hedge of a Forecasted Sale or Purchase on Credit for Foreign Exchange Risk

Many entities use a single forward contract to hedge the foreign currency risk associated with a forecasted transaction (e.g., a forecasted purchase or sales transaction) through to its settlement date. ASC 815-20-25-34 through 25-36 permits an entity to designate 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 transaction on credit. ASC 815-30-35-9 and Example 18 detailed in ASC 815-30-55-106 through 55-112 provide additional guidance with respect to such hedges involving non-interest-bearing receivables/payables:

- The effective portion of the gain or loss on the derivative instrument should be reported in other comprehensive income each period.
- The functional currency interest rate implicit in the hedging relationship as a result of the entering into the forward contract is used to determine the amount of cost or income (i.e., the forward points) ascribed to each period of the hedging relationship (i.e., from inception to the date of the forecasted transaction and from the date of the forecasted transaction to the settlement date of the receivable/payable).
- The amount of cost or income ascribed to the forecasted transaction is reclassified from other comprehensive income to earnings when the hedged forecasted transaction affects earnings.
- The amount of cost or income ascribed to the settlement of the related receivable/payable is reclassified from other comprehensive income to earnings consistent with the guidance for forward contracts above (i.e., an amount is transferred from other comprehensive income to earnings for the purpose of offsetting the transaction gain or loss on the payable/receivable each period and the allocated portion of the spot/forward difference is amortized to earnings over the settlement period).

ASC 815-30-35-3(f) states that if the assessment of effectiveness and measurement of ineffectiveness are based on total changes in the option's cash flows, an amount that adjusts earnings for the amortization of the cost of the option on a rational basis should be reclassified each period from other comprehensive income to earnings.

See DH 7.16 Example 7-4, Scenario 3, for an illustration of how ASC 815-30-35-9 is applied to a single cash flow hedge that encompasses the variability of functional

currency cash flows attributable to foreign exchange risk related to the settlement of the foreign-currency-denominated receivable resulting from a forecasted sale.

7.8 Foreign Currency Fair Value Hedges

In order to qualify for hedge accounting, foreign currency fair value hedges must meet all of the general fair value hedge criteria in ASC 815-20, including the rigorous documentation requirements for hedge accounting. As discussed above, the Board clarified that fair value hedges must also comply with the conditions in ASC 815-20-25-30(a) and 25-30(b) (described above in DH 7.7.3 Foreign Currency Cash Flow Hedges).

7.8.1 Qualifying Criteria for Fair Value Hedges

Fair value hedges of foreign currency risk are required to meet all of the general fair value hedge criteria highlighted below. See DH 5.2 for a more detailed discussion.

Specific Identification

ASC 815 requires specific identification of the hedged item. The hedged item must be either (1) all or a specific portion of a recognized asset or liability or of an unrecognized firm commitment or (2) a portfolio of similar assets or liabilities (or a specific portion thereof). For (2), ASC 815 requires that the items in a portfolio share the risk exposure for which they are designated as being hedged and that the fair values of individual items attributable to the hedged risk be expected to respond proportionately to the total change in fair value of the hedged portfolio.

ASC 815-20-25-12(b)(2) further explains that the following items may be designated as hedged items in a fair value hedging relationship:

- 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 the first two years of a four-year debt instrument).**
- iii. A put option or call option (including an interest rate or price cap or price floor) embedded in an existing asset or liability that is not an embedded derivative accounted for separately pursuant to paragraph 815-15-25-1.**
- iv. The residual value in a lessor's net investment in a direct financing or sales-type lease.**

Both (iii) and (iv) are not prevalent hedged items in the context of foreign currency hedging.

Earnings Exposure

The changes in fair value of the hedged item attributable to the foreign currency risk must present an earnings exposure. For a recognized asset or liability, this would mean that a foreign currency transaction gain or loss is recognized under the provisions of ASC 830-20-35-1.

Risks That May Be Designated as Being Hedged

For financial assets or liabilities, hedge accounting is permitted for hedges of changes in fair value that result from changes in four types of risk: market price risk (i.e., changes in the market price of the entire item), interest rate risk, foreign exchange risk, and credit risk. Two or more of these risks may be designated simultaneously as being hedged.

For a non-financial firm commitment with a financial component, the risk of changes in the fair value attributable to changes in foreign exchange rates may be separately hedged in a fair value hedging relationship.

7.8.2 Accounting for Fair Value Hedges

Gains and losses on a qualifying foreign currency fair value hedge should be accounted for in a manner consistent with ASC 815's general provisions for fair value hedges. The gains and losses on both the derivative and the hedged item should be recorded in earnings, assuming the hedging relationship is considered highly effective. The change in the fair value of the hedged item attributable to the hedged risks other than foreign currency risks should first adjust the carrying amount of the hedged item with any subsequent transaction gain or loss from changes in foreign currency rate changes being recognized consistent with the provisions of ASC 830.

When a nonderivative hedging instrument is used as the hedging instrument for an unrecognized firm commitment, the gain or loss recognized in earnings is the foreign currency transaction gain or loss recognized in accordance with ASC 830-20-35-1. This amount is calculated by using the difference between the spot rates in the functional currency and the currency in which the hedging instrument is denominated. The hedging instrument itself would not be measured at fair value, and other accounting literature would continue to be used to determine its carrying value.

PwC Observation: To the extent that the hedged item is a portfolio of similar assets or liabilities, an entity must allocate the hedge accounting adjustments to individual items in the portfolio to determine their correct carrying amounts. Information about such allocations is required when (1) the assets are sold or liabilities are settled, (2) the hedging relationship is discontinued, or (3) the item is assessed for possible impairment. See DH 5 for further details of basis adjustments related to other types of hedges (e.g., interest rate hedge).

Refer also to DH 7.15, Question No. 7-12.

7.9 Selecting the Appropriate Type of Hedge: A Fair Value Hedge versus a Cash Flow Hedge

7.9.1 Firm Commitments and Recognized Assets and Liabilities

With regard to foreign-currency-denominated unrecognized firm commitments and recognized assets and liabilities, entities are permitted to designate the hedging relationship as either a fair value hedge or a cash flow hedge, depending on an entity's objectives and the type of hedging instrument that is being used. In order to use the fair value hedge model, the hedged item must be exposed to fair value changes. When an entity's objective is to hedge the changes in fair value that are attributable to (1) only the foreign exchange risk or (2) both the foreign exchange risk and the interest rate risk, the entity should use the fair value hedge model. On the other hand, when an entity's objective is to eliminate the variability of (or "fix") the functional-currency-equivalent cash flows of the hedged item, then the entity should use the cash flow hedge model.

Refer also to DH 7.15, Question No. 7-8.

7.9.2 Hedging Foreign-Currency-Denominated Borrowings with Cross-Currency Swaps

The table below illustrates hedge alternatives in the context of a common financing strategy employed by many multinational entities that borrow funds in a foreign currency (euro) and then use a cross-currency swap to economically convert the borrowing into a functional currency (U.S. dollar) obligation. The examples in the following illustration assume that all terms are perfectly matched.

	Borrowing Currency	Interest Rate	Cross-Currency Swap	Are Functional- Currency Cash Flows Fixed?	Treatment of Hedging Relationship
1	Euro	Fixed	Receive-fixed-euro and pay-fixed- dollars	Yes	Cash flow hedge
2	Euro	Variable	Receive-variable- euro and pay-fixed- dollars	Yes	Cash flow hedge
3	Euro	Fixed	Receive-fixed-euro and pay-variable- dollars	No	Fair value hedge of interest and FX risk
4	Euro	Variable	Receive-variable- euro and pay- variable-dollars	No	Fair value hedge of FX risk

The last two scenarios in the table do not qualify for cash flow hedge accounting because the hedging instrument does not eliminate all of the variability in the entity's functional currency cash flows arising from the hedged item as required by ASC 815-20-25-39(d) and 25-40.

Even though the last scenario qualifies as a fair value hedge, an entity may elect not to designate any hedging relationship because, in this case, the effect of hedge accounting in the income statement would be the same as the effect of not designating the derivative as a hedge at all. On the other hand, an entity may elect to designate the last scenario as a fair value hedge because (1) such a designation is

consistent with the entity's risk management strategy and (2) the entity would prefer to demonstrate to the investors that the derivative met the rigorous requirements under ASC 815.

ASC 815-25-35-18 and ASC 815-30-35-6 clarifies that "remeasurement of the hedged foreign-currency-denominated assets and liabilities is based on the guidance in ASC 830, which requires remeasurement based on spot exchange rates," regardless of whether a fair value hedging relationship or a cash flow hedging relationship exists. Accordingly, whether or not the derivative in the last scenario is designated as a fair value hedge, the entity would remeasure the variable-rate euro-denominated debt by using current spot rates (as required by ASC 830) and would record in current earnings the change in the fair value of the cross-currency swap (which is due primarily to changes in spot rates). As a result, an entity may expect some ineffectiveness due to interest rate changes between the two foreign currencies in the cross-currency swap.

A foreign currency fair value hedge of a recognized foreign-currency-denominated asset or liability has a real accounting effect only when the interest rate risk is being hedged in addition to the foreign currency risk, as in the third scenario in the above table. This is the primary reason that a fair value hedge of only foreign exchange risk is not prevalent. An entity generally implements a fair value hedging strategy when it is hedging both interest and foreign exchange risk. The Board's decision to permit fair value hedge accounting for this scenario stems from the Board's desire to accommodate entities' common practice of using a compound derivative (i.e., a cross-currency interest rate swap) to hedge both the interest rate risk and the foreign currency risk. In applying hedge accounting to this scenario, an entity would adjust the value of the foreign-currency asset or liability to reflect changes in foreign interest rates and then remeasure the asset or liability at the current spot exchange rate, as required by ASC 830.

7.10 Hedges of Net Investments in Foreign Operations

Consistent with the provisions in ASC 830, ASC 815 allows entities to hedge their net investments in foreign operations. Under ASC 815, the hedged net investment is viewed as a single asset (as opposed to several individual assets and liabilities that compose the balance sheet of the subsidiary) and continues to qualify for special accounting, as it had under ASC 830, provided that the hedging instrument is designated and is effective as an economic hedge of the net investment.

ASC 815-20-25-71(d) clarifies that an 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. In general, ASC 815 does not permit a compound derivative that involves an underlying that is not based on foreign currency risk to be designated as the hedging instrument. However, the Board provides an exception for fixed-for-fixed and floating-for-floating cross-currency swaps. 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.

DH 7.16 Example 7-6 illustrates the use of a forward exchange contract to hedge a net investment in a foreign subsidiary. In this example, the effective portion of the change in the fair value of the forward (in this case, 100 percent) is recorded in other comprehensive income in the same manner as the translation adjustment is recorded. The forward is recorded on the balance sheet at fair value.

Entities may designate a non-derivative financial instrument that gives rise to an ASC 830 foreign currency transaction gain or loss as a hedge of the foreign currency exposure of a net investment in a foreign operation. For example, an entity may choose to designate a euro-denominated loan as a hedge of a net investment in a euro-functional-currency subsidiary, assuming all of the criteria of hedge accounting are met. Entities may also use the following derivatives as hedging instruments for net-investment hedges: forward exchange contracts, purchased foreign currency options, fixed-for-fixed cross-currency swaps, and floating-for-floating cross-currency swaps.

Refer also to DH 7.15, Question Nos. 7-3, 7-4 and 7-5.

DH 7.16 Example 7-7 illustrates the use of a foreign-currency-denominated loans payable to hedge the net investment in a foreign subsidiary with foreign currency as its functional currency.

7.10.1 Qualifying Criteria

The requirements of ASC 815-20-25-30 described earlier vis-a-vis cash flow hedges also apply to hedges of net investments. Thus, for consolidated financial statements, either (1) the operating unit that has the foreign currency exposure must be a party to the hedging instrument or (2) another member of the consolidated group that has the same functional currency as the operating unit (subject to specified restrictions) must be a party to the hedging instrument. ASC 815-35-35-4 provides additional guidance in measuring ineffectiveness in a net-investment hedge.

Unlike fair value and cash flow hedges, ASC 815 did not prescribe specific criteria for hedges of net investments in foreign operations provided the conditions in ASC 815-20-25-30 are met. However, in practice, the hedge designation documentation of a net-investment hedge is generally prepared with the same rigor and detail as with other types of hedges are prepared. Additionally, an entity should document those elections specific to net-investment hedges, such as whether effectiveness is being assessed based on the beginning balance of the net investment and how frequently the redesignation is made pursuant to ASC 815-35-35-27 and Example 1 discussed in ASC 815-35-55-1, and whether the amount of ineffectiveness is being measured based on the spot or forward method.

7.10.2 Accounting for Net Investment Hedges

Similar to ASC 830, ASC 815 states that the effective portion of (1) the changes in the fair value of a hedging derivative and (2) the foreign currency transaction gain or loss on a nonderivative hedging instrument must be reported in the same manner as the related translation adjustments (i.e., recorded in the cumulative translation account within other comprehensive income). ASC 815-35-35-23 and 24 specify that unlike cash flow hedges, the effective portion of the change in the value of the hedged item reported in cumulative translation adjustment is not limited by the total change in the value of the hedging item. Any ineffectiveness must be reported directly in earnings. ASC 815-20-25-132 clarifies that an entity does not have the option of separately amortizing the premium or discount on the forward exchange contract to earnings ratably over the period of the contract, as was permitted under ASC 830. The accounting treatment for the hedge of a net investment in a foreign operation is an explicit exception, and the provisions for recognizing the change in value of the hedged item in earnings, as with fair value hedge relationships, is forbidden. Recognition of currency translation amounts in earnings is limited to the circumstances provided in ASC 830-30-40-1 and its related interpretations, such as

sale of the investment or complete or substantially complete liquidation or through the deconsolidation of a subsidiary from a change in control as provided in ASC 810-10.

7.10.3 Consistent Application of Spot or Forward Method for Net Investment Hedges

ASC 815-35-35-4 permits entities to assess and measure the amount of ineffectiveness in a net-investment hedge by using either (1) a method that is based on changes in spot exchange rates or (2) a method that is based on changes in forward exchange rates. An entity must document the method it chooses and consistently use the same method for all of its net-investment hedges (an entity is not permitted to selectively use the spot method for some net-investment hedges while using the forward method for other net-investment hedges). Generally, the spot method leads to more income statement volatility than the forward method does, as the spot-to-forward difference will be recognized through earnings. On the other hand, the spot method will result in perfect matching between the hedging instrument and the net investment in cumulative translation adjustment.

7.10.4 Method Based on Changes in Forward Rates

When electing to hedge using changes in forward rates, if (1) the notional amount of a derivative that is designated as a hedge of a net investment in a foreign operation matches the designated portion of the hedged net investment, (2) the derivative's underlying relates solely to the foreign exchange rate between the functional currency of the hedged net investment and the investor's functional currency, and (3) the derivative is an eligible cross-currency swap, all changes in the derivative's fair value should be recorded in the same manner as a translation adjustment (i.e., reported in the "cumulative translation adjustment" section of other comprehensive income). In that case, no hedge ineffectiveness would be recognized in earnings (including the time-value component of purchased options and the interest accrual/periodic cash-settlement components of qualifying float-for-float or fixed-for-fixed cross-currency swaps). However, hedge ineffectiveness would have to be measured and recognized in earnings when (1) the hedging instrument and the hedged net investment have (a) different notional amounts, (b) different currencies, or (2) the legs of the currency swap are based on different interest rate indexes. An entity would measure hedge ineffectiveness that results from these differences by comparing the change in the value of the actual derivative with the change in the value of a hypothetical derivative with the same maturity that would be perfectly effective. Although dissimilar assets and liabilities with various maturities compose the balance sheet of the foreign operation, ASC 815 does not require the maturity of the actual derivative to match the maturity of these dissimilar assets and liabilities. ASC 815 views the hedged net investment as a single item and thus provides an exception to the normal prohibition of hedging dissimilar assets and liabilities in a single portfolio.

7.10.5 Method Based on Changes in Spot Rates

When electing to hedge using changes in spot rates, if (1) the notional amount of a derivative that is designated as a hedge of a net investment in a foreign operation matches the designated portion of the net investment, (2) the derivative's underlying exchange rate is the exchange rate between the functional currency of the hedged net investment and the investor's functional currency, and (3) the derivative is an eligible cross-currency swap, the change in the fair value of the derivative attributable to changes in the difference between the forward rate and the spot rate would be excluded from the measurement of hedge ineffectiveness, with the difference being

reported directly in earnings. The effective portion of the change in fair value should be reported in the same manner as a translation adjustment (that is, reported in the cumulative translation adjustment section of other comprehensive income). An entity should determine the effective portion of a hedge by looking to changes in spot exchange rates; that change should not be discounted.

The rules that apply to the use of cross-currency swaps for the purpose of hedging a net investment in a foreign operation are summarized below:

Type of Swap	Eligible for Hedge Accounting?	Method of Measuring Ineffectiveness	For Perfectly Matching Swaps, the Amount of Ineffectiveness
Float-for-float	Yes	Forward rates	None
		Spot rates	Spot-forward difference
Fixed-for-fixed	Yes	Forward rates	None
		Spot rates	Spot-forward difference
Float-for-fixed	No	N/A	N/A
Fixed-for-float	No	N/A	N/A

7.10.6 Measurement of Ineffectiveness in a Net Investment Hedge

ASC 815-35 requires an entity to recognize hedge ineffectiveness in earnings if (1) the notional amount of the derivative does not match the portion of the net investment that has been designated as being hedged, (2) the derivative's underlying exchange rate is not the exchange rate between the functional currency of the hedged net investment and the investor's functional currency, or (3) the hedging derivative is a cross-currency interest rate swap (as permitted by ASC 815-20-25-67 and 68) in which neither leg is based on comparable interest rate curves (for example, pay foreign-currency based on three-month LIBOR, receive functional currency based on three-month commercial paper rates). Under these circumstances, an entity measures the hedge ineffectiveness by using a perfectly matching "hypothetical" derivative.

Under the forward-rate method of assessing effectiveness, the change in the fair value of the hypothetical derivative is recorded as the effective portion of the hedge in the "cumulative translation adjustment" section of other comprehensive income. The difference between this effective amount and the change in the fair value of the actual derivative must be recorded in earnings as the ineffective portion of the hedge. Under the spot-rate method of assessing effectiveness, the change in the fair value of the hypothetical derivative that is due to a change in the spot rate is recorded in the cumulative translation account. The difference between this effective amount and the change in the fair value of the actual derivative is recorded as the ineffective portion of the hedge, in earnings. As a consequence of applying the spot-rate method, an entity records in earnings the spot-forward differential, as well as the ineffectiveness that results from using a derivative that is less than perfect.

7.10.7 Frequency of Assessing Hedge Effectiveness

If (1) an entity assesses hedge effectiveness based on the beginning balance of its net investment and (2) the net investment changes during the year, the entity must consider (whenever financial statements or earnings are reported and at least every three months) whether it needs to redesignate the hedging relationship. For example, assume that a U.S. parent company has designated a forward contract

as the hedging instrument for its investment in a subsidiary that uses the euro as its functional currency. At the beginning of the first quarter, both the notional amount of the forward contract and the amount of the net investment equal 100 million euros. If at the beginning of the second quarter, the amount of the net investment has increased to 120 million euros, the entity could continue to designate the forward contract as the hedging instrument. The entity, however, would have to document that, prospectively, it is designating only five-sixths or the first 100 million euros of its total net investment as the hedged item. If, on the other hand, the amount of the investment has decreased to 80 million euros by the beginning of the second quarter, the entity can designate 80 percent of the forward contract as the hedging instrument. The entity would have to prospectively mark-to-market through earnings the remaining 20 percent of the forward contract as a non-hedging instrument. In either case, the hedge accounting for the first quarter would not be called into question, because the entity's policy is to assess hedge effectiveness based on the beginning balance of the net investment. As discussed in ASC 815-35-35-27, an entity is not required to redesignate the hedging relationship more frequently than discussed above even when a significant transaction (e.g., dividend) occurs during the interim period.

Refer also to DH 7.15, Question No. 7-6.

7.10.8 Impact of Hedging Gains and Losses on Evaluation of a Net Investment for Impairment

ASC 830-30-45-13 through 15 addresses certain issues related to a net investment in a foreign operation that will be disposed of. When an entity has committed to a plan to dispose of a net investment in a foreign operation, an entity should include the portion of the cumulative translation adjustment that represents a gain or loss from an effective hedge of the net investment in a foreign operation as part of the carrying amount of the net investment when evaluating that investment for impairment.

7.10.9 Hedging of Foreign-Currency Risk of Equity Method Investments

As discussed above, ASC 815 provides an exception to permit an entity to designate a financial instrument denominated in a foreign currency (derivative or nonderivative) as a hedge of the foreign currency exposure of a net investment in a foreign operation. This exception not only allows a parent to hedge its net investment in its foreign subsidiary, it also allows an entity to hedge its foreign currency risk of its equity-method investments.

The term *foreign entity* is defined in the glossary of ASC 830-30-20 and specifically includes foreign entities that are accounted for under the equity method. Accordingly, the literature explicitly allows equity-method investments to be considered net investments in foreign operations. Consequently, hedges of these net investments fall under the net-investment hedging guidance in ASC 815.

However, certain aspects of equity-method investments are precluded from being hedged items. ASC 815-20-25-43(b) states that "an investment accounted for by the equity method in accordance with the requirements of Subtopic 323-10..." is not an eligible hedged item with respect to fair value hedges and cash flow hedges. ASC 815-20-25-43(c) also states that "a firm commitment...to acquire or dispose of... an equity method investee" is not an eligible hedged item with respect to fair value hedges.

To illustrate the above, assume that a U.S. entity (Company A) owns slightly more than 20 percent of the outstanding common stock of an entity that does not use the U.S. dollar as its functional currency (Company B). Through its ownership interest, Company A is able to exercise significant influence over Company B but does not have control. In accordance with ASC 323, *Investments-Equity Method and Joint Ventures*, Company A accounts for this investment under the equity method of accounting.

Company A decides to use foreign-currency forward contracts to hedge the foreign-currency exposure of this investment by agreeing to sell the foreign exchange and buy USD (Company A's functional currency). The notional amount of the forward contracts is equivalent to the initial investment in the equity-method investee. For the purposes of this analysis, assume that the equity-method balance recorded by Company A does not fall below this initial investment.

These foreign currency forward contracts should be eligible for hedge-accounting treatment under ASC 815.

7.11 Intercompany Arrangements

Intercompany transactions of a long-term investment nature (i.e., transactions for which a settlement is not planned or anticipated in the foreseeable future) are considered part of a net investment, as provided in ASC 830-20-35-4. Accordingly, gains and losses on derivative instruments that hedge an intercompany balance of a long-term investment nature are deferred in the cumulative translation account in accumulated other comprehensive income.

Other intercompany balances (i.e., those for which a settlement is planned or anticipated in the foreseeable future) are considered foreign currency transactions under ASC 830 and result in transaction gains and losses that are reported through earnings to reflect current exchange rates. An entity may designate other intercompany balances or the forecasted cash flows from them as hedged items for foreign currency risk in either a fair value hedge or a cash flow hedge, 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.

PwC Observation: In a cash flow hedge of forecasted cash flows arising from an intercompany transaction, the effective portion of the derivative's gains or losses is initially accumulated in other comprehensive income, and pursuant to ASC 815-30-35-38 through 41, that portion is to be reclassified into earnings in the same period(s) during which the hedged transaction affects earnings. Example 14 discussed in ASC 815-30-55-86 through 90 addresses when the amounts in accumulated other comprehensive income (in the case of intercompany transactions) should be reclassified as earnings. It concludes that for consolidated statements, the amounts in other comprehensive income should be reclassified as earnings when the sale to an unrelated third party occurs because consolidated earnings are not affected until that time. Thus, 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, following the inventory conventions of the reporting entity.

7.12 Treasury Center Hedges

With respect to **consolidated** financial statements, ASC 815 permits entities to use intercompany derivatives as hedging instruments for cash flow hedges of foreign currency risk. As stated earlier in this chapter, this is an exception to the overall model, because an intercompany derivative cannot be designated as the hedging instrument for hedges of risks other than foreign currency risk in the consolidated financial statements of the parent. ASC 815 permits entities to designate intercompany derivatives as hedging instruments for cash flow hedges of foreign exchange risk because the Board wanted to ensure that companies that use a central treasury function for executing derivative contracts with third parties could continue doing so and still comply with the ASC 815-20-25-30(a) requirement that the operating unit with the foreign currency exposure be a party to the hedging instrument. The ASC 815 paragraphs below describe the criteria for the use of intercompany derivatives and the offsetting or netting of exposures:

Internal Derivatives as Hedging Instruments in Cash Flow Hedges of Foreign Exchange 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.

PwC Observation: The individuals who oversee an entity's treasury center operations are permitted to decide whether or not they wish to use the netting procedures for internal derivatives. They can either (1) enter into third-party derivative contracts to offset the exposures received from the hedging affiliates on a one-for-one (gross) basis or (2) aggregate internal derivatives in the same foreign currency and then enter into third-party contracts to offset the net exposure. If the latter approach is chosen, certain additional conditions must be met in order for a derivative instrument to qualify for hedge accounting (discussed below).

(continued)

This is not meant to construe that intercompany derivative contracts for underlyings other than currency, for example commodities, cannot be used for hedge accounting purposes, such as by subsidiaries in their stand-alone financial statements. Commodity intercompany derivatives do not survive consolidation as they are not subject to the same ASC 815-20-25-61 currency derivative exception. As a result, in order for the consolidated entity to achieve hedge accounting, the entity will need to enter into a derivative transaction with a third party (this could be performed by the treasury center) and designate the third-party transaction as a hedging instrument in the hedging relationship.

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.

PwC Observation: Initially, ASC 815 required that each internal derivative be offset by a third-party contract on a gross or one-for-one basis and did not permit entities to net exposures from various affiliates within the consolidated group when the purpose of such netting was to allow the entity to enter into a single third-party contract for the “net” internal exposure for each foreign currency. Several constituents, however, requested that the Board reconsider this requirement of one-to-one matching of internal and third-party derivatives, pointing out that the requirement increases the costs of risk management and defeats the very purpose of establishing a centralized treasury management function. Subsequently, the Board decided to permit entities to net internal derivatives for the purpose of entering into third-party contracts, provided that the entities stay within the parameters described above. The parameters effectively establish that the treasury center should act as the hedging entity’s conduit to the foreign exchange market.

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.

PwC Observation: Because of this prohibition, an entity that is applying the “offsetting of net exposures” concept (as permitted by ASC 815-20-25-61 through 25-63) must stop applying hedge accounting for each internal 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 affiliate wishes to continue the cash flow hedge or initiate a fair value hedge by using an internal derivative, the issuing affiliate must enter into an offsetting contract with an unrelated third party on a “one-for-one” or gross basis (i.e., without netting any other exposures). ASC 815 does not permit the “netting” of internal derivatives that are used in fair value hedges, net-investment hedges, or cash flow hedges of recognized assets and liabilities.

The discussion in this section of the chapter focuses on the criteria that must be fulfilled in order for an entity to use hedge accounting in its consolidated financial statements. One of those criteria is that when an internal derivative is used, there must be a third-party derivative contract that will offset the exposure. However, for purposes of separate company financial statements, an internal 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 separate financial statements.

7.13 Hedging With Tandem Currencies

ASC 815 expands the concepts in ASC 830 that relate to using contracts in tandem currencies as qualifying hedging instruments. Tandem currencies are two currencies that are (1) other than the entity's functional currency and (2) expected to move in tandem with each other in relation to the entity's functional currency. For example, when the exchange rates for (1) the U.S. dollar and foreign currency A and (2) the U.S. 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 U.S. entity.

Before implementation of ASC 815, ASC 830 restricted an entity's use of a tandem currency to circumstances when it was not practical or feasible for the entity to hedge in the currency of the underlying hedged item. Under ASC 815, an entity is permitted to use tandem currencies if, based on historical experience, an entity 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. Therefore, ASC 815 is more flexible than ASC 830 previously was in permitting the use of tandem currencies. On the other hand, ASC 815 is stricter than ASC 830 regarding the discipline that entities must exercise in measuring and recognizing hedge ineffectiveness.

7.14 After-Tax Hedging of Foreign Currency Risk

ASC 815 permits the hedging of foreign currency risk on an after-tax basis. The notional amount of the hedging instrument is determined by the exposure on an after-tax basis. Accordingly, the portion of the gain or loss on the hedging instrument that exceeds the loss or gain on the hedged item (i.e., because the entity intended the portion to be a hedge of the tax effect) is required to be recorded as an offset of the related tax effects in the period that those tax effects are recognized.

7.15 Questions and Interpretive Responses

Hedging Future Earnings

Question No. 7-1: Would the forecasted earnings of a foreign subsidiary qualify as a hedged item?

PwC Interpretive Response: No, ASC 815-20-25-28 does not list earnings (or net income) among the foreign-currency-denominated items that may qualify as a hedged item. ASC 815 prohibits hedge accounting for hedges of future earnings.

Entities may, however, designate as a hedged item (1) a net investment in a foreign operation or (2) royalty payments that are to be received from a subsidiary.

Hedging Operating Costs

Question No. 7-2: Assume that a parent company has a foreign subsidiary and that the functional currency of the parent company and the subsidiary is the U.S. dollar. Also assume that the foreign subsidiary's sales and cost of sales are denominated in U.S. dollars, while all other operating costs are denominated in the local foreign currency. In this situation, could the subsidiary hedge its forecasted foreign-currency-denominated operating costs?

PwC Interpretive Response: Yes. The hedge of forecasted operating costs would represent a foreign currency cash flow hedge of the currency outflows associated with the costs. The forecasted operating costs, however, may need to be segregated into specific forecasted transactions (such as payments of rent, salaries, and similar specific costs) so that they meet the qualifying criteria for cash flow hedges (e.g., specific identification, probability, and high effectiveness). Also note that although nonderivative financial instruments do not qualify as a hedging instrument in a cash flow hedge, ASC 815 does permit the use of any type of derivative instrument (including forward-exchange contracts) as a qualifying hedging instrument in a cash flow hedge.

Nonderivative Financial Instrument

Question No. 7-3: Is foreign-currency-denominated cash a “nonderivative financial instrument”?

PwC Interpretive Response: Yes. Under the Glossary section in ASC 815-25-20, the definition of a financial instrument includes cash. Therefore, foreign-currency-denominated cash may be used as a hedge of the foreign currency exposure of an unrecognized firm commitment under ASC 815-20-25-58 or as the hedge of the foreign currency exposure of a net investment under ASC 815-20-25-66.* Obviously, the reporting enterprise would need to meet all of the appropriate requirements of ASC 815 to ensure that the hedge is designated and qualifies for hedge accounting.

*Foreign-currency-denominated cash should be used as a hedge of a net investment only if an entity has a net liability position in a foreign operation. Foreign currency movements will affect an entity’s net liability position in the opposite direction from its foreign-currency-denominated cash, and thus the cash may be used to hedge its foreign currency exposure.

Use of Synthetic Foreign-Currency Debt to Hedge a Net Investment

Question No. 7-4: Assume that a U.S. company borrows U.S. dollars at fixed interest rates and simultaneously enters into a currency swap to economically convert its U.S. dollar debt into a fixed-rate euro-denominated debt. Can this synthetic foreign-currency debt be designated as a hedge of a net investment in a foreign subsidiary that uses the euro as its functional currency?

PwC Interpretive Response: No. ASC 815 does not permit entities to apply synthetic accounting in hedging transactions. The currency swap noted above, however, can be designated as a hedging instrument, because (1) it is viewed as a series of forward exchange contracts and (2) ASC 815-20-25-67 and 25-68 allows a fixed-for-fixed cross-currency swap to be designated as the hedging instrument in a net-investment hedge. Therefore, changes in the fair value of the currency swap to the extent that they are effective as a hedge, can be included in the cumulative translation account within other comprehensive income.

Use of an Affiliate's Hedging Instrument to Hedge a Net Investment

Question No. 7-5: Assume that a U.S. parent company has two subsidiaries: Subsidiary A is in Japan and Subsidiary B is in Australia. The functional currencies of the two subsidiaries are the local currencies in their respective countries. Subsidiary B has debt that is denominated in Japanese yen. Can the U.S. parent company designate Subsidiary B's Japanese yen debt as a hedge of the parent company's net investment in Subsidiary A?

PwC Interpretive Response: No. The requirements in ASC 815-20-25-30 that relate to foreign currency cash flow hedges also apply to foreign currency fair value hedges and hedges of a net investment in a foreign operation. ASC 815-20-25-30 states that for purposes of consolidated financial statements, either (1) the operating unit that has the foreign currency exposure must be a party to the hedging instrument or (2) another member of the consolidated group that has the same functional currency as the operating unit must be a party to the hedging instrument. In addition, the hedged transaction must be denominated in a currency other than the hedging unit's functional currency. Accordingly, the designation described in the question above would not qualify for hedge accounting, because the parent company (the operating unit with the foreign-currency exposure) is not a party to the hedging instrument (i.e., the Japanese-yen-denominated debt). Further, the parent company and Subsidiary B do not have the same functional currency.

Determining Ineffectiveness in a Hedge of a Net Investment in a Foreign Operation When Notional Amounts Differ at the End of the Period

Question No. 7-6: Assume that a parent company uses the U.S. dollar as its functional currency and has an investment in a wholly owned subsidiary that uses the euro as its functional currency. At the beginning of the first quarter of 200X, the parent company designates the entire balance of its third-party debt, which is 1 million euros, as a hedge of its beginning net investment in the subsidiary, which is also 1 million euros. At the end of the first quarter of 200X, the parent company's net investment in the subsidiary has decreased to 900,000 euros. The debt balance that was designated as the hedging instrument has not changed during the period.

ASC 815-35-35-1 states that "... (or the foreign currency transaction gain or loss on the nonderivative hedging instrument) that is designated as, and is effective as, an economic hedge of the net investment in a foreign operation shall be reported in the same manner as a translation adjustment (that is, reported in the cumulative translation adjustment section of other comprehensive income) to the extent it is effective as a hedge."

ASC 815-35-35-13 states that "recognition of hedge ineffectiveness in earnings is required if...the notional amount of the nonderivative instrument does not match the portion of the net investment designated as being hedged..."

What notional balance should the parent company use when determining the extent of hedge ineffectiveness that is to be recorded in earnings at the end of the first quarter of 200X?

PwC Interpretive Response: Because the parent company specified that it was hedging all of its beginning net-investment balance, it should use the beginning net-investment balance to determine the extent of hedge ineffectiveness that is to be recorded in earnings. No hedge ineffectiveness will be recognized in earnings for the first quarter of 200X, because the currency and the notional amounts of the hedging instrument and the hedged item were the same at the beginning of the period. However, at the beginning of the second quarter of 200X (and each subsequent quarter), the parent company must redesignate the hedging relationship based on the new notional amount of the net investment balance at the beginning of each subsequent period, pursuant to ASC 815-35-35-27 and Example 1 discussed in ASC 815-35-55-1.

This response applies equally to both derivative hedging instruments and nonderivative hedging instruments.

Hedging the Foreign-Exchange Risk in a Forecasted Purchase of Land

Question No. 7-7: An entity anticipates purchasing undeveloped land for which the purchase price is denominated in a foreign currency. Can the entity use a derivative to hedge the foreign exchange risk in the forecasted purchase of land?

PwC Interpretive Response: Yes. An entity is permitted to hedge the foreign currency exposure to variability in the functional-currency-equivalent cash flows associated with a forecasted foreign-currency-denominated transaction.

ASC 815-30-35-38 through 35-41 describes the process of reclassifying into earnings derivative gains/losses that were previously classified as other comprehensive income:

“Amounts in accumulated other comprehensive income shall be reclassified into earnings in the same period or periods during which the hedged forecasted transaction affects earnings... 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 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).”

Since the purchase of land does not affect earnings in a systematic way (e.g., through depreciation), the amounts recorded in accumulated other comprehensive income result in a form of permanent deferral, which gives rise to the question of whether or not the forecasted acquisition of land qualifies as an eligible item that may be hedged in a cash flow hedge. We believe that the forecasted purchase of land can qualify as a hedged item because the transaction price will affect the earnings of the entity when and if the entity decides to sell the land (or at an earlier point, if an impairment loss were recognized). Therefore, we believe that an entity can hedge the foreign exchange risk in a forecasted purchase of land (provided that the forecasted purchase is not part of a business combination) as a cash flow hedge, provided that the hedge meets all of the other criteria in ASC 815. Accordingly, the derivative would be recorded as an asset or liability at fair value,

(continued)

and the effective portion of the gain or loss on the derivative would be recorded in other comprehensive income. The gain or loss in accumulated other comprehensive income would remain there until the land is sold (or if an impairment loss were recognized), at which time the gain or loss would be reclassified as earnings, along with the gain/loss on the sale (or impairment) of the land. The long period before the gain or loss is taken out of other comprehensive income and reclassified as earnings is somewhat analogous to the delay involved in a cash flow hedge of the variability of the purchase price of inventory that is included in a new layer under the last-in, first-out (LIFO) method of accounting for inventory. Reclassification does not occur until the LIFO layer is liquidated (though it may occur earlier if a lower-of-cost-or-market reserve is recognized).

Hedging a Firm Commitment with an Intercompany Payable

Question No. 7-8: Assume that a U.S. parent company has a subsidiary (Subsidiary A) that uses the euro as its functional currency. Subsidiary A enters into a firm commitment with a third party, which results in cash inflows of pound sterling. Subsidiary A also has an intercompany note payable to its U.S. parent company, denominated in pound-sterling. Subsidiary A designates the pound-sterling intercompany note payable as a hedge of its firm commitment. The following questions arise:

1. Would such a designation qualify for hedge accounting in the separate, stand-alone financial statements of Subsidiary A?
2. Would such a designation qualify for hedge accounting in the consolidated financial statements of the U.S. parent company?

PwC Interpretive Response:

1. Yes. ASC 815-20-25-58 states that a derivative instrument or a nonderivative financial instrument that, under ASC 830, may give rise to a foreign currency transaction gain or loss can be designated as hedging changes in the fair value of an unrecognized firm commitment (or a specific portion thereof) that are attributable to foreign currency exchange rates. Additionally, intercompany transactions are considered external third-party transactions for purposes of applying hedge accounting in the subsidiary's separate, stand-alone financial statements, because those transactions are with a party "external to" the reporting entity in those stand-alone financial statements. Thus, the intercompany note payable is considered a nonderivative financial instrument that was entered into with an external third party for purposes of applying hedge accounting in the separate, stand-alone financial statements of Subsidiary A. Implicit in this answer is the assumption that the designated hedging relationship satisfies the fair value hedging criteria in ASC 815.
2. 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 pound sterling) still remains within the consolidated group. Thus, hedge accounting would not be appropriate in the consolidated financial statements of the parent company.

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However, as discussed in ASC 815-20-25-60 and ASC 815-20-55-168 through 55-170, the designation would qualify for hedge accounting in the consolidated financial statements if, the parent company has entered into a third-party pound-sterling loan that offsets the foreign exchange exposure of the pound-sterling intercompany loan.

Hedging on Behalf of an Operating Unit

Question No. 7-9: Assume that a U.S. parent company that uses the U.S. dollar as its functional currency has a first-tier subsidiary (Subsidiary A) in the United Kingdom that uses British pound sterling as its functional currency. Subsidiary A has a second-tier subsidiary (Subsidiary B) that uses the euro as its functional currency. The parent company has another first-tier subsidiary (Subsidiary C), which uses the euro as its functional currency. Subsidiary C functions as a centralized treasury center for the consolidated group. Can Subsidiary C enter into a contract for a third-party derivative instrument to hedge the foreign currency exposures of Subsidiary B without entering into an intercompany derivative contract with Subsidiary B?

PwC Interpretive Response: No. Although the functional currencies of both Subsidiary B and Subsidiary C are the same (the euro), Subsidiary C cannot enter into a foreign currency hedging derivative on behalf of Subsidiary B, because the parent companies of Subsidiary B and Subsidiary C do not have the same functional currencies. ASC 815-20-25-30(a) requires that the functional currencies be the same. ASC 815-20-25-30(a) also requires that in order for an entity to qualify for hedging on behalf of another operating unit without entering into an intercompany contract, there cannot be an intervening entity that uses a different functional currency. In the fact pattern of this question, Subsidiary B's parent company uses British pound sterling as its functional currency, while Subsidiary C's parent company uses the U.S. dollar as its functional currency. Therefore, even though Subsidiary B and Subsidiary C use the same functional currency, the consolidated financial statements must cite Subsidiary B as a party to the hedging instrument that is designated as hedging its foreign currency exchange risk. That hedging instrument may be an intercompany hedging contract between Subsidiary B and Subsidiary C, as long as Subsidiary C offsets the internal exposure with a third-party derivative contract.

Foreign-Currency Cash Flow Hedge With Multiple Derivatives

Question No. 7-10: Assume that a U.S. entity that uses the U.S. dollar as its functional currency issues a fixed-rate debt denominated in Japanese yen. At the same time, the entity hedges the debt by entering into two swap contracts. Under the first swap contract, the entity receives fixed yen (equal to the entity's interest and principal obligations on the hedged debt) and pays variable U.S. dollars based on LIBOR. Under the second swap contract, the entity receives variable U.S. dollars based on LIBOR and pays fixed U.S. dollars.

Would this hedging relationship qualify for a foreign currency cash flow hedge under ASC 815?

PwC Interpretive Response: Yes. ASC 815-20-25-39(d) and 25-40 indicate that in order to qualify for a foreign currency cash flow hedge of an existing foreign-currency-denominated debt, the hedging relationship must eliminate the variability in the hedged item's functional-currency-equivalent cash flows. 815-20-25-45 permits an entity to designate two or more derivatives as hedging instruments in a single hedging relationship. If the two swaps in the situation described above were to act together as hedging instruments for the single hedged item of the yen-denominated debt, they would eliminate the variability in U.S. dollar cash outflows that are needed to meet the yen-denominated debt's interest and principal obligations. Accordingly, the above hedging relationship would qualify as a foreign currency cash flow hedge, provided that the relationship meets all of the other criteria in ASC 815.

Hedging Proceeds to Be Received From a Forecasted Foreign-Currency-Denominated Debt Issuance

Question 7-11: Is the variability in functional-currency-equivalent proceeds expected to be received from the forecasted issuance of debt denominated in a currency other than the reporting entity's functional currency eligible for designation as the hedged transaction in a cash flow hedge of foreign currency risk?

PwC Interpretive 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 an entity will receive upon borrowing at a specified date in the future does not present an earnings exposure. Future foreign currency transaction gains or losses that occur on the foreign-currency-denominated debt remeasured under ASC 830 bear no relationship to the difference in functional-currency-equivalent proceeds received due to changes in exchange rates between the forecasted date and the issue date. Therefore, an anticipated foreign currency borrowing is not a transaction that qualifies for hedge accounting of foreign currency risk.

Amortization of Basis Adjustments Recorded in a Fair Value Hedge of Debt Denominated in a Foreign Currency

Question 7-12: Company A issued fixed-rate debt denominated in a foreign currency. The fair value exposure from the fixed-rate debt is hedged by using a cross-currency interest rate swap. The designated risk being hedged is the change in overall fair value. In order to achieve the accounting and economic match between the hedging instrument and hedged item, the company chooses to begin amortization of the basis adjustments immediately. What is the impact of changes in foreign currency exchange rates on the amortization of the resulting basis differences between carrying value and par value?

PwC Interpretive Response: ASC 815-25-35-1(b) requires that the carrying value of any hedged item in a fair value hedge be adjusted for changes in fair value attributable only to the hedged risk. ASC 815-25-35-8 states in part, "the adjustment of the carrying amount of a hedged asset or liability required by paragraph 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".

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The “other components” of the carrying value of fixed-rate debt include discounts and premiums. ASC 835-30-45-1A states, “The discount or premium resulting from the determination of present value in cash or non-cash transactions is not an asset or liability separable from the note which gives rise to it. Therefore, the discount or premium should be reported in the balance sheet as a direct deduction from or addition to the face amount of the note”. Discounts and premiums are amortized and charged to interest expense over the period of time that the bonds are outstanding by using the effective interest method. Accordingly we believe that the hedging basis adjustments are similar to debt premiums and discounts and should be amortized by using an interest method.

When debt is denominated in a foreign currency, the components of the carrying amount, including hedging basis adjustments and, premiums or discounts should be determined and amortized in the bond’s denominated currency. After correctly accounting for the bond in its denominated currency, all foreign-currency-denominated amounts should be remeasured to the functional currency of Company A.

ASC 815-25-35-18 states in part, “Remeasurement of the foreign-currency-denominated assets and liabilities is based on the guidance in Subtopic 830-20, which requires remeasurement based on spot exchange rates, regardless of whether a fair value hedging relationship exists.” Consistent with the guidance above, Company A should translate the balance sheet at period end by using the spot rate and translate the interest amortization for the period in accordance with the guidance in ASC 830.

Example: Company A issued an 8 percent fixed-rate (euro) denominated bond with a five-year term, at a premium. The company’s functional currency is U.S. dollars, and it simultaneously enters into a cross-currency interest rate swap to hedge the risk of changes in overall fair value. All the criteria for a fair value hedge are met. The following journal entries should be made by Company A.

To record the issuance of the bond:

Dr Cash	€105,000	
Cr Premium on Bonds Payable		€ 5,000
Cr Bonds Payable		€100,000

To record the first-year interest payment and premium amortization by using the (effective interest method) is:

Dr Interest Expense	€ 6,400	
Dr Premium on Bonds Payable	€ 1,600**	
Cr Cash		€ 8,000

To record swap fair value:

Dr Loss on Hedge Activity	€ 500	
Cr Swap		€ 500

** (Hypothetical amount for illustration purposes only. See DH 9, Example 9-1, for an example calculated using the effective interest method.)

(continued)

To record fair value hedging basis adjustment:			
Dr Fair Value Hedging Basis Adjustment	€	500	
Cr Gain on Hedge Activity			€ 500
To record amortization of fair value hedging basis adjustment using the effective interest method:			
Dr Interest Expense	€	100	
Cr Fair Value Hedging Basis Adjustment			€ 100
The bonds' new carrying value at the end of the first year would be:			
Bonds Payable		€100,000	
Unamortized Premium (5,000 – 1,600)		€ 3,400	
Fair Value Hedge Basis Adjustment			€ 400
New carrying value			€103,000
In accordance with ASC 830, all foreign-currency-denominated amounts after making the above entries should be re-measured to U.S. dollars at the applicable spot rates. The use of the spot rate will result in a level effective yield and ensure that foreign exchange rate movements do not result in a gain or loss at maturity of the debt.			

Forward Contract

Question 7-13: A company forecasts that six months from now it will purchase 25,000 units of inventory for 100,000 euros. The company's functional and reporting currency is the U.S. dollar. The company would like to hedge its foreign currency exposure on its forecasted purchase.

The company enters into a foreign currency cash flow hedge of its forecasted purchase by executing a purchased call and written put option. The combination of options appears to be a zero-cost collar because the company does not pay a premium to the counterparty bank.

The put and call options have the same maturity date (i.e., the date the forecasted purchase will occur) and can be exercised only at the maturity date. The call and put options have the same underlying (i.e., the same foreign currency in which the inventory is priced by the supplier) and strike prices (i.e., the same foreign exchange rate), but different notional amounts. The call option has a notional of 100,000 euros and the put option has a notional of 80,000 euros.

The combination of options essentially represents an off-market forward purchase with a notional of 80,000 euros combined with a purchased call option with a notional of 20,000 euros. The combination of options consists of a synthetic forward for 80,000 euros since the call and put options have the same strike price and exercise date. In other words, one counterparty to the arrangement will be in a gain position and will be economically compelled to exercise its respective option to receive such gain. The company will receive either 80,000 euros at the strike price if the put option is in-the-money or 100,000 euros at the strike price if the call option is in-the-money. In either scenario, the company will be purchasing at least 80,000 euros at the contractual strike price under the arrangement.

In order to finance the purchased call option (20,000 notional), the company and the bank structure the terms of the options such that the strike price for the call and put options on 80,000 euros is unfavorable to the company compared with the strike price the company would have received without the financing component in the marketplace. The consideration for the off-market strike price will be used to purchase the incremental call option creating an uneven notional arrangement.

The participating forward provides the following benefits for the company:

1. The call option allows the company to hedge itself from an unfavorable movement in the foreign exchange market. If the euro appreciates and the foreign exchange rate rises above the strike price, the company will exercise the call option and in turn use the 100,000 euros to execute its forecasted inventory purchase. The company is completely hedged against its downside risk (i.e., the foreign exchange exposure above the strike price) because the notional of the call option matches the notional of its forecasted purchase in euros.
2. If the euro depreciates and the foreign exchange rate decreases below the strike price, the counterparty bank will exercise the put option, requiring the company to purchase 80,000 euros at the strike price. However, the company will still need to purchase 20,000 euros in the open market to execute its forecasted inventory purchase. This 20,000 euro purchase will be at the current foreign exchange rate which is lower than the strike price of the “synthetic forward.” Therefore, the company may still “participate” in favorable movements (i.e., decrease in foreign exchange rates) in the foreign exchange market.

Can this participating forward contract be designated as a hedge as a foreign currency cash flow hedge of the risk of changes in the forecasted functional-currency-equivalent cash flow attributable to changes in the euro/U.S. dollar foreign currency exchange rates pursuant to the guidance in ASC 815-20-25-126 through 25-129?

PwC Interpretive Response: No, the combination of options cannot be designated as a foreign currency cash flow hedge with an effectiveness assessment method based on total changes in the option’s cash flows because the combination of options does not comprise either a net purchased option or a zero-cost collar as contemplated by ASC 815 but, rather, contains a synthetic forward instrument.

The guidance in ASC 815-20-25-126 through 25-129 is not intended for a zero-cost collar that in substance contains a synthetic forward, but is intended for a zero-cost collar with appropriate market terms and a reasonably wide range of strike prices for the purchased call and written put options. The aforementioned guidance is applicable only to options or a combination of options. Because forwards and options have their own separate accounting guidance under hedge accounting, it would not be appropriate to account for the synthetic forward under ASC 815-20-25-126 through 25-129.

7.16 Examples

Example 7-1: Use of Forward Exchange Contracts to Hedge a Firm Commitment to Pay Foreign-Currency

In connection with the renovation of one of its plants, a U.S. company (the Company) enters into a firm commitment with a foreign supplier (ABC Company) on September 30, 20X1, to purchase equipment for foreign currency 10,000,000. The equipment is deliverable on March 31, 20X2, and the price is payable on June 30, 20X2. In order to hedge the commitment to pay foreign currency 10,000,000, the Company enters into a forward exchange contract on September 30, 2001, to receive foreign currency 10,000,000 on June 30, 20X2, at an exchange rate of foreign currency 1.00 = U.S. \$0.72.

Assume the following:

Foreign Currency (FC)/U.S.\$ Exchange Rates

Date	Spot Rates	Forward Rates for June 30, 20X2
September 30, 20X1	FC 1.00 = U.S. \$0.65	FC 1.00 = U.S. \$0.72
December 31, 20X1	FC 1.00 = U.S. \$0.66	FC 1.00 = U.S. \$0.71
March 31, 20X2	FC 1.00 = U.S. \$0.69	FC 1.00 = U.S. \$0.71
June 30, 20X2	FC 1.00 = U.S. \$0.70	N/A

Fair Value Analysis

The Company determines the fair values of the forward contract, which are based on the changes in forward rates discounted on a net present value basis.

Date	Fair Value of Forward Contract (Discounted at 6 percent) ¹	Change in Fair Value of Forward Contract Gain (Loss)
September 30, 20X1	\$ —	\$ —
December 31, 20X1	(97,066)	(97,066)
March 31, 20X2	(98,522)	(1,456)
June 30, 20X2	(200,000)	(101,478)
Total		\$(200,000)

¹ Fair values of the forward contract are derived as follows:
 $12/31/X1 - (\$97,066) = [FC\ 10,000,000 \times (0.71 - 0.72)] / [(1 + .06 / 4)^2]$
 $3/31/X2 - (\$98,522) = [FC\ 10,000,000 \times (0.71 - 0.72)] / [(1 + .06 / 4)]$
 $6/30/X2 - (\$200,000) = [FC\ 10,000,000 \times (0.70 - 0.72)]$

(continued)

Hedge Effectiveness Analysis

Date	Change in Fair Value of		
	Forward Contract Based on Changes in Forward Rate Gain (Loss)	Firm Commitment Based on Changes in Forward Rate ² Gain (Loss)	Effectiveness Ratio for the Period
December 31, 20X1	\$(97,066)	\$97,066	1.00
March 31, 20X2	(98,522)	98,522	1.00

² Consistent with the valuation basis of forward exchange contracts, the changes in the fair value of the firm commitment for the foreign currency risk that is being hedged are also computed on a present value basis. These changes are expected to be opposite but identical to those in the forward exchange contracts, since the critical terms (i.e., amounts, dates, and currencies) of the two contracts are identical.

Management assesses hedge effectiveness based on a measurement of the difference between changes in the value of the forward exchange contracts and the U.S. dollar equivalent of the firm commitment, both of which are calculated based on changes in forward rates from the inception of the hedge. Accordingly, management determines that there would be no hedge ineffectiveness.

Initial Hedge Documentation

The hedging relationship and entity's risk management objective and strategy for undertaking the hedge

The objective of the transaction is to hedge the changes in fair value of the equipment purchase firm commitment attributable to changes in foreign currency rates between foreign currency and U.S. dollar.

Date of Designation is September 30, 20X1.

The hedging instrument

A forward contract (Forward ID#12345) to buy foreign currency 10,000,000 at an exchange rate of FC 1.00 = U.S. \$0.72 on June 30, 20X2.

The hedged item or transaction

The firm commitment to purchase equipment from ABC Company at foreign currency 10,000,000 is on March 31, 20X2.

The nature of the risk being hedged

The risk of variability in foreign currency exchange rates.

The method that will be used to retrospectively and prospectively assess the hedging instrument's effectiveness³

The Company has performed an assessment that determined that all critical terms of the hedging instrument and the hedged transaction match and as such has qualitatively concluded that changes in the fair value attributable to the changes in the foreign currency rates between the foreign currency and the U.S. dollar are expected to be completely offset by the forward contract. In making that determination, the guidance in ASC 815-20-25-84 was used (see analysis below). The Company will perform subsequent assessments by verifying and documenting

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³ Actual documentation should be more specific than what is described in this illustrative example. In general, reperformance of effectiveness assessments and ineffectiveness measurements should be possible based on the initial hedge documentation.

whether the critical terms of the hedging instrument and firm commitment have changed during the period in review and that there are no adverse developments with respect to counterparty credit risk. If there are no such changes in critical terms or adverse developments, the Company will continue to conclude that there is no ineffectiveness to be recorded.

The Company assessed the critical terms as follows:

- ASC 815-20-25-84(a): The critical terms of the forward and the hedged transaction are identical (i.e., same notional, same date, same currency)
- ASC 815-20-25-84(b): The fair value of the forward is zero at inception. No amounts were paid or received and the forward was entered into at market rates
- ASC 815-20-25-84(c): Effectiveness will be assessed based on changes in the forward rate

The method that will be used to measure hedge ineffectiveness³

The Company will compare the overall changes in fair value of the forward to the overall changes in the value of the foreign currency payment of the firm commitment measured at the forward rate. The changes in the fair value of both the forward and the firm commitment will be recorded in current earnings. Since the critical terms of the forward and the firm commitment are identical, the company expects no ineffectiveness.

Note that this example assumes the other fair value hedge criteria are met. The Company needs to assess and document these criteria as part of its hedge documentation.

Application of ASC 815

A contract to purchase equipment for a fixed price is an unrecognized firm commitment. The hedge of the foreign currency exposure in an unrecognized firm commitment can be considered a foreign currency fair value hedge (ASC 815-20-25-58). Accordingly, the forward contract is recognized as an asset or liability and marked to market through the income statement (ASC 815-20-35-1(b), ASC 815-25-35-1(a) and ASC 815-25-35-15 through 35-16). The change in the value of the firm commitment that arises due to fluctuations in the forward exchange rate is also reflected in income and as an asset or liability on the balance sheet (ASC 815-20-35-1(b), ASC 815-25-35-1(b) and ASC 815-25-35-16). At the time that the equipment is received, a liability for the purchase price is recorded in the amount of the foreign currency payable multiplied by the current spot rate. The hedging relationship is terminated at such time. The liability is thereafter measured at the current spot exchange rate, with gains and losses reflected in earnings in accordance with ASC 830. The equipment is recorded at the amount of the liability, net of the amount previously recorded for the firm commitment. The forward exchange contract remains on the accounting records as an effective hedge of the liability, since the gains and losses on both the liability (i.e., the hedged item) and the forward exchange contract (i.e., the hedging instrument) are recorded in current earnings and they naturally offset each other in the income statement.

(continued)

³ Actual documentation should be more specific than what is described in this illustrative example. In general, reperformance of effectiveness assessments and ineffectiveness measurements should be possible based on the initial hedge documentation.

PwC Observation: The hedge period ended on March 31, 20X2. However, a natural hedge exists during the period March 31 through June 30 when the payable is outstanding. The foreign currency denominated payable is remeasured to the company's functional currency using the reporting period end spot rate. The change in the fair value of the forward contract consists of three components: (1) change in spot, (2) interest on opening forward fair value and (3) change in forward/spot differential. As a result, generally there is a small income statement mismatch between the forward and the payable due to implicit interest cost. In this example, the convention of using undiscounted payables in recording purchases at spot rates combined with large forward/spot differences converging post-acquisition of the equipment result in losses on both the hedging instrument and the hedged item even though the hedge was effective.

Note: The fair value of the forward contract is obtained from a broker quote, which is calculated on a discounted present value basis.

Accounting Entries	Debit	Credit
September 30, 20X1⁴		
December 31, 20X1		
1. Foreign exchange gains or losses ⁵	\$ 97,066	
Forward contract payable		\$ 97,066
To recognize the change in the fair value of the forward exchange contract at December 31, 20X1		
2. Firm commitment	97,066	
Foreign exchange gains or losses		97,066
To recognize the change in the fair value of the firm commitment that is due to changes in exchange rates		
March 31, 20X2		
3. Foreign exchange gains or losses	1,456	
Forward contract payable		1,456
To recognize the change in the fair value of the forward exchange contract as of March 31, 20X2		
4. Firm commitment	1,456	
Foreign exchange gains or losses		1,456
To recognize the change in the fair value of the firm commitment that is due to changes in exchange rates		
5. Equipment ⁶	6,998,522	
Firm commitment ⁶		98,522
Accounts payable		6,900,000
To record the receipt of the equipment on March 31, 20X2 (at the forward contract rate established by the hedge) and the related payable at the March 31, 20X2, spot rate. The equipment is placed in service on June 30, 20X2		

⁴ No entry is required, as the forward exchange contract's fair value is zero at the date of its initiation.

⁵ For purposes of this example, deferred tax entries are ignored.

⁶ The equipment is recorded at \$6,998,522 because the firm commitment is recorded at fair value (i.e., on a discounted present value basis) while the accounts payable (FC 10,000,000 x U.S. \$0.69) is recorded without reflecting any discount for time value. Depreciation is not calculated for the subsequent period because the equipment is not placed in service until June 30, 20X2.

(continued)

Accounting Entries	Debit	Credit
June 30, 20X2		
6. Foreign exchange gains or losses ⁷	\$ 101,478	
Forward contract payable		\$ 101,478
To recognize the change in fair value of the forward exchange contract		
7. Foreign exchange gains or losses ⁷	100,000	
Accounts payable		100,000
To recognize the transaction loss on the foreign currency accounts payable		
8. Accounts payable ⁸	7,000,000	
Forward contract payable	200,000	
Cash		7,200,000
To record the settlement of the forward contract receivable and accounts payable at June 30, 20X2		

⁷ For entry six, the change in the fair value of the forward contract is based on spot rates (FC 10,000,000 x U.S. (\$0.70 – \$0.69)) plus the accrual of interest on the opening forward contract fair value. For entry seven, the transaction loss is based on solely on changes in spot rates and ignores the accrual of interest.

⁸ (FC 10,000,000 x U.S. \$0.70).

Example 7-2: Use of a Fixed-to-Fixed Cross Currency Swap to Hedge a Recognized Foreign-Denominated Debt

On January 1, 20X1, Company A (the Company), a U.S. dollar-functional currency entity, issues debt denominated in a foreign currency of FC 1,000,000. The debt matures on December 31, 20X3, and bears interest at a fixed rate of 8 percent. Interest is payable annually on December 31. Concurrent with its debt issuance, Company A enters into a cross currency swap to hedge the foreign currency exchange risk associated with the debt. The swap consists of three elements: (1) an initial exchange (2) the intervening payments, in which the Company makes fixed-rate payments of 7 percent at the current spot of \$1.60, and receives foreign currency fixed payments of 8 percent on FC 1,000,000 and (3) the maturity exchange. All terms of the swap match those of the foreign currency debt including the notional amount and interest payment dates.

The spot U.S./FC exchange rates, FC swap rates, U.S. swap rates, and the fair value of the fixed-to-fixed cross currency swap at inception and on December 31 each year over the life of the hedge relationship are presented in the following table. For simplicity, it has been assumed that the interest rates in U.S. and in FC have a flat yield curve during each year.

(continued)

Date	Exchange Rate	FC Swap Rate	U.S. Swap Rate	Fair Value of Swap Gain (Loss) Clean Values (i.e., Excludes Accrued Interest)
January 1, 20X1	U.S.\$1.60/FC 1.00	8.00%	7.00%	\$ —
December 31, 20X1	U.S.\$1.65/FC 1.00	8.50%	7.16%	40,007*
December 31, 20X2	U.S.\$1.58/FC 1.00	8.25%	7.58%	(15,023)**
December 31, 20X3	U.S.\$1.63/FC 1.00	N/A	N/A	30,000***

* $\$40,007 = [(FC\ 80,000) / (1 + .085) + (FC\ 1,080,000) / (1 + .085)^2] \times 1.65 - [(\$112,000) / (1 + .0716) + (\$1,712,000) / (1 + .0716)^2]$.

** $(\$15,023) = [(FC\ 1,080,000) / (1 + .0825)] \times 1.58 - [(\$1,712,000) / (1 + .0758)]$.

*** $30,000 = (FC\ 1,000,000 \times \$1.63) - \$1,600,000$.

Hedge Results — Company A

Date	Debt		Cross Currency Swap			Maturity Exchange	Total Cash Flow per Period-Receipt (Payment)
	Principal	Interest ²	Initial Exchange	Settlement Payments	Settlement Receipts ²		
1/1/X1	FC 1,000,000		FC (1,000,000) \$1,600,000				\$ 1,600,000
12/31/X1		FC (80,000)		\$(112,000) ¹	FC 80,000		\$ (112,000)
12/31/X2		FC (80,000)		\$(112,000) ¹	FC 80,000		\$ (112,000)
12/31/X3	FC (1,000,000)	FC (80,000)		\$(112,000) ¹	FC 80,000	FC 1,000,000 \$(1,600,000) ³	\$ (112,000) \$(1,600,000)

¹ FC 1,000,000 x 1.60 x .07.

² By entering into the fixed-to-fixed cross currency swap, the Company fixed its interest expense in U.S. dollar at 7 percent.

³ The principal amount to be repaid at maturity was fixed to equal the foreign currency notional amount multiplied by the spot rate of U.S.\$1.60/FC 1.00 at the inception of the hedge.

Initial Hedge Documentation

The hedging relationship and entity's risk management objective and strategy for undertaking the hedge

The objective of the hedge transaction is to eliminate all variability in the functional-currency-equivalent cash flows of the foreign currency-denominated debt due to changes in the U.S. dollar/FC exchange rate.

Date of Designation is January 1, 20X1.

The hedging instrument

A three year fixed-to-fixed cross currency swap (FX swap ID#12345) in which the Company will receive fixed foreign currency at a rate of 8 percent on FC 1,000,000 and pay fixed U.S. dollar at a rate of 7 percent on U.S. dollar 1,600,000. The agreement requires an exchange of the notional amounts at inception and at maturity. Interest will be paid annually on December 31.

The hedged item or transaction

The fixed-to-fixed cross currency swap is designated as a cash flow hedge of the changes in the cash flows of the foreign currency-denominated debt resulting from foreign exchange risk. In a separate document, the Company has appropriately concluded and documented that the forecasted transaction is probable of occurring and will subsequently update this assessment each period.

(continued)

The nature of the risk being hedged

The risk of variability in foreign currency exchange rates.

The method that will be used to retrospectively and prospectively assess the hedging instrument's effectiveness⁴

The Company has performed an assessment that determined that all critical terms of the hedging instrument and the hedged transaction match and as such has qualitatively concluded that changes in the functional-currency-equivalent cash flows attributable to changes in the related foreign currency exchange risk are expected to be offset by the cross-currency swap. In making that determination, the guidance in ASC 815-20-25-84 was used (see analysis below). Future assessment will be performed utilizing the guidance in ASC 815-20-35-9 through 35-13, *Relative Ease of Assessing Effectiveness*. The Company will perform subsequent assessments by verifying and documenting whether the critical terms of the hedging instrument and forecasted transaction have changed during the period in review and that there are no adverse developments with respect to counterparty credit risk. If there are no such changes in critical terms or adverse developments, the Company will continue to conclude that there is no ineffectiveness to be recorded.

In the event that the Company's ongoing assessment demonstrates that critical terms of the hedging instrument or the forecasted transaction have changed, or that there have been adverse developments regarding the risk of the counterparty defaulting, the Company will use the long-haul method, outlined in the Hypothetical Derivative Method under ASC 815-30-35-25 through 35-30, in accordance with company policy, to measure ineffectiveness. Therefore, to the extent the cross-currency swap is effective, the changes in its fair value will be recorded through other comprehensive income. To the extent the swap is not effective, changes in its fair value will be recorded in earnings. The Company in this instance, will also then be required to perform a quantitative assessment of hedge effectiveness, and will perform a regression analysis using the hypothetical derivative and the hedging derivative in accordance with its standard policies.

The Company assessed the critical terms as follows:

- ASC 815-20-25-84(a): The critical terms of the debt and the cross-currency swap are identical (i.e., notional, interest rate, cash flow date)
- ASC 815-20-25-84(b): The fair value of the swap was at inception is zero. No amounts were paid or received and the swap was entered into at market rates
- ASC 815-20-25-84(c): Effectiveness will be assessed based on changes in the spot rate.

The method that will be used to measure hedge ineffectiveness⁴

As the critical terms match, the Company does not expect to incur any ineffectiveness. However, if there is any ineffectiveness (e.g., due to a change in the counterparty's credit rating), the Company will use the hypothetical derivative method, to measure ineffectiveness.

Note that this example assumes the other cash flow hedge criteria are met. The Company needs to assess and document these criteria as part of its hedge documentation.

(continued)

⁴ Actual documentation should be more specific than what is described in this illustrative example. In general, reperformance of effectiveness assessments and ineffectiveness measurements should be possible based on the initial hedge documentation.

Application of ASC 815

This cross currency swap can be designated as hedging the foreign currency exposure to variability in the functional-currency-equivalent cash flows associated with forecasted interest and principal payments of the foreign currency denominated debt.

By entering into the fixed-to-fixed cross currency U.S. dollar interest-rate swap, the Company fixed, at the inception of the hedge, (1) the interest expense throughout the life of the debt and (2) the amount due in U.S. dollar at maturity.

Since the notional amount of the fixed-to-fixed cross-currency swap is equal to the foreign currency denominated debt, and all of the payment dates agree between the cross-currency swap and the foreign currency denominated debt, the Company concluded that the total changes in the cash flows attributable to changes in the U.S./FC exchange rates are expected to completely offset at inception and throughout the term of the hedging transaction. However, the Company will assess every period (a) that the critical terms of the hedged item and the hedging instrument continue to match and (b) the counterparty credit risk.

The Company has formally documented its objective and strategy for undertaking the hedge.

Accounting Entries	Debit	Credit
January 1, 20X1⁵		
1. Cash	\$1,600,000	
Foreign currency debt		\$1,600,000
To record the issuance of the foreign currency-denominated debt		
December 31, 20X1		
2. Interest expense ⁶	132,000	
Accrued interest payable		132,000
To record the annual interest payable on the foreign-currency-denominated debt		
3. Currency-swap receivable ⁷	20,000	
Interest expense		20,000
To record the net settlement interest on the currency swap		
4. Accrued interest payable	132,000	
Cash		132,000
To record the annual interest payment on the foreign-currency-denominated debt		
5. Cash	20,000	
Currency-swap receivable		20,000
To record the settlement of the currency-swap net settlement interest		

⁵ No entry is made to record the fair value of the swap contract at its inception, because at the time of initiation its fair value is zero.

⁶ FC 1,000,000 x .08 x \$1.65.

⁷ (FC 1,000,000 x .08 x \$1.65) less (\$1,600,000 x .07). With foreign currency swaps, these settlement payments are often made on a gross basis. For simplicity, we are presenting them net.

(continued)

Accounting Entries	Debit	Credit
6. Transaction loss ⁸	\$ 50,000	
Foreign currency debt		\$ 50,000
To record the transaction loss on the debt		
7. Currency-swap receivable	40,007	
Other comprehensive income		40,007
To record the change in the fair value of currency-swap		
8. Accumulated other comprehensive income	50,000	
Transaction gain		50,000
To record an amount necessary to offset the transaction loss recorded on the debt		
<hr/>		
December 31, 20X2		
9. Interest expense ⁹	126,400	
Accrued interest payable		126,400
To record the annual interest payable on the foreign-currency-denominated debt		
10. Currency-swap receivable ¹⁰	14,400	
Interest expense		14,400
To record the net settlement interest on the currency swap		
11. Accrued interest payable	126,400	
Cash		126,400
To record the annual interest payment on the foreign-currency-denominated debt		
12. Cash	14,400	
Currency swap receivable		14,400
To record the settlement of the currency-swap net settlement interest		
13. Foreign currency debt ¹¹	70,000	
Transaction gain		70,000
To record the transaction gain on the debt		
14. Other comprehensive income	55,030	
Currency swap payable		55,030
To record the change in the fair value of currency-swap		
15. Transaction loss	70,000	
Other comprehensive income		70,000
To record an amount necessary to offset the transaction gain recorded on the debt		

⁸ (\$1.65 – \$1.60) x FC 1,000,000.

⁹ FC 1,000,000 x .08 x \$1.58.

¹⁰ (FC 1,000,000 x .08 x 1.58) less (\$1,600,000 x .07). With foreign currency swaps, these settlement payments are often made on a gross basis. For simplicity, we are presenting them net.

¹¹ (\$1.58 – \$1.65) x FC 1,000,000.

(continued)

Accounting Entries	Debit	Credit
December 31, 20X3		
16. Interest expense ¹²	\$130,400	
Accrued interest payable		\$130,400
To record the annual interest payable on the foreign-currency-denominated debt		
17. Currency-swap receivable ¹³	18,400	
Interest expense		18,400
To record the net settlement interest on the currency swap		
18. Accrued interest payable	130,400	
Cash		130,400
To record the annual interest payment on the foreign-currency-denominated debt		
19. Cash	18,400	
Currency-swap receivable		18,400
To record the settlement of the currency-swap net settlement interest		
20. Transaction loss ¹⁴	50,000	
Foreign currency debt		50,000
To record the transaction loss on the debt		
21. Currency swap receivable	45,023	
Other comprehensive income		45,023
To record the change in the fair value of currency-swap		
22. Accumulated other comprehensive income	50,000	
Transaction gain		50,000
To record an amount necessary to offset the transaction loss recorded on the debt		
23. Cash	30,000	
Currency swap receivable		30,000
To record the principal net settlement on the currency-swap		

¹² FC 1,000,000 x .08 x \$1.63.

¹³ (FC 1,000,000 x .08 x 1.63) less (\$1,600,000 x .07). With foreign currency swaps, these settlement payments are often made on a gross basis. For simplicity, we are presenting them net.

¹⁴ (\$1.63 – \$1.58) x FC 1,000,000.

Example 7-3: Use of a Forward-Exchange Contract to Hedge the Foreign-Currency Fair Value Risk of an Available-for-Sale Security

On September 30, 20X1, a U.S. company (the Company) purchases a foreign-currency-denominated debt security (or an eligible foreign-currency-denominated equity security listed on a foreign stock exchange but not listed on any U.S. stock exchange) for FC 100,000. The security is classified as available for sale (AFS). The

(continued)

Company decided to hedge the risk of the currency fluctuations of this available for sale security over the next three months and entered into a forward contract to sell FC 100,000 on December 31, 20X1, at an exchange contract rate of FC 1 = U.S.\$1.49 (i.e., the Company will pay 1 FC for each \$1.49). The Company has elected to exclude the changes in the difference between the forward rate and the spot rate from the effectiveness assessment, which will be recorded in earnings. Hedge effectiveness will be assessed based on changes in the spot rate. Assume the following:

Date	Spot Exchange Rate	Forward Exchange Rate to 12/31/01	Fair Value of Forward Contract
September 30, 20X1	FC 1 = U.S. \$1.50	FC 1 = U.S. \$1.49	\$ —
December 31, 20X1	FC 1 = U.S. \$1.30	FC 1 = U.S. \$1.30	19,000*
Change in fair value			19,000

*\$19,000 = FC 100,000 x (\$1.49 – \$1.30)

Date	Spot Exchange Rate	Fair Value of the Security
September 30, 20X1	FC 1 = U.S. \$1.50	FC 100,000
December 31, 20X1	FC 1 = U.S. \$1.30	FC 110,000

The Company's policy of segregating the impact of foreign currency risk is as follows:

Opening fair value in foreign currency x change in exchange rates FC 100,000 x (U.S. \$1.30 – U.S. \$1.50) = \$20,000 loss

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.

Initial Hedge Documentation

The hedging relationship and entity's risk management objective and strategy for undertaking the hedge

The objective of the hedge transaction is to hedge the changes in fair value of the AFS security attributable to changes in foreign currency rates between foreign currency and U.S. dollar.

Date of Designation is September 30, 20X1

The hedging instrument

A forward contract (Forward ID#12345) to sell FC 100,000 at an exchange rate of FC 1.00 = U.S. \$1.49 on December 31, 20X1.

The hedged item or transaction

Foreign currency denominated AFS security (Security ID#12345) purchased on September 30, 20X1, for an original investment of FC 100,000.

The nature of the risk being hedged

The risk of variability in FC exchange rates.

(continued)

The method that will be used to retrospectively and prospectively assess the hedging instrument's effectiveness¹

The Company has performed an assessment that determined that all critical terms of the hedging instrument and the hedged transaction match and as such has qualitatively concluded that changes in the fair value of the AFS security attributable to the changes in the spot rate are expected to be completely offset by the forward contract. In making that determination, the guidance in ASC 815-20-25-84 was used (see analysis below). The Company will perform subsequent assessments by verifying and documenting whether the critical terms of the hedging instrument and forward transaction have changed during the period in review and that there are no adverse developments with respect to counterparty credit risk. If there are no such changes in critical terms or adverse developments, the Company will continue to conclude that there is no ineffectiveness to be recorded.

The Company assessed the critical terms as follows:

- ASC 815-20-25-84(a) The critical terms of the forward and the hedged transaction are identical (i.e., notional, date, currency).
- ASC 815-20-25-84(b) The fair value of the forward is zero at inception. No amounts were paid or received and the forward was entered into at market rates.
- ASC 815-20-25-84(c) Effectiveness will be assessed based on changes in the spot rate.

The method that will be used to measure hedge ineffectiveness¹

Hedge effectiveness will be assessed based on the overall changes in spot rate of the AFS security based on the original investment of FC 100,000. Changes in the fair value of the AFS security due to changes in the spot rate are recorded in earnings, along with the entire change in the fair value of the forward exchange contract. In other words, changes in the difference between the forward and spot rate are excluded from the assessment of hedge effectiveness and will be recorded in earnings. No other ineffectiveness is expected as the notional of the forward matches the original investment of the FC denominated AFS security. Changes in the fair value of the AFS security that are due to unhedged risks will continue to be recorded in other comprehensive income as required by ASC 320.

Counterparty credit risk will be monitored throughout the hedge period.

Note that this example assumes the other fair value hedge criteria in ASC 815 are met. The Company needs to assess and document these criteria as part of its hedge documentation.

Application of ASC 815

ASC 815-20-25-37, 25-71, and 815-20-35-1 specify the rules for hedges of the foreign currency risk of AFS securities. Accordingly, this transaction is designated as a foreign currency fair value hedge. Changes in the fair value of the AFS securities that are attributable to the hedged foreign currency risk are recorded in earnings, along with the entire change in the fair value of the hedging instrument (i.e., the forward-exchange contract in this example). Changes in the fair value of the AFS securities that are due to unhedged risks will continue to be recorded in other comprehensive income as required by ASC 320.

(continued)

¹ Actual documentation should be more specific than what is described in this illustrative example. In general, reperformance of effectiveness assessments and ineffectiveness measurements should be possible based on the initial hedge documentation.

Hedge Effectiveness Analysis

Date	Change in Fair Value of Forward Contract Gain (Loss) Due to Spot Rate	Change in Fair Value of AFS Security Due to Change in Exchange Rates Gain/Loss	Effectiveness Ratio
December 31, 20X1	\$20,000	\$(20,000)	1.00

Management determines that the forward contract is highly effective in offsetting changes in the fair value of the AFS security attributable to changes in currency exchange rates.

Accounting Entries	Debit	Credit
September 30, 20X1²		
1. Investment in AFS security	\$150,000	
Cash		\$150,000
To record the purchase of the foreign AFS security		
December 31, 20X1		
2. Forward contract receivable	19,000	
Gain on hedge activity		19,000
To record the change in the fair value of the forward contract		
3. Loss on hedge activity	20,000	
Investment in AFS security		20,000
To record the change in the fair value of the AFS security attributable to the foreign-currency risk that is being hedged		
4. Investment in AFS security ³	13,000	
Other comprehensive income		13,000
To record the change in the fair value of the AFS security that is attributable to risks that are not hedged		
5. Cash	19,000	
Forward contract receivable		19,000
To record the settlement of the forward contract at its maturity		

² No entry is made to record the forward contract, because it was entered into at the market (i.e., the fair value of the contract on the date that it was entered into was zero).

³ FC 10,000 gain (FC 110,000 – FC 100,000) multiplied by current exchange rate of FC 1 = U.S. \$1.30.

Example 7-4: Use of a Foreign-Currency Forward to Hedge a Forecasted Foreign-Currency Sale

Company A (the Company) is a U.S. manufacturer with a U.S. dollar functional currency. The Company forecasts the sale of 100,000 units of its primary product to a foreign customer for a price of FC 10,000,000, due at the date of sale. The sale has not been firmly committed to, but the Company expects that it will occur in six months, on March 31, 20X2 (historical experience with this foreign customer

(continued)

indicates that the sale is probable). As a consequence, the Company is exposed to changes in the U.S. dollar foreign currency exchange rate, and its risk management policy is to eliminate all transactional foreign exchange exposure through the use of foreign currency forward contracts. Accordingly, the Company enters into a six-month foreign currency exchange forward contract on September 30, 20X1, to hedge its foreign-currency exposure. The foreign exchange forward contract has the following terms:

Contract Amount: FC 10,000,000
Maturity Date: March 31, 20X2
Forward Contract Rate: 2.00 FC = U.S. \$1.00

FC/U.S.\$ Exchange Rates

Date	Spot Rates	Forward Rates for March 31, 20X2
September 30, 20X1	1.75 FC/U.S.\$1.00	2.00 FC/U.S.\$1.00
December 31, 20X1	1.85 FC/U.S.\$1.00	2.05 FC/U.S.\$1.00
March 31, 20X2	2.10 FC/U.S.\$1.00	N/A

Fair Value Analysis

The Company obtains the fair values of the forward exchange contract from dealer, which are based on the changes in forward rates discounted on a net present value basis.

	Fair Value of Forward Contract (Discounted at 6.4691%*)	Change in Fair Value of Forward Contract Gain (Loss)
September 30, 20X1	\$ —	\$ —
December 31, 20X1	120,000	120,000
March 31, 20X2	238,095	118,095
Total		\$238,095

*Annual percentage yield compounded monthly.

As permitted by ASC 815-20-25-82, an entity may choose to assess hedge effectiveness based on changes in spot rates or forward rates. The selection of a specific method of assessing hedge effectiveness, in this type of hedge, has some noteworthy accounting implications. In particular, assessing hedge effectiveness based on changes in spot rates may allow a company to assert critical terms matching when the maturity date of the derivative does not exactly match that of the underlying exposure. Taking this election, however, may create more volatility in earnings than assessing based on total derivative value. Scenario 1 that follows illustrates the application of ASC 815 where hedge effectiveness is assessed based on changes in forward rates, while scenarios 2 and 3 that follow illustrates the application of ASC 815 where hedge effectiveness is assessed based on changes in spot rates.

(continued)

Scenario 1

The Company assesses hedge effectiveness based on the entire change in fair value of the forward contract.

Hedge Effectiveness Analysis

Date	Change in Cash Flow of		Effectiveness Ratio	
	Forward Exchange Contract Gain (Loss)	Anticipated FC Sale Gain (Loss)	For the Period	Cumulative
December 31, 20X1	\$120,000 ¹	\$(120,000) ²	1.00	1.00
March 31, 20X2	118,095	(118,095) ²	1.00	1.00
Fair Value of Forward at March 31, 20X2	\$238,095			

¹ $(FC\ 10,000,000 / 2.00) - (FC\ 10,000,000 / 2.05) / (1 + .064691 / 12)^3 = \$120,000$.

² Since the critical terms of the hedged item match with the forward exchange contract and the Company assesses hedge effectiveness based on the entire change in fair value, the change in anticipated cash flows will probably be exactly the opposite of that in the forward contract.

Hedge Documentation—Scenario 1

The hedging relationship and entity's risk management objective and strategy for undertaking the hedge

The objective of the hedge transaction is to hedge anticipated FC-denominated sales against currency fluctuations between FC and USD.

Date of Designation is September 30, 20X1.

The hedging instrument

A forward contract (Forward ID#12345) to sell FC 10,000,000 at an exchange rate of FC 2.00 = U.S. \$1 on March 31, 20X2.

The hedged item or transaction

The forward contract is designated as a cash flow hedge of 10,000,000 forecasted foreign currency sales expected to occur on March 31, 20X2. In a separate document, the Company has appropriately concluded and documented that the forecasted transaction is probable of occurring and this assessment will be subsequently updated each period.

The nature of the risk being hedged

The risk of variability in foreign currency exchange rates.

The method that will be used to retrospectively and prospectively assess the hedging instrument's effectiveness³

The Company has performed an assessment that determined that all critical terms of the hedging instrument and the hedged transaction match and as such has qualitatively concluded that changes in the functional-currency-equivalent cash flows attributable to changes in the related foreign currency exchange risk are expected to offset by the forward contract. In making that determination, the guidance in

(continued)

³ Actual documentation should be more specific than what is described in this illustrative example. In general, reperformance of effectiveness assessments and ineffectiveness measurements should be possible based on the initial hedge documentation.

ASC 815-20-25-84 was used (see analysis below). Future assessments will be performed utilizing the guidance in ASC 815-20-35-9 through 35-13, *Relative Ease of Assessing Effectiveness*. The Company will perform subsequent assessments by verifying and documenting whether the critical terms of the hedging instrument and forecasted transaction have changed during the period in review and that there are no adverse developments with respect to counterparty credit risk. If there are no such changes in critical terms or adverse developments, the Company will continue to conclude that there is no ineffectiveness to be recorded.

In the event that Company's ongoing assessment demonstrates that critical terms of the hedging instrument or the forecasted transaction have changed, or that there have been adverse developments regarding the risk of the counterparty defaulting, the Company will use the long-haul method, outlined in the Hypothetical Derivative Method under ASC 815-30-35-25 through 35-30 in accordance with company policy, to measure ineffectiveness. Therefore, to the extent the forward is effective, the changes in its fair value will be recorded through other comprehensive income. To the extent the forward is not effective, changes in its fair value will be recorded in earnings. The Company in this instance, will also then be required to perform a quantitative assessment of hedge effectiveness, and will perform a regression analysis using the hypothetical derivative and the hedging derivative in accordance with its standard policies.

The Company assessed the critical terms as follows:

- ASC 815-20-25-84(a) The forward is for the purchase of the same quantity, at the same currency, at the same time and at the same location as the hedged forecasted payment. The critical terms of the forward and the hedged item are identical.
- ASC 815-20-25-84(b) The fair value of the forward contract at inception is zero. No amounts were paid or received and the forward was entered into at market rates.
- ASC 815-20-25-84(c) Effectiveness will be assessed based on changes in the forward price of the commodity.

The method that will be used to measure hedge ineffectiveness³

As the critical terms match, the Company does not expect to incur any ineffectiveness. However, if there is any ineffectiveness (e.g., due to change in counterparty's credit rating), the company will use the hypothetical derivative method to measure ineffectiveness.

Note that this example assumes the other cash flow hedge criteria are met. The Company needs to assess and document these criteria as part of its hedge documentation.

Application of ASC 815

For both scenarios 1 and 2, the Company's projected sales for March 31, 20X2, are considered a forecasted transaction. A derivative instrument that hedges the foreign currency exposure to the variability of cash flows associated with a forecasted transaction is a foreign currency cash flow hedge provided that it meets all the other cash flow hedging eligibility requirements in ASC 815.

(continued)

³ Actual documentation should be more specific than what is described in this illustrative example. In general, reperformance of effectiveness assessments and ineffectiveness measurements should be possible based on the initial hedge documentation.

The Company must record the forward contract on its balance sheet at fair value. The effective portion of the gain or loss on the forward contract in a hedge of a forecasted foreign-currency-denominated transaction must be reported as a component of other comprehensive income and the ineffective portion must be reported in earnings. The balance in other comprehensive income will be reclassified as earnings on the date of the sale to a third party (i.e., March 31, 20X2 [ASC 815-30-35-38 through 41]).

Note that the hedge documentation for Scenario 2 would be similar to above except the company will document that hedge effectiveness will be assessed based on changes in spot. As a result, the spot to forward difference will be recorded in current earnings.

The journal entries for Company A's first two reporting periods are shown on the following pages.

Accounting Entries—Scenario 1—Forward Method	Debit	Credit
September 30, 20X1		
No entry is required, since the FC forward rate equals the contract rate		
December 31, 20X1		
1. Forward contract receivable	\$ 120,000	
Other comprehensive income		\$ 120,000
To record the change in the fair value of the forward contract		
March 31, 20X2		
2. Forward contract receivable	118,095	
Other comprehensive income		118,095
To record the change in the fair value of the forward contract		
3. Cash	238,095	
Forward contract receivable		238,095
To record the net settlement of the forward contract at its maturity		
4. Cash	4,761,905	
Sales		4,761,905
To record FC 10,000,000 in cash sales at the spot rate of 2.10 FC/U.S.\$		
5. Accumulated other comprehensive income	238,095	
Sales		238,095
To transfer the gain on the hedge activity from other comprehensive income to earnings when the forecasted transaction impacts earnings		

Analysis

Despite the unfavorable change in exchange rates, which reduced the functional currency equivalent sales proceeds received, the entity's sales in U.S. dollar are fixed at the forward rate at inception of the hedge of 2.00 FC to U.S. \$1.00 (i.e., \$4,761,905 + \$238,095 = \$5,000,000).

(continued)

Scenario 2

Assume that the Company elects to assess hedge effectiveness based on changes in the spot exchange rates. Accordingly, the Company will exclude from its assessment of effectiveness the portion of the fair value of the forward contract attributable to changes of the spot-forward difference (the difference between the spot exchange rate and the forward exchange rate). That is, the Company will recognize changes in that portion of the derivative's fair value in earnings but will not consider those changes to represent ineffectiveness. The Company will estimate the cash flows on the forecasted transaction based on the current spot exchange rate. Thus, the Company will assess effectiveness by comparing (a) changes in the fair value of the forward contract attributable to changes in the dollar spot price of foreign currency and (b) changes in the forecasted cash flows based on the current spot exchange rate. Those two changes will exactly offset because the currency and the notional amount of the forward contract match the currency and the expected foreign currency amount of the forecasted transaction.

Hedge Effectiveness Analysis

Date	Change in Spot Price of		Effectiveness Ratio	
	Forward Exchange Contract Gain (Loss)	Anticipated FC Sale Gain (Loss)	For the Period	Cumulative
December 31, 20X1	\$308,880 ⁴	\$(308,880)	1.00	1.00
March 31, 20X2	643,501 ⁵	(643,501)	1.00	1.00

⁴ $(\text{FC } 10,000,000 / 1.75) - (\text{FC } 10,000,000 / 1.85) = \$308,880.$

⁵ $(\text{FC } 10,000,000 / 1.85) - (\text{FC } 10,000,000 / 2.10) = \$643,501.$

Hedge Documentation—Scenario 2

The hedging relationship and entity's risk management objective and strategy for undertaking the hedge

The objective of the hedge transaction is to hedge anticipated foreign currency-denominated sales against currency fluctuations between FC and U.S. dollar.

Date of Designation is September 30, 20X1.

The hedging instrument

A forward contract (Forward ID#12345) to sell FC 10,000,000 at an exchange rate of FC 2.00 = U.S. \$1 on March 31, 20X2.

The hedged item transaction

The forward contract is designated as cash flow hedge of 10,000,000 forecasted foreign currency sales occur on March 31, 20X2. In a separate document, the Company has appropriately concluded and documented that the forecasted transaction is probable of occurring and this assessment will be subsequently updated each period.

(continued)

The nature of the risk being hedged

The risk of variability in foreign currency exchange rates.

The method that will be used to retrospectively and prospectively assess the hedging instrument's effectiveness³

The Company has performed an assessment that determined that all critical terms of the hedging instrument and the hedged transaction match and as such has to offset by the forward contract. In making that determination, the guidance in ASC 815-20-25-84 was used (see analysis below). Future assessment will be performed qualitatively concluded that changes in the functional-currency-equivalent cash flows attributable to changes in the related foreign currency exchange risk are expected utilizing the guidance in ASC 815-20-35-9 through 35-13, *Relative Ease of Assessing Effectiveness*. The Company will perform subsequent assessments by verifying and documenting whether the critical terms of the hedging instrument and forecasted transaction have changed during the period in review and that there are no adverse developments with respect to counterparty credit risk. If there are no such changes in critical terms or adverse developments, the Company will continue to conclude that there is no ineffectiveness to be recorded.

In the event that Company's ongoing assessment demonstrates that critical terms of the hedging instrument or the forecasted transaction have changes, or that there have been adverse developments regarding the risk of the counterparty defaulting, the Company will use the long-haul method outlined in ASC 815-30-35-25 through 35-30, the Hypothetical Derivative Method, in accordance with company policy, to measure ineffectiveness. Therefore, to the extent the forward is effective, the changes in its fair value will be recorded through other comprehensive income. To the extent the forward is not effective, changes in its fair value will be recorded in earnings. The Company, in this instance, will also then be required to perform a quantitative assessment of hedge effectiveness, and will perform a regression analysis using the hypothetical derivative and the hedging derivative in accordance with its standard policies.

The Company assessed the critical terms as follows:

- ASC 815-20-25-84(a) The forward is for the purchase of the same quantity, at the same currency, at the same time and at the same location as the hedged forecasted payment. The critical terms of the forward and the hedged item are identical.
- ASC 815-20-25-84(b) The fair value of the forward contract at inception is zero. No amounts were paid or received and the forward was entered into at market rates.
- ASC 815-20-25-84(c) Effectiveness will be assessed based on changes in the spot price of the commodity.

The method that will be used to measure hedge ineffectiveness³

As the critical terms match, the Company does not expect to incur any ineffectiveness. However, because effectiveness is based on changes in spot rate, the initial spot to forward difference will be reflected in earnings as the differential changes in value. However, if there is any ineffectiveness (e.g., due to change in counterparty's credit rating), the Company will use the hypothetical derivative method to measure ineffectiveness.

(continued)

³ Actual documentation should be more specific than what is described in this illustrative example. In general, reperformance of effectiveness assessments and ineffectiveness measurements should be possible based on the initial hedge documentation.

Note that this example assumes the other cash flow hedge criteria are met. The Company needs to assess and document these criteria as part of its hedge documentation.

Accounting Entries—Scenario 2—Spot Method	Debit	Credit
September 30, 20X1		
No entry is required, since the foreign currency forward rate equals the contract rate		
December 31, 20X1		
1. Forward contract receivable	\$ 308,880	
Other comprehensive income		\$ 308,880
To record the change in the fair value of the forward contract due to changes in the spot price		
2. Loss on hedge activity	188,880	
Forward contract receivable		188,880
To record the change in the spot-forward difference [i.e., the premium on the forward contract as the portion of the derivative's change in value excluded from measuring hedge effectiveness, \$120,000 – \$308,880]		
March 31, 20X2		
3. Forward contract receivable	643,501	
Other comprehensive income		643,501
To record the change in the fair value of the forward contract due to changes in the spot price		
4. Loss on hedge activity	525,406	
Forward contract receivable		525,406
To record the change in the spot-forward difference [i.e., the premium on the forward contract as the portion of the derivative's change in value excluded from measuring hedge effectiveness, \$118,095 – \$643,501]		
5. Cash	238,095	
Forward contract receivable		238,095
To record the net settlement of the forward contract at its maturity		
6. Cash	4,761,905	
Sales		4,761,905
To record FC 10,000,000 in cash sales at the spot rate of 2.10 FC/U.S.\$		
7. Accumulated other comprehensive income	952,381	
Sales		952,381
To reclassify the gain on the hedge activity from other comprehensive income to earnings when the forecasted transaction impacts earnings		

(continued)

Analysis

Despite the unfavorable change in exchange rates, which reduced the functional currency equivalent sales proceeds received, the entity's net sales in U.S. dollars are fixed at the spot rate at inception of the hedge of 1.75 FC to U.S. \$1.00 (i.e., \$4,761,905 + \$952,381 = \$5,714,286).

Scenario 3

In addition to hedging the forecasted foreign currency sale on March 31, 20X2, the Company may also elect, at inception of the contract, to hedge the foreign exchange exposure associated with the cash flows required to settle the receivable for the sale. Assume that the sale will still occur on March 31, 20X2, but the receivable will not be settled until April 30, 20X2. Instead of entering into the six-month foreign-currency-exchange forward contract discussed in Scenarios 1 and 2 above, the Company entered into a forward contract with the same terms, except that the settlement date is April 30, 20X2.

Date	Spot Rates	Forward Rates for March 31, 20X2	Forward Rates for April 30, 20X2
September 30, 20X1	1.75 FC/U.S. \$1.00	2.00 FC/U.S. \$1.00	2.04 FC/U.S. \$1.00
December 31, 20X1	1.85 FC/U.S. \$1.00	2.05 FC/U.S. \$1.00	2.08 FC/U.S. \$1.00
March 31, 20X2	2.10 FC/U.S. \$1.00	N/A	2.15 FC/U.S. \$1.00
April 30, 20X2	2.12 FC/U.S. \$1.00	N/A	N/A

The changes in fair market value of the forward exchange contract for the life of the derivative are reflected by the following table:

Fair Value Analysis

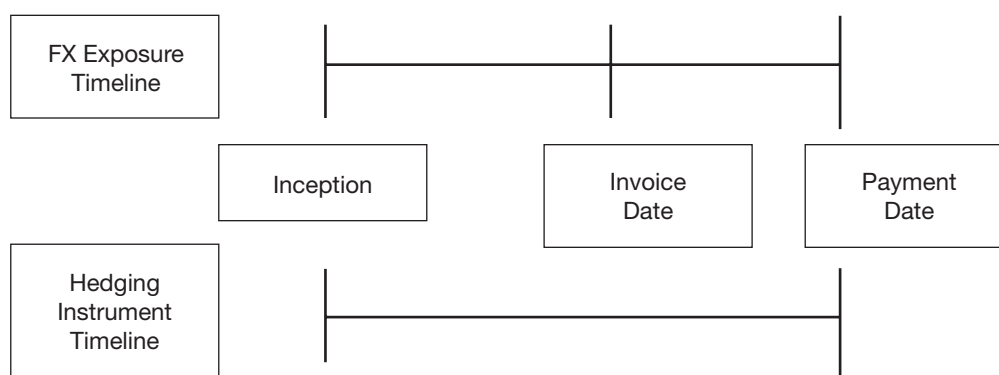
The Company obtains the fair values of the forward exchange contract, which are based on the changes in forward rates discounted on a net present value basis.

	Fair Value of Forward Contract (Discounted at 6.4691%*)	Change in Fair Value of Forward Contract Gain (Loss)
September 30, 20X1	\$ —	\$ —
December 31, 20X1	92,263	92,263
March 31, 20X2	249,453	157,190
April 30, 20X2	184,980	(64,473)
Total		\$184,980

*Annual percentage yield compounded monthly.

(continued)

The timeline of the aforementioned hedge relationship can be illustrated as below:



Hedge Documentation—Scenario 3

The hedging relationship and entity's risk management objective and strategy for undertaking the hedge

The objective of the hedge transaction is to hedge anticipated foreign currency-denominated sales against currency fluctuations between FC and U.S. dollar. In doing so, the Company chooses to designate a single cash flow hedge (ASC 815-20-25-34, ASC 815-30-35-9 and ASC 815-30-55-106 through 112) that encompasses variability of functional currency cash flows attributable to foreign exchange risk related to the settlement of the foreign currency-denominated receivable (hedged to the date of cash inflow) resulting from forecasted sales of FC 10,000,000.

Date of Designation is September 30, 20X1.

The hedging instrument

A forward contract (Forward ID#12345) to sell FC 10,000,000 at an exchange rate of FC 2.04 = U.S. \$1 on April 30, 20X2.

The hedged item or transaction

The forward contract is designated as cash flow hedge of 10,000,000 of forecasted foreign currency sales to occur on March 31, 20X2, with the resulting receivable settled on April 30, 20X2. In a separate document, the Company has appropriately concluded and documented that the forecasted transaction is probable of occurring and this assessment will be subsequently updated each period.

The nature of the risk being hedged

The risk of variability in foreign currency exchange rates.

The method that will be used to retrospectively and prospectively assess the hedging instrument's effectiveness³

The Company has performed an assessment that determined that all critical terms of the hedging instrument and the hedged transaction match and as such has qualitatively concluded that changes in the functional-currency-equivalent cash flows attributable to changes in the related foreign currency exchange risk are expected to offset by the forward contract. In making that determination, the guidance in ASC 815-20-25-84 was used (see analysis below). Future assessment will be performed

(continued)

³ Actual documentation should be more specific than what is described in this illustrative example. In general, reperformance of effectiveness assessments and ineffectiveness measurements should be possible based on the initial hedge documentation.

utilizing the guidance in ASC 815-20-35-9 through 35-13, *Relative Ease of Assessing Effectiveness*. The Company will perform subsequent assessments by verifying and documenting whether the critical terms of the hedging instrument and forecasted transaction have changed during the period in review and that there are no adverse developments with respect to counterparty credit risk. If there are no such changes in critical terms or adverse developments, the Company will continue to conclude that there is no ineffectiveness to be recorded.

In the event that Company's ongoing assessment demonstrates that critical terms of the hedging instrument or the forecasted transaction have changes, or that there have been adverse developments regarding the risk of the counterparty defaulting, the Company will use the long-haul method outlined in ASC 815-30-35-25 through 35-30, *Hypothetical Derivative Method*, in accordance with company policy, to measure ineffectiveness. Therefore, to the extent the forward is effective, the changes in its fair value will be recorded through other comprehensive income. To the extent the forward is not effective, changes in its fair value will be recorded in earnings. The Company in this instance, will also then be required to perform a quantitative assessment of hedge effectiveness, and will perform a regression analysis using the hypothetical derivative and the hedging derivative in accordance with its standard policies.

The Company assessed the critical terms as follows:

- ASC 815-20-25-84(a) The forward is for the purchase of the same quantity, at the same currency, at the same time and at the same location as the hedged forecasted payment. The critical terms of the forward and the hedged item are identical.
- ASC 815-20-25-84(b) The fair value of the forward contract at inception is zero. No amounts were paid or received and the forward was entered into at market rates.
- ASC 815-20-25-84(c) Effectiveness will be assessed based on changes in the spot price of the commodity.

The method that will be used to measure hedge ineffectiveness³

As the critical terms match, the company does not expect to incur any ineffectiveness. However, if there is any ineffectiveness (e.g., due to change in counterparty's credit rating), the company will use the hypothetical derivative method to measure ineffectiveness.

Note that this example assumes the other cash flow hedge criteria are met. The Company needs to assess and document these criteria as part of its hedge documentation.

Application of ASC 815

ASC 815-20-25-34, ASC 815-30-35-9 and ASC 815-30-55-106 through 55-112 permits this type of hedging program; however, it requires two adjustments to the amounts held in other comprehensive income for the period between invoice date and payment date. These adjustments reflect the forward points allocated to that time and an amount necessary to offset the ASC 830 remeasurement of the underlying invoice. In this case, the hedged forecasted transaction is the settlement of the receivable, which affects earnings through periodic remeasurement at spot rates.

(continued)

³ Actual documentation should be more specific than what is described in this illustrative example. In general, reperformance of effectiveness assessments and ineffectiveness measurements should be possible based on the initial hedge documentation.

The first step in determining the amount referenced in ASC 815-30-35-9 is to calculate the amount of cost to be ascribed to each period. There are three methods to calculate the amount of cost to be reclassified from other comprehensive income to earnings for the recognized receivable: (1) Daily Implicit interest rate calculation (2) Pro rata method and (3) Method using two foreign currency forward exchange rates. Note that method (2) is acceptable if the calculated amount approximates the amount calculated under the daily implicit interest rate method.

Method of Using Daily Interest Rate Implicit in the Hedging Relationship

Step	Example	
1) Calculate the total forward points of the derivative by computing the functional currency equivalent amount at both the spot rate at inception and the derivative's forward rate. This reflects the difference between the amount the receivable would have been settled at if settlement occurred at the inception of the hedging relationship, September 30, 20X1, and the amount the receivable actually settled at the end of the hedging relationship, April 30, 20X2, which includes the effect of the forward contract.	Notional Spot rate at inception Forward contract rate USD equivalent at spot USD equivalent at forward Total cost from forward points	FC 10,000,000 1.75 FC/U.S.\$1.00 2.04 FC/U.S.\$1.00 = 10,000,000 / 1.75 = 5,714,286 = 10,000,000 / 2.04 = \$4,901,961 = \$812,325
2) Determine the number of days between the inception of the derivative and the maturity date on the forward contract.	September 30, 20X1– April 30, 20X2	= 212 days
3) Compute the daily implied interest rate associated with the forward points from step 1) above.	$[(\$4,901,961 / \$5,714,286)^{(1/212)}] - 1 = -0.0723\%$	
4) Using the implied interest rate from step 3), allocate the functional currency equivalent of the forward points across the life of the derivative.	See Table below	

Date	Cumulative Cost of the Forward Contract at Month-end	Cost of Forward Contract Incurred for the Period ⁷
September 30, 20X1	\$5,714,286 ⁴	
December 31, 20X1	5,346,425 ⁵	367,861
March 31, 20X2	5,009,487	336,938
April 30, 20X2	4,901,961 ⁶	107,526
		<u>\$812,325</u>

⁴ Equals the U.S. dollar equivalent of the receivable based on the spot rate, at the inception of the forward contract (original foreign currency amount of 10,000,000 divided by 1.75).

⁵ $\$5,714,286 \times (1 - 0.000723) \wedge 92 = \$5,346,425$.

⁶ Equals the U.S. dollar equivalent of the receivable based on the forward rate, at the inception of the forward contract (original foreign currency amount of 10,000,000 divided by 2.04).

⁷ Cumulative cost of the forward contract for the prior period – Cumulative cost of the forward contract for the current period (e.g., $\$5,714,286 - \$5,346,425 = \$367,861$).

(continued)

Pro Rata Method

Step	Example	
1) Calculate the total forward points of the derivative by computing the functional currency equivalent amount at both the spot rate at inception and the derivative's forward rate.	USD equivalent at spot	= 10,000,000 / 1.75 = \$5,714,286
	USD equivalent at forward	= 10,000,000 / 2.04 = \$4,901,961
	Total cost from forward points	= \$812,325
2) Determine the number of days (a) between the inception of the derivative and the invoice date and (b) between the invoice date and the payment date.	March 31, 20X2– September 30, 20X1	= 182 days
	April 30, 20X2–March 31, 20X2	= 30 days
	Total number of days	= 212 days
3) Determine the amount of cost or income to be ascribed to each period.	From September 30, 20X1 to March 31, 20X2 \$812,325 x 182/212 days	= \$697,373
	From March 31, 20X2 to April 30, 20X2 \$812,325 x 30/212 days	= \$114,952
	Total cost	= \$812,325

Method Using Two Foreign Currency Forward Exchange Rates

Step	Example	
1) Calculate the total forward points of the derivative from inception to the invoice date by computing the functional currency equivalent amount at both the spot rate at inception and the forward rate to the invoice date.	USD equivalent at spot	= 10,000,000 / 1.75 = \$5,714,286
	USD equivalent at forward to the invoice date	= 10,000,000 / 2.00 = \$5,000,000
	Total cost from forward points	= \$714,286
2) Calculate the total forward points of the derivative from the invoice date to the payment date by computing the functional currency equivalent amount at both the forward rate to the invoice date and the derivative's forward rate to the payment date.	USD equivalent at forward to the invoice date	= 10,000,000 / 2.00 = \$5,000,000
	USD equivalent at forward to the payment date	= 10,000,000 / 2.04 = \$4,901,961
	Total cost from forward points	= \$98,039
3) Determine the amount of cost or income to be ascribed to each period.	From September 30, 20X1 to March 31, 20X2 \$5,714,286 – \$5,000,000	= \$714,286
	From March 31, 20X2 to April 30, 20X2 \$5,000,000 – \$4,901,961	= \$98,039
	Total cost	= \$812,325

(continued)

After calculating the amount of cost or income to be ascribed to each period, the Company needs to determine the amount in other comprehensive income needed to be reclassified into earnings, if any, to (a) offset the gain or loss from the ASC 830 remeasurement of the underlying invoice which is performed using spot rates and (b) to account for the portion of the change in fair value of the forward contract attributable to the anticipated sale recognized at the invoice date.

The entries relating to the above example are depicted below based on the daily implicit interest rate method:

Accounting Entries—Scenario 3	Debit	Credit
September 30, 20X1		
(No entry is required, since the FC forward rate equals the contract rate)		
December 31, 20X1		
1. Forward contract receivable	\$ 92,263	
Other comprehensive income		\$ 92,263
To record the change in the fair value of the forward contract		
March 31, 20X2		
2. Forward contract receivable	157,190	
Other comprehensive income		157,190
To record the change in the fair value of the forward contract		
3. Accounts receivable	4,761,905	
Sales		4,761,905
To record FC 10,000,000 in receivable sales at the spot rate of 2.10 FC/U.S.\$ [$\$4,761,905 = 10,000,000 / 2.10$]		
4. Accumulated other comprehensive income	247,582	
Sales		247,582
To reclassify from accumulated other comprehensive income into earnings the portion of the change in fair value of the forward contract attributable to the anticipated sale recognized at the invoice date: change in spot minus allocable cost. $\$247,587 = \{[(10,000,000/1.75) - (10,000,000/2.1)] - \$367,861 - \$336,938\}$		
April 30, 20X2		
5. Other comprehensive income	64,473	
Forward contract		64,473
To record the change in fair value of the forward contract		

(continued)

Accounting Entries—Scenario 3	Debit	Credit
6. Foreign currency transaction loss	\$ 44,924	
Accounts Receivable		\$ 44,924
To record the transaction loss for the period by dividing the accounts receivable amount of FC 10,000,000 by each spot rate [10,000,000 / 2.12 – 10,000,000 / 2.10]		
7. Accumulated other comprehensive income	44,924	
Foreign currency transaction loss		44,924
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		
8. Hedge expense	107,526	
Other comprehensive income		107,526
To record the cost of the forward contract for April		
9. Cash	4,716,981	
Accounts receivable		4,716,981
To record the cash receipts for the settlement of the receivable		
10. Cash	184,980	
Forward contract receivable		184,980
To record the net settlement of the forward contract at its maturity		

Analysis

By electing to hedge the cash flows received for the settlement of the foreign currency denominated receivable, the Company had to recognize in earnings (a) the portion of the change in fair value of the forward contract attributable to the anticipated sale recognized at the invoice date and (b) the cost of hedging the receivable for the month of April. This hedge was effective at locking the amount of sales to be recognized in March of \$5,009,487 [$\$5,714,286 \times (1 - 0.0723) = \$5,009,487$] and the amount of cash to be received in April of \$4,901,961 ($10,000,000 / 2.04 = \$4,901,961$), while neutralizing the re-measurement impact of the underlying invoice.

PwC Observation: This example made the following simplified assumptions: (1) In both scenarios 1 and 2, we assume that the sale occurs on a specific date, March 31, 20X2, and (2) in scenario 3, the receivable settles on a specific date, April 30, 20X2. Frequently, entities will not be able to forecast precisely the date a sale will occur or the date a receivable will settle. If there is only minor mismatch between the settlement date of the hedging instrument and the hedged item (e.g., within 30 days) and an entity is able to demonstrate that the hedging relationship is highly effective and that ineffectiveness is de minimus, an entity may still be able to apply the critical terms match approach assuming all other critical terms are perfectly match. Otherwise, an entity may need to apply the long-haul to assess hedge effectiveness and measure ineffectiveness. See DH 8 for further details.

Example 7-5: Use of Foreign-Currency Options to Hedge Forecasted Foreign Sales

Company A (the Company) is a U.S. reporting company with sales to foreign purchasers. The Company's sales are denominated in foreign currency but do not represent firm commitments. The Company forecasts (as of September 30, 20X1) that foreign currency sales of FC 10,000,000 will occur in six months on March 31, 20X2 (historical experience with these foreign customers indicates that the sales are probable of occurring). Pursuant to its foreign exchange risk management policy, the Company will manage its currency risk by purchasing a foreign currency put option. The Company will designate this transaction as a cash flow hedge of a foreign-currency-denominated transaction that is in accordance with ASC 815-20-25-29 and 25-30. The terms of the purchased put option are as follows:

Put Option Contract Terms	
Contract amount:	FC 10,000,000
Trade date:	September 30, 20X1
Expiration date:	March 31, 20X2
Foreign-currency strike rate:	2 FC / 1 U.S.\$
Spot rate:	2 FC / 1 U.S.\$
Premium:	\$20,000

The option is purchased at the money spot rate. Therefore, the premium on September 30, 20X1, reflects the option's time value only. The option is designated as a hedge of the Company's forecasted sales, and management expects that at the hedge's inception and through the date of the forecasted sales, the hedge will be perfectly effective, since the critical terms of the option contract match those of the anticipated sales. Accordingly, management expects that cash flows received on any exercised option will offset foreign-exchange losses on the cash sales, thereby assuring net U.S. dollar receipts of at least \$5,000,000 (excluding the put option premium) on March 31, 20X2. The Company decides to assess effectiveness on the basis of the option's intrinsic value (i.e., the value of the option that reflects the positive difference between the spot exchange rate and the strike exchange rate. Changes in the time value of the option are excluded from the effectiveness assessment and are included currently in earnings.

The spot and forward rates for calculating the fair value of the option are as follows:

Fair Value Analysis

FC/U.S.\$ March Contract	09/30/X1	12/31/X1	03/31/X2
Contract rate	2.00	2.00	2.00
Spot rate	2.00	2.10	2.30

	Fair Value of Option		
	Time Value	Intrinsic Value ¹	Total Value ⁴
09/30/X1	\$20,000	\$ —	\$ 20,000
12/31/X1	9,000	238,095 ²	247,095
03/31/X2	—	652,174 ³	652,174

¹ Intrinsic value is computed based on the changes in spot rates as compared to the strike rate.

² (FC 10,000,000 ÷ 2.00 = \$5,000,000) less (FC 10,000,000 ÷ 2.10 – \$4,761,905) = \$238,095.

³ (FC 10,000,000 ÷ 2.00 = \$5,000,000) less (FC 10,000,000 ÷ 2.30 – \$4,347,826) = \$652,174. The increase in intrinsic value is \$414,079 (\$652,174 less \$238,095).

⁴ The total value is based on dealer quotes.

(continued)

Initial Hedge Documentation

Risk management objective/strategy and nature of risk being hedged

The objective of the hedged transaction is to eliminate the currency risk associated with forecasted foreign currency-denominated sales in Company A (U.S. dollar functional currency entity) due to changes in the FC/U.S. dollar exchange rate. The date of designation is September 30, 20X1.

The hedging instrument

This is a cash flow hedge in which (a) the hedging instrument is a purchased option (Option ID#12345) to sell FC 10,000,000 with strike price of 2FC / 1U.S.\$ on March 31, 20X2, and (b) the exposure being hedged is the variability in expected future cash flow attributable to changes in fair value of the FC/U.S. dollar spot rate below 2FC / 1U.S.\$.

The hedged item or transaction

The foreign exchange option is designated as a foreign currency cash flow hedge of 10,000,000 of forecasted foreign currency sales on March 31, 20X2. In a separate document, the Company has appropriately concluded and documented that the forecasted transaction is probable of occurring and this assessment will be subsequently updated each period.

The method that will be used to retrospectively and prospectively assess the hedging instrument's effectiveness⁵

The Company has performed an assessment that determined that all critical terms of the hedging instrument and the hedged transaction match and as such has qualitatively concluded that changes in the option's intrinsic value will completely offset the change in the expected cash flows based on changes in the spot rate. In making that determination, the guidance in ASC 815-20-25-84 was used (see analysis below). Future assessment will be performed utilizing the guidance in ASC 815-20-35-9 through 35-13, *Relative Ease of Assessing Effectiveness*. Additionally, in accordance with ASC 815-20-25-82, since the effectiveness of this hedge is assessed based on changes in the option's intrinsic value, the change in the time value of the contract would be excluded from the assessment of hedge effectiveness.

The Company will perform subsequent assessments by verifying and documenting whether the critical terms of the hedging instrument and forecasted transaction have changed during the period in review and that there are no adverse developments with respect to counterparty credit risk. If there are no such changes in critical terms or adverse developments, the Company will continue to conclude that there is no ineffectiveness to be recorded.

In the event that Company's ongoing assessment demonstrates that critical terms of the hedging instrument or the forecasted transaction have changed, or that there have been adverse developments regarding the risk of the counterparty defaulting, the Company will use the long-haul method outlined in ASC 815-30-35-25 through 35-30, *Hypothetical Derivative Method*, in accordance with company policy, to measure ineffectiveness. Therefore, to the extent the option is effective, the changes in its fair value will be recorded through other comprehensive income. To the extent the option is not effective, changes in its fair value will be recorded in earnings. The Company in this instance, will also then be required to perform a quantitative assessment of hedge effectiveness, and will perform a regression analysis using the hypothetical derivative and the hedging derivative in accordance with its standard policies.

(continued)

⁵ Actual documentation should be more specific than what is described in this illustrative example. In general, reperformance of effectiveness assessments and ineffectiveness measurements should be possible based on the initial hedge documentation.

The Company assessed the critical terms as follows:

- ASC 815-20-25-84(a): The critical terms of the hedged item and the option are identical (i.e., notional, cash flow date, currency).
- ASC 815-20-25-84(b): The option was at the money at inception.
- ASC 815-20-25-84(c): Effectiveness will be assessed based on intrinsic value. The change in the option's intrinsic value will completely offset the change in the expected cash flows based on changes in the spot rate.

The method that will be used to measure hedge ineffectiveness⁵

The Company will compare the cumulative change in the option's intrinsic value to the cumulative change in expected cash flows based on changes in spot rate. Changes in the option's intrinsic value, to the extent that they are effective, are recorded in other comprehensive income. Since the critical terms of the option and the hedged cash flows are identical, the Company expects no ineffectiveness. However, if ineffectiveness occurs (e.g., due to changes in timing of the expected cash flows), it will be measured by the "change in fair value" method discussed in ASC 815-30-35-31 through 35-32. Changes in the time value of the contract will be recorded in current earnings.

Note that this example assumes the other cash flow hedge criteria are met. The Company needs to assess and document these criteria as part of its hedge documentation.

Application of ASC 815

The Company's projected sales for March 31, 20X2, are considered a forecasted transaction (see the glossary). A derivative instrument that hedges the foreign currency exposure to the variability of cash flows associated with a forecasted transaction will be a foreign currency cash flow hedge, provided that it meets all the other cash flow hedging eligibility requirements in ASC 815. The use of an option contract to offset a loss qualifies for cash-flow hedge accounting, provided that it is highly effective as discussed in the Hedge Effectiveness section under ASC 815-25. Management has elected to measure effectiveness based on changes in the intrinsic value of the option contract, as permitted by ASC 815-20-25-82.

The Company must record the fair value of the option on its balance sheet. Changes in the time value of the option are recorded currently in earnings. Time value is considered to be the excess of the fair value of the option over their intrinsic value (ASC 815-20-20). Changes in the option's intrinsic value, to the extent that they are effective as a hedge, are recorded in other comprehensive income. That is, the amount in other comprehensive income is brought to a balance equal to the lesser of (1) the cumulative increase in the intrinsic value of the option (less any gains and losses on the option that were previously reclassified from accumulated comprehensive income to earnings), or (2) the cumulative decrease in the expected proceeds of the sale, measured at the current spot rate, less any gains and losses on the option that were previously reclassified from accumulated comprehensive income into earnings. Any additional change in the intrinsic value of the option is recorded in earnings. The balance in other comprehensive income is reclassified to earnings at the date of the sale (i.e., March 31, 20X2) [ASC 815-30-35-38 through 35-41].

(continued)

⁵ Actual documentation should be more specific than what is described in this illustrative example. In general, reperformance of effectiveness assessments and ineffectiveness measurements should be possible based on the initial hedge documentation.

Hedge Effectiveness Analysis

Date	Cumulative Change in Option's Intrinsic Value Gain (Loss)	Cumulative Change in Expected Cash Flows Based on Changes in the FC Spot Rate	Effectiveness Ratio Cumulative
12/31/X1	\$238,095 ²	\$(238,095) ²	1.00
3/31/X2	652,174 ³	(652,174) ³	1.00

² (FC 10,000,000 ÷ 2.00 = \$5,000,000) less (FC 10,000,000 ÷ 2.10 = \$4,761,905) = \$238,095.

³ (FC 10,000,000 ÷ 2.00 = \$5,000,000) less (FC 10,000,000 ÷ 2.30 = \$4,347,826) = \$652,174. The increase in intrinsic value is \$414,079 (\$652,174 less \$238,095).

The Company has determined that the hedging relationship between the option contract and the forecasted sales proceeds is highly effective in achieving the offset in changes of cash flows due to changes in foreign currency exchange rates.

Accounting Entries—Scenario 3

	Debit	Credit
September 30, 20X1		
1. Foreign currency option	\$ 20,000	
Cash		\$ 20,000
To record the premium paid on the purchased option		
December 31, 20X1		
2. Loss on hedging activity	11,000	
Foreign currency option		11,000
To record the change in the time value of the option		
3. Foreign-currency option	238,095	
Other comprehensive income		238,095
To record the change in the intrinsic value of the option		
March 31, 20X2		
4. Loss on hedging activity	9,000	
Foreign currency option		9,000
To record the change in the time value of the option		
5. Foreign currency option	414,079	
Other comprehensive income		414,079
To record the change in the intrinsic value of the option		
6. Cash	4,347,826	
Sales		4,347,826
To record FC 10,000,000 in sales at a spot rate of 2.30 FC/U.S.\$		
7. Cash	652,174	
Foreign currency option		652,174
To record net cash settlement of the option at its maturity		
8. Accumulated other comprehensive income	652,174	
Sales		652,174
To transfer the gain on the hedging activity to earnings when the forecasted transaction impacts earnings		

(continued)

Analysis

By entering into the option contract, the Company is assured of receiving at least \$5,000,000 from its FC 10,000,000 sales, excluding the cost of the option contract (\$4,347,826 from sales at the spot rate plus \$652,174 from the gain on the option contract).

Example 7-6: Use of a Forward-Exchange Contract to Hedge a Net Investment in a Foreign Subsidiary

A U.S. parent company (the Company) has a net investment of £50 million in a British subsidiary, ABC UK Limited. On October 1, 20X1, the Company enters into a six-month forward exchange contract to sell £50 million at £1 = \$1.70, when the spot rate is £1 = \$1.72 to hedge 100 percent of the beginning book value of its net investment in ABC UK Limited. The Company elects to measure ineffectiveness based on changes in the forward rates and on the beginning balance of the net investment at the beginning of the hedging period. As such, all changes in the fair value of the forward contract will be reported in cumulative translation adjustment since (a) the notional amount of the forward contract and the hedged item matches perfectly and (b) the underlying currency of the forward matches ABC UK Limited's functional currency. Assume the following:

Date	Exchange Rates		Change in Fair Value of Forward Contract for the Period (Using an 8.16% Discount Rate)	Change in Fair Value of Net Investment in Foreign Subsidiary Attributable to Change in Spot Rates Gain (Loss)
	Spot	Forward		
October 1, 20X1	£1 = \$1.72	£1 = \$1.70	\$ —	\$ —
December 31, 20X1	£1 = \$1.65	£1 = \$1.63	3,430,027 ¹	(3,500,000)
March 31, 20X2	£1 = \$1.60	£1 = \$1.60	1,569,973	(2,500,000)
Cumulative total			\$5,000,000 ²	\$(6,000,000)

¹ The change is computed based on the change in forward rates multiplied by the notional amount of £50 million and discounted to reflect the present value. $\$3,430,027 = [\text{£}50,000,000 \times (1.70 - 1.63)] / [1 + (.0816 / 4)]$.

² Fair value at March 31, 20X2, represents the difference between the spot and contract rates x £50 million. $\$5,000,000 = [\text{£}50,000,000 \times (1.70 - 1.60)]$.

Initial Hedge Documentation

Risk management objective/strategy and nature of risk being hedged

The objective of the hedged transaction is to protect the net investment in the Company's British subsidiary, ABC UK Limited, against adverse changes in exchange rates.

Date of Designation is October 1, 20X1.

The hedging instrument

A forward contract (Forward ID#12345) to sell £50 million at £1 = \$1.70 on March 31, 20X2.

(continued)

The hedged item or transaction

The foreign exchange forward is designated as a hedge of the net investment beginning balance as of October 1, 20X1.

The method that will be used to retrospectively and prospectively assess the hedging instrument's effectiveness³

Hedge effectiveness will be assessed based on the overall changes in fair value (i.e., forward rate) of the forward contract. The forward has a zero fair value at inception. The critical terms (notional, currencies, underlying) of the forward contract match the portion of the net investment designated as being hedged. As a result, the Company does not expect to incur any ineffectiveness. Counterparty credit risk will be monitored throughout the hedge period.

The method that will be used to measure hedge ineffectiveness³

As described in ASC 815-35, *Net Investment Hedges*, the hypothetical derivative will be used to measure any ineffectiveness. The change in fair value of the actual forward will be compared to the change in fair value of the hypothetical derivative to calculate ineffectiveness. Any ineffectiveness will be recognized in current earnings. However, as the critical terms of the actual derivative and the hedged transaction are identical, the Company does not expect to incur any ineffectiveness.

Note that this example assumes the conditions in ASC 815-20-25-30 are met. The Company needs to assess and document these criteria as part of its hedge documentation.

Note that under ASC 815-35-35-27 and ASC 815-35-55-1, the Company is required to redesignate the hedging relationship whenever financial statements or earnings are reported, and at least every three months. The above hedge documentation is meant to illustrate the first hedge designation documentation only.

Application of ASC 815

The net assets of the British subsidiary are translated into U.S. dollar at the current exchange rate at each balance-sheet date (ASC 830-30-45-3). The effects of changes in exchange rates are reflected in the cumulative translation adjustment, which is a component of other comprehensive income (ASC 830-30-45-12). A derivative instrument may be designated as a hedge of the foreign-currency exposure of a net investment in a foreign operation.

The U.S. parent company must record the forward contract on its balance sheet at its fair value (ASC 815-10-30-1). The effective portion of the change in the fair value of the forward contract (in this example, 100 percent of the change) is recorded in other comprehensive income in the same manner as the translation adjustment is recorded (ASC 815-20-35-1(d)).

If the notionals or the currency pairs, or both, did not match, the Company would need to use the hypothetical derivative method to assess hedge effectiveness and measure any ineffectiveness. The difference between the changes in the hedging value of the actual derivative and changes in the hedging value of the hypothetical derivative would be considered ineffectiveness and would affect earnings in that reporting period.

(continued)

³ Actual documentation should be more specific than what is described in this illustrative example. In general, reperformance of effectiveness assessments and ineffectiveness measurements should be possible based on the initial hedge documentation.

Accounting Entries	Debit	Credit
October 1, 20X1		
No entry is required, since the FC forward rate equals the contract rate		
December 31, 20X1		
1. Forward contract receivable	\$3,430,027	
Cumulative translation adjustment		\$3,430,027
To record the change in the fair value of the forward contract in the cumulative translation adjustment account		
2. Cumulative translation adjustment	3,500,000	
Net investment in foreign subsidiary		3,500,000
To record the translation of the Company's net investment in the foreign subsidiary. The amount represents the net impact of translating the British subsidiary's assets and liabilities		
March 31, 20X2		
3. Forward contract receivable	1,569,973	
Cumulative translation adjustment		1,569,973
To record the change in the fair value of the forward contract in the cumulative-translation- adjustment account		
4. Cumulative translation adjustment	2,500,000	
Net investment in foreign subsidiary		2,500,000
To record the translation of the Company's net investment in the foreign subsidiary		
5. Cash	5,000,000	
Forward contract receivable		5,000,000
To record the cash settlement of the gain on the forward contract		

Note: Tax effect is not included in the above illustration.

Example 7-7: Use of a Non-Derivative to Hedge a Net Investment in a Foreign Subsidiary

A U.S. parent company (the Company) has a net investment of FC 50 million in a foreign subsidiary. On January 1, 20X1, the Company has a 50 million foreign currency-denominated loan payable that it wishes to designate as a hedge of its net investment in the foreign subsidiary. Assume the following:

Date	Spot Rates
January 1, 20X1	1.60 FC/\$1.00
December 31, 20X1	1.68 FC/\$1.00

Also assume that the subsidiary has no income statement activities during the year.

(continued)

Initial Hedge Documentation

Risk management objective/strategy and nature of risk being hedged

The objective of the hedged transaction is to protect the net investment in our foreign subsidiary against adverse changes in exchange rates.

Date of designation is January 1, 20X1.

The hedging instrument

Foreign Currency-denominated loan payable with principal of 50,000,000. There is no premium or discount associated with the loan payable.

The hedged item or transaction

The foreign currency-denominated loan payable is designated as a hedge of the net investment beginning balance as of January 1, 20X1.

The method that will be used to retrospectively and prospectively assess the hedging instrument's effectiveness¹

Hedge effectiveness will be assessed based on the change in the spot rate of the loan payable. The critical terms (notional, currencies, underlying) of the loan payable match the portion of the net investment designated as being hedged. As a result, the Company does not expect to incur any ineffectiveness. Counterparty credit risk will be monitored throughout the hedge period.

The method that will be used to measure hedge ineffectiveness¹

As described in ASC 815-35-35-12 through 35-15, the hypothetical derivative method will be used to measure any ineffectiveness. The change in fair value due to change in spot rate of the loan payable will be compared to the change in fair value of the hypothetical derivative to calculate ineffectiveness. Any ineffectiveness will be recognized in current earnings. However, as the critical terms of the loan payable and the hedged transaction are identical, the company does not expect to incur any ineffectiveness.

Note that this example assumes the conditions in ASC 815-20-25-30 are met. The Company needs to assess and document these criteria as part of its hedge documentation.

Note that under ASC 815-35-35-27 and ASC 815-35-55-1, the Company is required to re-designate the hedging relationship whenever financial statements or earnings are reported, and at least every three months. The above hedge documentation is meant to illustrate the first hedge designation documentation only.

Application of ASC 815

The net assets of the foreign subsidiary are translated into U.S. dollar at the current exchange rate at each balance-sheet date (ASC 830-30-45-3). The effect of changes in exchange rates are reflected in the cumulative translation adjustment, which is a component of other comprehensive income (ASC 830-30-45-12).

(continued)

¹ Actual documentation should be more specific than what is described in this illustrative example. In general, reperformance of effectiveness assessments and ineffectiveness measurements should be possible based on the initial hedge documentation.

When a nonderivative instrument (e.g., loans) is designated as a hedge of the foreign currency exposure of a net investment in a foreign operation, the change in the carrying value of the non-derivative attributable to the change in spot rates is recorded in other comprehensive income in the same manner as the translation adjustment is recorded (ASC 815-20-35-1(d)). As in this case, the notional amount of the loan payable is equal to the notional amount of the beginning balance of the net investment being designated, no ineffectiveness may be assumed and the entire change in fair value of the loan payable attributable to the change in spot rates will be recorded in cumulative translation adjustment for the reporting period.

In accordance with ASC 815-35-35-12 through 35-15, if the notionals or the currency pairs, or both, did not match, the Company would need to use the hypothetical derivative method to assess hedge effectiveness and measure any ineffectiveness. The difference between the changes in the value of the actual hedging instrument and changes in the value of the hypothetical derivative would be considered ineffectiveness and would affect earnings in that reporting period. Note that ineffectiveness must be recognized in earnings for both overhedges and underhedges.

Accounting Entries	Debit	Credit
January 1, 20X1		
(No entry is required)		
December 31, 20X1		
1. Loan payable	\$1,488,095	
Cumulative translation adjustment		\$1,488,095
To record the change in carrying value attributed to the foreign currency gain in the cumulative-translation-adjustment account – $(50,000,000 / 1.60) - (50,000,000 / 1.68) = \$1,488,095$		
2. Cumulative translation adjustment	1,488,095	
Net investment in foreign subsidiary		1,488,095
To record the translation of the Company's net investment in the foreign subsidiary. The amount represents the net impact of translating the foreign subsidiary's assets and liabilities		

Chapter 8:

Effectiveness Assessments

Executive Takeaway

- To apply hedge accounting, 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.
- Generally, ASC 815-20-25-79 requires the completion of an effectiveness assessment at hedge inception and periodically, with an assessment whenever financial statements or earnings are reported, and at least as frequently as 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 has been highly effective).
- For hedging relationships that are not considered to be perfectly effective, the extent of ineffectiveness in achieving the risk management objectives documented at the inception of the hedging relationship must be assessed each period and the amount of ineffectiveness reported in current period earnings and disclosed.
- In certain limited circumstances, the standard allows some hedging relationships to be considered perfectly effective and thus practitioners may avoid the need to assess or record ineffectiveness. These circumstances are intentionally limited in scope and particular care should be taken in the application of the standard's numerous requirements.

8.1 Overview

As discussed in DH Chapters 5, 6, and 7, ASC 815-20-25-80(a) requires an entity wishing to qualify for hedge accounting to have 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. If this expectation cannot be met, hedge accounting is not allowed.

For qualifying hedging relationships considered to be *highly effective* but not *perfectly effective* (i.e., those hedging relationships that do not qualify for either the shortcut or critical terms match methods described in Sections DH 8.2 and DH 8.3 below), the extent of ineffectiveness in achieving the risk management objectives documented at the inception of the hedging relationship must be assessed each period and any ineffectiveness must be reported in current period earnings and disclosed.

Sections DH 8.2 through DH 8.4 of this chapter discuss alternative methods for assessing the effectiveness of various hedging strategies. In addition to addressing guidance related to the required assessments of hedge effectiveness, this chapter discusses the recognition and measurement of any ineffectiveness for hedging instruments that qualify for hedge accounting. See Section DH 8.5 for this discussion.

8.1.1 Definition of Highly Effective

Although having an expectation that the hedging relationship will be *highly effective* is fundamental to qualifying for hedge accounting, the FASB has neither explicitly defined this term nor specified exactly how effectiveness should be assessed. The Board believes that the assessment of hedge effectiveness is dependent on the nature of the hedging relationship and should be based on the objective of management's risk management strategy. Therefore, the guidance requires that the method of assessing hedge effectiveness be reasonable, documented at inception of the hedging relationship, and consistently applied throughout the life of the hedge and to all similar hedges. The Board did state in the Basis for Conclusions¹ of FAS 133, that the high-effectiveness requirement was intended to have the same meaning as the *high correlation* requirement in FASB Statement No. 80 *Accounting for Futures Contracts* (FAS 80) which was nullified by FAS 133. This has been interpreted, in practice, to mean that the cumulative change in the value of the designated portion of the hedging instrument should be between 80 to 125 percent of the inverse cumulative change in the fair value or cash flows of the hedged item attributable to the risk being hedged.

¹ Paragraphs 387 and 389, which were not included in the FASB Codification.

PwC Observation: Although the FASB declined to provide specific guidance in ASC 815-20, the FASB staff has stated informally that in order for a hedge to be highly effective, the cumulative change in the value of the hedging instrument expressed as a ratio of the cumulative change in the fair value of the hedged item must fall within the range of 80 to 120 percent. In other words, ASC 815-20 implicitly requires that the change in the value of the derivative instrument must always be within plus or minus 20 percent of the change in the value of the hedged item. However, under FAS 80, practice accepted a range of 80 to 125 percent. This view was predicated on the belief that if hedge accounting is acceptable when the change in the value of the derivative is \$80 and the change in the value of the hedged item is \$100, then it should also be acceptable when the change in the value of the derivative instrument is \$100 and the change in the value of the hedged item is \$80 (i.e., $80/100 = 80$ percent, and $100/80 = 125$ percent).

Thus far, the SEC staff has continued to support the views it established under FAS 80 (i.e., 80 to 125 percent). Because ASC 815-20 does not provide any bright lines that define *highly effective*, the interpretation of that phrase will be a matter of judgment. Until an authoritative interpretation is established, we believe either definition of high effectiveness is acceptable. Accordingly, each entity should specify in its hedge documentation how it would interpret the high effectiveness requirement to determine whether hedging relationships will qualify for hedge accounting.

8.1.2 Required Effectiveness Assessments

ASC 815-20-25-75 stipulates that to qualify for hedge accounting, the hedging instrument must be highly effective at both the inception of the hedging relationship and on an ongoing basis throughout the life of the hedge. An effectiveness assessment is required to be prepared whenever financial statements or earnings are reported, and at least every three months. ASC 815-20-25-79 clarifies that effectiveness must be considered in two specific ways: prospectively and retrospectively. ASC 815-20-35 provides further guidance on performing the ongoing effectiveness tests:

- 35-2 If a fair value hedge or cash flow hedge initially qualifies for hedge accounting, the entity would continue to assess whether the hedge meets the effectiveness test and also would measure any ineffectiveness during the hedge period. If the hedge fails the effectiveness test at any time (that is, if the entity does not expect the hedge to be highly effective at achieving offsetting changes in fair values or cash flows), the hedge ceases to qualify for hedge accounting. At least quarterly, the hedging entity shall determine whether the hedging relationship has been highly effective in having achieved offsetting changes in fair value or cash flows through the date of the periodic assessment. That assessment can be based on regression or other statistical analysis of past changes in fair values or cash flows as well as on other relevant information.**
- 35-3 If an entity elects at the inception of a hedging relationship to use the same regression analysis approach for both prospective considerations and retrospective evaluations of assessing**

effectiveness, then during the term of that hedging relationship both of the following conditions shall be met:

- a. Those regression analysis calculations shall generally incorporate the same number of data points.
- b. That entity must periodically update its regression analysis (or other statistical analysis).

35-4 Electing to use a regression or other statistical analysis approach instead of a dollar-offset approach to perform retrospective evaluations of assessing hedge effectiveness may affect whether an entity can apply hedge accounting for the current assessment period.

PwC Observation: The flexibility granted to select different methods for performing the two effectiveness assessments in ASC 815-20-35 and further described in ASC 815-20-55-68, is often not utilized in practice due to the unusual outcomes that can occur. For example, it is possible for an entity to have selected (1) a method for prospective consideration that indicates that the hedge is expected to be highly effective for future periods and (2) a method for retrospective evaluation that demonstrates that the hedge was not highly effective in the period just completed (e.g., due to unexpected market factors). In such a case, hedge accounting would not be allowed for the current period in question, but could be applied in future periods. Likewise, it is possible for an entity to have selected a method for prospective consideration that indicates the hedge is not expected to be highly effective for future periods, yet the method for retrospective evaluation demonstrates that the hedge was highly effective in the period just completed. In this case, hedge accounting would be allowed for the current period in question, but could not be applied in future periods. To avoid such disparate results from occurring and to reduce the administrative burden of preparing two analyses, many entities use the same method for both the prospective consideration and retrospective evaluation of hedge effectiveness.

8.1.3 Defining How Hedge Effectiveness Will Be Assessed

ASC 815-20-25-80 requires that the method(s) used to assess hedge effectiveness be defined (and documented) at the inception of the hedging relationship and that the method(s) be used consistently throughout the life of the hedge. ASC 815-20-25-81 also requires that an entity assess hedge effectiveness for all similar hedges in a similar manner, unless a different method can be justified. Should an entity identify a different method for assessing hedge effectiveness, it must discontinue the existing hedging relationship and prospectively designate a new hedging relationship. However, as discussed in ASC 815-20-55-55 and 55-56, *Changes In Assessment Methods*, such a change is not considered a change in accounting principle. Additionally, the reference in ASC 815-20-35-19 to redesignating the hedging relationship with an *improved method* was not meant to imply that a change to a new method must be considered preferable under ASC 250-10-45-2.

In defining how hedge effectiveness will be assessed, an entity must initially specify whether it will include all or only a portion of the gain or loss on a hedging instrument in its assessment of hedge effectiveness. If an election is made to exclude a portion of the gain or loss, then the changes in fair value of the excluded component would be included currently in earnings, together with any ineffectiveness that results under

the entity's defined method of assessing effectiveness. ASC 815-20-25-82 permits an entity to exclude a component of the hedging instrument's gain or loss (e.g., the *time value* element of an option) from the assessment of hedge effectiveness only in certain circumstances, which are listed below:

- a. **If the effectiveness of a hedge with an option contract is assessed based on changes in the option's intrinsic value, the change in the time value of the option would be excluded from the assessment of hedge effectiveness.**
- b. **If the effectiveness of a hedge with an option is assessed based on changes in the option's minimum value, that is, its intrinsic value plus the effect of discounting, the change in the volatility value of the contract would be excluded from the assessment of hedge effectiveness.**
- c. **An entity may exclude any of the following components of the change in an option's time value from the assessment of hedge effectiveness:**
 - 1. **The portion of the change in time value attributable to the passage of time (theta)**
 - 2. **The portion of the change in time value attributable to changes due to volatility (vega)**
 - 3. **The portion of the change in time value attributable to changes due to interest rates (rho).**
- d. **If the effectiveness of a hedge with a forward or futures contract is assessed based on changes in fair value attributable to changes in spot prices, 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 shall be excluded from the assessment of hedge effectiveness.**

With regard to item (c) above, entities may not exclude from the assessment of hedge effectiveness the portion of the change in time value attributable to changes in other market variables (that is, other than rho and vega). See ASC 815-20-55-57 through 55-61 for further guidance.

ASC 815-10-25 also concludes that with respect to an option designated as the hedging instrument in a cash flow hedge, an entity may assess hedge effectiveness based on a measure of the difference, as of the end of the period used for assessing hedge effectiveness, between the strike price and forward price of the underlying on an undiscounted basis. However, as part of the overall documentation for each hedging relationship, the entity must document the measure of intrinsic value that will be used in the assessment of hedge effectiveness. That measure must be used consistently for each period following the designation of the hedging relationship.

PwC Observation: The above guidance from ASC 815-20-25-82 has some important accounting implications. Generally, the method of how an entity assesses hedge effectiveness should not have a direct accounting impact, since high effectiveness is only a test to see if hedge accounting can be applied. However, this is not true, when an entity is assessing effectiveness for a cash flow hedge and elects to exclude a portion of the gain or loss on a hedging instrument in its assessment of hedge effectiveness, because ASC 815-30-35-3(a) specifically requires that "If an entity's defined risk management strategy for a particular

(continued)

hedging relationship excludes a specific component of the gain or loss, or related cash flows, on the hedging derivative from the assessment of hedge effectiveness (as discussed in paragraphs 815-20-25-81 through 25-83), that excluded component of the gain or loss shall be recognized currently in earnings. For example, if the effectiveness of a hedging relationship with an option is assessed based on changes in the option's intrinsic value, the changes in the option's time value would be recognized in earnings." In other words, it is determined at the inception of the hedge that the component of the hedging derivative that is excluded from the assessment of hedge effectiveness will be automatically recognized each period in earnings. The same is true for fair value hedges, except that the separation of the excluded portion from the true ineffectiveness is less apparent because all changes in a derivative's fair value are recorded in earnings each reporting period.

Therefore, when an entity assesses hedge effectiveness based on changes in spot prices (i.e., it excludes from its assessment of effectiveness the portion of the fair value of a forward contract that is attributable to the difference between the spot rate and the forward rate), changes in the spot-forward difference must always be recorded in earnings. As illustrated in Example 11 (ASC 815-30-55-75), this method of assessing hedge effectiveness adds to the number of journal entries that must be recorded. Conversely, in Example 8 (ASC 815-30-55-49), where the entity assesses hedge effectiveness based on the entire change in the fair value of the derivative contract (i.e., based on forward rates), there is no separate accounting entry required for changes in the spot-forward difference.

See Sections DH 8.2 through DH 8.4 of this chapter for further discussion on methods for assessing effectiveness.

8.1.4 Frequency of Effectiveness Assessments

An assessment of effectiveness is required whenever financial statements or earnings are reported, and at least as frequently as every three months for both public and private entities. That assessment must include both the prospective consideration to demonstrate that the hedge is expected to be highly effective in the future and a retrospective evaluation to demonstrate that the hedge has been highly effective for the period ended.

PwC Observation: As noted above, an assessment of effectiveness is required at least as frequently as every three months. However, an entity may wish to, and in some cases might be required to, perform this assessment more frequently. In a speech at the 2003 AICPA National Conference on Current SEC Developments, the SEC staff expressed the view that it would object to a documented hedge period of either monthly or quarterly when the hedge is being rebalanced on a daily or weekly basis, for example, through a delta neutral dynamic hedging strategy. The staff stated that it instead believed the designated hedge period should coincide with the rebalancing of the hedge. That requirement might be achieved through the performance of daily effectiveness assessments but, at a minimum, must support the daily or weekly frequency in which an entity intends to rebalance the portfolio.

If a hedging relationship fails to qualify for hedge accounting in a certain assessment period (e.g., because it fails either the prospective assessment performed at the

commencement of the evaluation period or the retrospective assessment performed at the end of the period), the overall change in fair value of the derivative for that current period is recognized in earnings (i.e., not reported in other comprehensive income) for a cash flow hedge, and the change in fair value of the hedged item would not be recognized in earnings for that period for a fair value hedge. Had the relationship continued to qualify for hedge accounting during the period, only the ineffectiveness of the hedge would have been reflected in current earnings. Accordingly, the consequences of failing any prospective or retrospective assessments could contribute unanticipated volatility to reported earnings.

8.1.5 Common Causes of Ineffectiveness

There are many common reasons why the changes in fair value of the hedging instrument will not exactly offset the changes in fair value or cash flows attributable to the hedged risk for the hedged item. For example, ineffectiveness may result from the following circumstances:

1. A difference between the basis of the hedging instrument and the hedged item or transaction, such as:
 - A LIBOR-based derivative instrument versus a prime-rate-indexed hedged item.
 - An Australian-dollar-denominated hedging instrument and a New Zealand-dollar-denominated hedged item. (Note that *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 effective².)
 - An aluminum-based derivative instrument and a manufactured product whose principal raw material is aluminum. (Note that the designated risk being hedged in such a hedge must be the change in the total fair value of a nonfinancial asset, which is impacted by many factors, not just the change in the price of aluminum.)
2. 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.
3. Location differences: location of the commodity on which the derivative's underlying is based differs from the location of the commodity actually being purchased or sold.
4. Option premiums for which the time value component is viewed as an insurance premium that generally is not effective as an offset for the hedged item (i.e., hedging relationships using purchased options where the provisions of ASC 815-20-25-128 have not been utilized).
5. Forward premiums or discounts that represent the cost of the derivative and may not contribute to the effectiveness of the hedge (e.g., foreign currency spot transaction hedged with a forward foreign exchange contract).

² Per ASC 815-25-55-3, the use of a hedging instrument with a different underlying basis than the item or transaction being hedged is generally referred to as a cross hedge. The principles for cross-hedges illustrated in this example 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 interest rate would be evaluated in the same way as the natural gas cross-hedge in this example.

As a general rule, if one (or more) of these or any other sources of potential ineffectiveness are present in a hedging relationship, it should be identified in the hedge documentation and assessed as to its potential impact on the effectiveness of the overall hedging relationship. Further, to the extent that it could result in more than a de minimis amount of ineffectiveness in any period, the documentation should also address the method by which it will be measured for recognition in earnings.

8.1.6 Methods of Assessing Hedge Effectiveness

The extent to which a given hedging relationship is effective will depend on how well the terms of the hedging instrument and the hedged item match. The more closely those terms align with each other, the more likely the hedging relationship will be considered highly effective and the less ineffectiveness there will be to recognize in earnings. ASC 815-20-25 does not prescribe a specific method(s) for assessing hedge effectiveness but instead requires that a reasonable method based on the objective of management's risk management strategy and the nature of the hedging relationship be applied consistently to all similar hedges.

However, in an effort to reduce the documentation burden, ASC 815-20-25-84 permits an entity to significantly reduce or eliminate its detailed effectiveness assessments in certain situations where the critical terms of the hedging instrument and the hedged item are exactly the same. For hedges of benchmark interest rate risk involving recognized financial assets or liabilities, ASC 815-20-25-102 through 25-117 provide guidance on the application of the shortcut method. For those relationships not involving the hedge of interest rate risk, ASC 815-20-25-84 discusses what has become known as the *critical terms match approach*. To the extent neither of these methods are applicable then the long-haul method must be used to assess hedge effectiveness. The shortcut, critical terms match and long-haul methods are discussed below in Sections DH 8.2, DH 8.3 and DH 8.4, respectively.

8.1.7 Documentation Requirements

Because the Board wanted to provide entities with flexibility in tailoring hedge strategies and in assessing the effectiveness of such strategies, ASC 815-20-25 does not provide detailed guidance as to how an entity should assess hedge effectiveness. However, in exchange for this flexibility, ASC 815-20-25-3 requires that an entity—at the inception of the hedging relationship—define and document the method it will use when assessing hedge effectiveness.

As discussed later in this chapter, there are a variety of methods that may be used for both assessing effectiveness and measuring ineffectiveness. Both the methods used for retrospectively and prospectively assessing hedge effectiveness and the method used for measuring ineffectiveness must be documented with sufficient specificity so that a third party could perform the measurement based on the documentation and arrive at the same result as the reporting entity.

The SEC staff has emphasized that contemporaneous designation and documentation of a hedging relationship are fundamental to the application of hedge accounting. The SEC staff has communicated that in the course of the filing review process, it has encountered instances where registrants have not been diligent in meeting the documentation requirements and that it will continue to challenge the application of hedge accounting in instances where an entity has not contemporaneously complied with all formal documentation requirements upon designation of a hedging relationship. See also Chapters DH 5, DH 6, and DH 7 for further discussion of required documentation.

PwC Observation: Once an entity selects and documents the method(s) for assessing and measuring hedge effectiveness, it must live with it (them), for better or for worse, at least until it prospectively redesignates the hedging relationship. Because the amount of ineffectiveness to recognize in earnings, as well as whether or not the hedging relationship can even be considered highly effective, may differ depending on the method(s) selected, management should carefully evaluate the manner in which it intends to assess and measure hedge effectiveness. It should also ensure that the method(s) selected is (are) adequately described in its hedge documentation to ensure there is no uncertainty regarding its selection(s). Failure to do so could result in the loss of hedge accounting from inception of the hedging relationship.

The decision an entity makes relating to the methodology to be used to assess and measure hedge effectiveness may also impact the ability for the hedging relationship to remain highly effective during the term of the hedging instrument. The decision on what methodology to use will be impacted by the entity's choice of complexity in the administration of the hedging relationship, which can indirectly impact the entity's ability to maintain hedge accounting. For example, 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 8.4.1.2 below, one of the inherent disadvantages of the dollar-offset effectiveness method is that these isolated periods could result in the hedging relationship no longer being considered to be "highly effective" under this relatively easy approach. A more complex regression analysis, however, may not result in a similar result of losing hedge accounting. Additionally, the more 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. As a result, the regression method with more data points will be the least impacted by this isolated period.

8.1.8 Disclosure Considerations

When hedge accounting has a material impact on a registrant, the SEC staff encourages registrants to include disclosures that clearly describe the specific methodology used to test hedge effectiveness for each type of hedge (apart from economic hedges), as well as how often those tests are performed. Disclosures of this type may be appropriately included within the critical accounting estimates section of management's discussion and analysis. See also Chapter DH 10 for further discussion of recommended and required disclosures.

8.2 Shortcut Method

The shortcut method described within this section allows an entity, for certain limited hedging relationships, to (1) assume that there is no ineffectiveness present without having to perform detailed effectiveness assessments otherwise required to apply hedge accounting, and (2) not record any ineffectiveness related to the hedging relationship.

PwC Observation: The shortcut method was included to provide for simplicity in the application of hedge accounting to a limited number of plain-vanilla hedging relationships. Given the potential for not recognizing hedge ineffectiveness in earnings, the application of the shortcut method is narrow in scope by design, and the regulators have strictly (and literally) interpreted its requirements. Therefore, the qualification of a hedging relationship for the shortcut method should be assessed with particular vigor. Entities should never analogize to the shortcut method for transactions that do not precisely meet its requirements. Also, transactions that are economically perfect hedges may nevertheless fail to meet all of the requirements for the shortcut method.

8.2.1 Requirements

ASC 815-20-25-104 through 25-105 specify twelve conditions that must be met to qualify for fair value hedge accounting and ASC 815-20-25-104 and 25-106 specify the thirteen conditions that must be met to qualify for cash flow hedge accounting if an entity is to assume no ineffectiveness in a hedging relationship under the shortcut method. If those conditions are met, an entity may assume that changes in the fair value or cash flows that are attributable to the risk being hedged will be completely offset at the hedge's inception and on an ongoing basis. This process has been referred to by the FASB staff and others as the *shortcut method* of assessing hedge effectiveness. Accordingly, in this situation, an entity's assessment of hedge effectiveness as required by ASC 815-20-25-75 would involve documenting only the terms discussed in ASC 815-20-25-104 through 25-106, as appropriate, for the hedging instrument and the hedged item and no ineffectiveness would need to be measured or recorded.

Unlike the abbreviated critical terms match method described in ASC 815-20-25-84 and Section DH 8.3 below, the shortcut method described in ASC 815-20-25-102 through 25-117 does not require a periodic evaluation of the critical terms over the life of the hedging relationship. However, should the critical terms of the hedging instrument or the hedged item change such that the hedging relationship would no longer qualify for use of the shortcut method, the hedge accounting relationship would be terminated. Upon any redesignation, a fully detailed effectiveness assessment would be required (i.e., the long-haul method would be required).

8.2.2 Fundamental Considerations

Before one addresses the detailed requirements in ASC 815-20-25-104 through 25-106, there are three fundamental criteria that should be considered when evaluating whether a hedging relationship can qualify for use of the shortcut method. First, *interest rate risk* (i.e., changes in fair value or cash flows attributable to changes in a designated benchmark interest rate) must be the only risk identified as the hedged risk. If the hedging relationship is a hedge of foreign exchange and interest rate risk or credit risk and interest rate risk, use of the shortcut method is not permitted. Likewise, the hedging relationship cannot involve the use of a non-benchmark interest rate, such as the prime rate.

Second, the shortcut method is available for hedging relationships only where the hedging instrument involves an *interest rate swap* with a variable rate leg indexed to a benchmark rate of interest (or 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). Therefore, forwards, futures,

other types of swaps, options (including options to enter into a swap), forward starting swaps, and other instruments are not eligible. Similarly, a compound hedging instrument composed of an interest rate swap and any mirror-image features other than puts, calls, floors, or caps would not be allowable.

Third, the shortcut method is available only for fair value or cash flow hedges involving a *recognized interest-bearing financial 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 (liability to the issuer and asset to the holder). Examples of items that are not considered a recognized asset or liability include forecasted or anticipated debt issuances, other forecasted transactions such as forecasted purchases or sales of inventory or commodities, and operating leases.

One possible exception to the requirement that the hedged item be a *recognized* interest-bearing asset or liability relates to situations where the hedging instrument is entered into on the pricing date of the hedged item but is not recognized until its settlement date several days later. This issue is discussed further in DH 8.7, Question No. 8-7.

8.2.3 Additional Considerations

In addition to those considerations identified in Sections DH 8.2.1 and DH 8.2.2 above, all of the following required conditions specified in ASC 815-20-25-104 through 25-106 and their subparagraphs, must be strictly met in order to qualify for application of the shortcut method:

ASC 815-20-25-104(a)

a. The notional amount of the interest rate swap matches the principal amount of the interest-bearing asset or liability being hedged.

As it relates to the shortcut method, *match* means that the principal amount must match exactly. There is no concept of “close enough” when it comes to applying the shortcut method.

However, the condition in ASC 815-20-25-104(a) need not be applied so literally that only a hedge of the entire debt with a single interest rate swap would qualify. An entity may designate a proportion of an interest-bearing asset or liability in a hedging relationship and still meet this condition. Likewise, a proportion of an interest rate swap may be utilized in a hedging relationship qualifying for the shortcut method. Thus the important point to remember is that 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.

Questions have arisen related to the requirement to match the notional amount of the interest rate swap to the principal amount of the interest-bearing asset or liability, regarding what occurs when the hedged item is subject to principal pay downs prior to maturity.

The Board considered this question in the Exposure Draft of DIG Issue E23. While the Board never actually concluded that ASC 815-20-25-104(a) is met in this circumstance, we understand that when (a) the notional amount of the swap and the principal amount of the hedged item match for each hedged interest payment for a cash flow hedge or match over the entire term of the hedged item for a fair value

hedge and (b) the notional amount of the fixed leg of the swap matches the notional amount of the variable leg of the swap throughout the life of the hedging relationship (e.g., through the use of an amortizing interest rate swap to hedge an interest-bearing asset or liability that has an amortizing principal balance), the criterion in ASC 815-20-25-104(a) has been met.

ASC 815-20-25-104(b)

- 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 820-10-35-7). 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.**

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 inception. Therefore, it is highly unlikely that a hedging relationship could qualify for the shortcut method unless the designation is made at the inception 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.

The Board concluded in DIG Issue E23 that ASC 815-20-25-104(b) is met for an interest rate swap that has a non-zero fair value at the inception of the hedging relationship provided that 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 entity's primary market (or most advantageous market, as applicable) under ASC 820-10-35-9B.

ASC 815-20-25-104(c)

- 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.**

An area where problems may occur in applying this requirement is related to costs paid by one party to the counterparty of the hedge, such as brokerage or debt issuance costs. If 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 will result in either the fair value of the contract not being zero or one, or both, of the swap legs to be at a non-market rate. Practitioners need to be aware of all such unstated rights and privileges that may have been paid for through the pricing of the interest rate swap.

Practitioners should also carefully 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.

The only explicit exception to the ASC 815-20-25-104(b) requirement that the fair value of the interest rate swap designated in a hedging relationship under the shortcut method must be zero at inception occurs 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 that is the subject of a hedge under the shortcut method is issued at a premium or discount equal to the fair value of the embedded call or put option, then 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. While this amount may approximate the discount or premium of the hedged item, it would not be expected to be the same amount due to credit spread differences between the instruments. Because prepayable interest-bearing assets and liabilities are generally issued at or near their par value, the circumstances where the interest rate swap would be allowed to have a fair value other than zero are expected to be rare.

ASC 815-20-25-104(d)

- 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.**

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. There is a view that one could interpret the words in ASC 815-20-25-104(d) to further require 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, i.e., 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 under the shortcut method. Notwithstanding, we think such an approach is overly rigid as even though cash settlements on the fixed and variable legs of the interest rate swap may not occur simultaneously, we believe that so 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 shortcut method is permissible (i.e., assuming all of the other conditions of ASC 815-20-25-102 through 25-106 have been met).

ASC 815-20-25-104(e)

- e. The interest-bearing asset or liability is not prepayable, that is, able to be settled by either party before its scheduled maturity, 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).**
 - 2. The call option embedded in the interest rate swap is considered a mirror image of the call option embedded in the hedged item if all of the following conditions are met:**
 - i. The terms of the two call options match exactly, including all of the following:**
 - 01. Maturities**
 - 02. Strike price (that is, the actual amount for which the debt instrument could be called) and there is no termination payment equal to the deferred debt issuance costs that remain unamortized on the date the debt is called**
 - 03. Related notional amounts**
 - 04. Timing and frequency of payments**
 - 05. Dates on which the instruments may be called**
 - ii. The entity is the writer of one call option and the holder (or purchaser) of the other call option.**

The presence of prepayment options in an interest-bearing asset or liability would typically be expected to violate the assumption of no ineffectiveness necessary for applying the shortcut method unless a mirror-image call or put option is incorporated into the interest rate swap. However, many debt instruments may contain various terms that permit either the debtor or the creditor to cause the prepayment of the debt prior to maturity that would not violate the shortcut method's assumption of no ineffectiveness. ASC 815-20-25-113 provides guidance on what provisions are considered prepayable for the purposes of applying the shortcut method. The general notion is that 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 for the

purposes of applying the shortcut method. Therefore, mirror-image prepayment options would not be required to be incorporated in the interest rate swap in order to qualify for the shortcut method.

One common example is a prepayment option included in a fixed-rate borrowing containing a *make-whole provision*. A typical call option enables the issuer to benefit from the option's exercise by prepaying the 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 prepayment option triggering a make-whole provision does not yield such a benefit because the settlement price is a variable amount that is generally determined by discounting the debt's remaining contractual cash flows at a specified small spread over the current Treasury rate. That settlement amount would be expected to be greater than the debt's fair value based on the issuer's likely higher credit spread over the Treasury rate. Thus the prepayment option contains a premium settlement amount to penalize the debtor and would not be considered a source of ineffectiveness in a shortcut hedge relationship.

Another example is a contingent acceleration clause that permits 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).

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, except as discussed below related to ASC 815-20-25-106(c)(2). The terms that must match exactly include maturities, strike price, related notional amounts, timing and frequency of payments, dates on which the instruments may be exercised, how premiums are paid and style of option (e.g., American, Bermudan, or European). In making this determination, ASC 815-20-25-108 clarifies that the carrying amount of the debt instrument has no direct impact on whether the swap contains a mirror-image option. The carrying amount of the debt is economically unrelated to the amount that would be required to pay to exercise the embedded option. Any discount or premium, as well as any related deferred issuance costs, is irrelevant in determining whether ASC 815-20-25-104(e) has been 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.

Another term that could violate the shortcut method's assumption of no ineffectiveness is whether there is any difference between the notification/election dates on the call or put option embedded in the hedged interest-bearing asset or liability and the interest rate swap. For example, if the hedged asset or liability requires a 60-day notification date prior to exercise of the put or call option, but the mirror-image put or call option in the interest rate swap requires a longer or shorter notification period, the change in fair value of the hedged item and hedging instrument may not be expected to perfectly offset. The option notification date essentially defines the term of the option, which is a key factor in determining its fair value. Therefore, a difference in the notification dates could cause the hedging relationship to fail to qualify for the shortcut method.

ASC 815-20-25-104(f)

- f. The index on which the variable leg of the interest rate swap is based matches the benchmark interest rate designated as the interest rate risk being hedged for that hedging relationship.**

A benchmark interest rate is defined in ASC 815-20-20 as “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 each financial market, only the one or two most widely used and quoted rates that meet the above criteria may be considered benchmark interest rates. The benchmark interest rate should be a risk-free rate and may be an interbank offered rate. In the United States, only the interest rates on direct Treasury obligations of the U.S. government and LIBOR swap rates are currently considered to be benchmark interest rates. However, in January 2013, the EITF reached a consensus-for-exposure to amend the existing definition of benchmark interest rate risk in ASC 815 to include the Fed Funds Effective Swap Rate. When the hedged item is a euro-denominated instrument, we believe a company may designate Euribor (the “euro interbank offered rate”) as the benchmark interest rate. Euribor 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. Therefore, Euribor would meet the criteria of a benchmark interest rate.

PwC Observation: A hedging relationship involving a swap with a variable leg based on a prime rate would not be eligible for the shortcut method even if it represents a perfectly effective economic hedge. However, the entity may not have any ineffectiveness to record if the change-in-variable-cash-flows method under ASC 815-30-35-16 or the hypothetical-derivative method under ASC 815-30-35-25 is applied to calculate ineffectiveness. Similarly, swapping to or from the Consumer Price Index (CPI), the federal funds rate (subject to the previously mentioned EITF deliberations), the Bond Market Association Municipal Swap Index, or any index other than the U.S. Treasury rate or LIBOR is not eligible for application of the shortcut method for an interest-bearing asset or liability in the U.S.

ASC 815-20-25-104(g)

- 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 no ineffectiveness.**

The only source of *known ineffectiveness* permitted under ASC 815-20-25-104(g) explicitly permitted in the shortcut method should be caused by differences in counterparty credit spreads as discussed in ASC 815-20-25-111. Any other apparent sources of ineffectiveness present in a hedging relationship should serve as an alarm that the application of the shortcut method is likely not appropriate.

PwC Observation: Our experience is that the standard setters and some regulators believe that the shortcut method should be applied only in the most straightforward hedging relationships. To support their view, they cite the reference in ASC 815-20-25-104(g) to terms that are “typical of those instruments.” Therefore, they maintain that any interest rate swap that must be highly structured to introduce features that are non-standard would violate this criterion. For example, a hedging instrument that is a forward starting swap (i.e., a forward on an interest rate swap)—because it is not a plain-vanilla interest rate swap—would not be eligible for the shortcut method. The challenge this view presents is how to determine when a feature is non-standard given the constant evolution in the marketplace. Others have supported the application of the shortcut method, provided that all terms of the instruments have been matched such that the assumption of no ineffectiveness has not been violated.

Refer also to DH 8.7, Question Nos. 8-1, 8-3, 8-4, 8-6, 8-8, 8-9, 8-10 and 8-11.

8.2.4 Conditions Applicable to Fair Value Hedges Only

ASC 815-20-25-105(a)

- a. The expiration date of the interest rate swap matches the maturity date of the interest-bearing asset or liability.**

As it relates to the shortcut method, *match* means that the expiration dates must match exactly to the day. There is no concept of “close enough” if dates are within a couple of days as ASC 815-20-25-102 is unequivocal in this regard.

PwC Observation: Practitioners should carefully review the impact of weekend and holiday rules (such as NY/London) 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 a modified following business convention). In some cases, seemingly different business-day rules may result in matched terms, so careful consideration is necessary.

ASC 815-20-25-105(b)

- b. There is no floor or cap on the variable interest rate of the interest rate swap.**

As noted above, 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.

ASC 815-20-25-105(c)

- 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).**

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(d)

- d. For fair value hedges of a proportion of the principal amount of the interest-bearing asset or liability, the notional amount of the interest rate swap designated as the hedging instrument (see [a] in the preceding paragraph³) matches the portion of the asset or liability being hedged.**

ASC 815-20-25-105(e)

- e. For fair value hedges of portfolios (or proportions thereof) of similar interest-bearing assets or liabilities, both of the following criteria are met:**
 - 1. The notional amount of the interest rate swap designated as the hedging instrument matches the aggregate notional amount of the hedged item (whether it is all or a proportion of the total portfolio).**
 - 2. The remaining criteria for the shortcut method are met with respect to the interest rate swap and the individual assets or liabilities in the portfolio.**

Refer also to DH 8.7, Question Nos. 8-1, 8-2, 8-4, 8-5, 8-6 and 8-8.

8.2.5 Conditions Applicable to Cash Flow Hedges Only

ASC 815-20-25-106(a)

- 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)

- 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's not being hedged and thus violate the shortcut method's assumption of no ineffectiveness. An example of a cash flow hedging relationship that would violate this condition is a 24-month floating-rate debt instrument 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 provisions of 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.

³ [a] refers to paragraph ASC 815-20-25-104(a).

ASC 815-20-25-106(c)

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.**

For the purposes of satisfying 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. In contrast to the example cited above, if a swap's variable rate is LIBOR and an asset's variable rate is LIBOR plus 2 percent, a 10 percent cap on the swap would not be comparable to a 10 percent 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 percent. Practitioners should ensure that any differences between the floors or caps do not violate the assumption of the no ineffectiveness criterion in ASC 815-20-25-104(g).

ASC 815-20-25-106(d)

- 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.**

In this case, *match* means that the repricing dates and calculation methods must match exactly to the day. There is no concept of "close enough" if dates are within a couple of days as ASC 815-20-25-102 is unequivocal in this regard.

PwC Observation: Similar to the observation related to ASC 815-20-25-105(a) for fair value hedges, practitioners should carefully 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 modified following). In some cases, seemingly different business-day rules may result in matched terms, so careful consideration is necessary.

ASC 815-20-25-106(e)

- e. For cash flow hedges of the interest payments on only a portion of the principal amount of the interest-bearing asset or liability, the notional amount of the interest rate swap designated as the hedging**

instrument (see paragraph 815-20-25-104[a]) matches the principal amount of the portion of the asset or liability on which the hedged interest payments are based.

ASC 815-20-25-106(f)

- f. For a cash flow hedge in which the hedged forecasted transaction is a group of individual transactions (as permitted by paragraph 815-20-25-15[a]), if both of the following criteria are met:**
 - 1. The notional amount of the interest rate swap designated as the hedging instrument (see paragraph 815-20-25-104[a]) matches the notional amount of the aggregate group of hedged transactions.**
 - 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.**

As discussed in ASC 815-20-25-122, *Consideration of Counterparty Credit Risk*, implicit in the criteria for the shortcut method is the requirement that a basis exists for conclusion on an ongoing basis that the hedging relationship is expected to be highly effective in achieving offsetting changes in fair values or cash flows. Accordingly, practitioners need to consider the likelihood of the counterparty's compliance with the contractual terms of the interest rate swap. If the likelihood that the counterparty will not default ceases to be probable, an 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.

Refer also to DH 8.7, Question No. 8-1.

8.2.6 Error in the Application of the Shortcut Method

Initially, the shortcut method had popular appeal due to its relative simplicity of application. It provides relief from having to reassess hedging relationships for effectiveness whenever financial statements or earnings are reported (and at least every three months). It also absolves the entity from having to measure and record any ineffectiveness, which in some circumstances, such as with many fair value hedges, could be significant. However, as previously mentioned, given the potential for not recognizing hedge ineffectiveness in earnings, the application of the shortcut method is narrow in scope by design, and the regulators have strictly (and literally) interpreted its requirements.

The consequences of applying the shortcut method in error can often be significant. In order to apply hedge accounting, ASC 815-20-25-3 requires formal identification and documentation of how the hedging instrument's effectiveness in offsetting exposure to changes in the hedged item's fair value or hedged transaction's variability in cash flows attributable to the hedged risk will be assessed at inception of the hedge designation. If an entity incorrectly identifies its method of assessing effectiveness as the shortcut method, it is prohibited from retroactively identifying a more appropriate method of hedge effectiveness assessment and 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 or represented a perfect economic hedge. Accordingly, an

incorrect application of the shortcut method often results in an accounting error that must be evaluated for materiality and potential correction.

The SEC staff has observed several instances in which the shortcut method has been inappropriately applied. Many of the hedges encountered did appear to provide economic offset; however, they failed to meet one or more of the criteria necessary to qualify for the shortcut method. In some instances, registrants assumed that they did not need to assess or measure ineffectiveness because they had met the “spirit” of the shortcut method. The SEC staff does not believe that the shortcut criteria have a “spirit” or a principle that can be met without strict compliance with the stated requirements. This view is consistent with ASC 815-20-25-102, which indicates that each and every one of the shortcut criteria must be met and that “Given the potential for not recognizing hedge ineffectiveness in earnings under the shortcut method, its application shall be limited to hedging relationships that meet each and every applicable condition. That is, all the conditions applicable to fair value hedges shall be met to apply the shortcut method to a fair value hedge, and all the conditions applicable to cash flow hedges shall be met to apply the shortcut method to a cash flow hedge. A hedging relationship cannot qualify for application of the shortcut method based on an assumption of no ineffectiveness justified by applying other criteria. The verb match is used in the specified conditions in the list to mean be exactly the same or correspond exactly.”

PwC Observation: In view of the narrow scope of the shortcut method, the literal interpretation of its criteria, and the risk of restatement for failure to strictly comply with each, we have observed registrants moving away from the shortcut method in favor of the more burdensome long-haul method. While we do not advocate the wholesale abandonment of the shortcut method, we do recommend that companies carefully evaluate all hedging relationships where the shortcut method is applied.

8.2.7 Mechanics in Accounting Under the Shortcut Method

For cases in which an entity wishes to use the shortcut method for qualifying hedging relationships, the mechanics of the accounting are straightforward. Essentially, 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 an entity should take in applying the shortcut method for fair value hedges and cash flow hedges, respectively, as follows:

Fair Value Hedge of a Liability	Cash Flow Hedge of an Asset
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, although that complication is not incorporated in this Example.)	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, although that complication is not incorporated in this Example.)
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.

These steps describe the application of the shortcut method of a fair value hedge for a fixed-rate interest-bearing liability and a cash flow hedge for a variable-rate interest-bearing asset. Comparable steps should be followed related to a fair value hedge of fixed-rate interest-bearing assets and a cash flow hedge of a variable-rate interest-bearing liability under hedging relationships qualifying for the shortcut method.

8.2.8 Late-Term Hedges and the Shortcut Method

Late-term hedging refers to the practice of establishing a hedge relationship between a hedged item at its inception and a hedging instrument at a time other than at its inception, or vice versa.

The SEC staff has cautioned that the “shortcut” and “critical-terms-match” methods of assessing hedge ineffectiveness are intended for straightforward hedging relationships involving conventional instruments. Instruments with unusual terms require a more thorough analysis of ineffectiveness.

For a fair value hedge, ASC 815-20-25-104 through 25-105 list the conditions that must be met for the hedging relationship to qualify for the shortcut method of hedge accounting. The requirements are more fully discussed in DH 8.2.3 and 8.2.4 above. One of the conditions is that the terms of the hedged instrument and the interest rate swap must comply with both of the following:

- The terms are typical of those instruments
- The terms do not invalidate the assumption of no ineffectiveness

There is some question on whether a late hedge, designated subsequent to issuance of the forecasted transaction contains terms that invalidate the assumption of no ineffectiveness and therefore does not meet the above criteria and cannot be accounted for using the shortcut method. Specifically, the primary concern is the

duration or interest rate sensitivity of the hedged instrument and interest rate swap in a late hedge will differ from the duration of the hedged instrument and the interest rate swap that would have been executed at issuance of the hedged instrument. This duration difference may lead to increased ineffectiveness 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, an entity that enters into an interest rate swap and designates it as a fair value hedge of a 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 percent. In the current interest rate environment, benchmark rates are 1 percent. 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 instrument.

As a result, we believe that entities that seek to apply the shortcut method to a late hedge should ensure, at a minimum, that the hedging relationship is highly effective and does not invalidate the assumption of no ineffectiveness. 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 entity would then compare the amount of ineffectiveness in the late hedging relationship with the amount of ineffectiveness in the hypothetical “at issuance” hedging relationship. If the analysis demonstrates that the late hedging relationship is as effective as the hypothetical hedging relationship, this would indicate that the late hedge does not introduce additional effectiveness.

Another approach to demonstrate that the late hedge does not introduce additional ineffectiveness is by reference to the fair value of the hedged instrument. If the fair value of the instrument being hedged is at or near par, the entity may be able to conclude that the hedging relationship is no more ineffective than it would have been at the issuance date.

If the entity’s analysis demonstrates that the late hedge produces hedge ineffectiveness that does invalidate the assumption of no ineffectiveness, then the entity should not use the shortcut method and the long-haul method of hedge effectiveness testing and documentation should be used. Otherwise, the entity should ensure that there is robust contemporaneous documentation that includes how the criteria were met and the quantitative evidence to demonstrate “no ineffectiveness” should be prepared to clearly demonstrate how this conclusion was reached.

PwC Observation: Generally, use of the shortcut method for assessing hedge effectiveness, or an assertion that critical terms match, would not be appropriate for entities entering into late-term cash flow or fair value hedging arrangements. For example, in late-term hedging, the terms of the hedged item such as its coupon rate would generally not be at market rates at the date of hedge designation. Therefore, the absence of ineffectiveness may not be assumed, and entities would likely need to use the long-haul method. In addition, late-term hedging for fair value hedges requires careful consideration when measuring basis adjustments of the hedged item.

8.3 Critical Terms Match Approach for Hedging Instruments and Hedged Items (ASC 815-20-25-84)

ASC 815-20-25-84 states that:

Whether a hedging relationship qualifies as highly effective sometimes will be easy to assess, and there will be no ineffectiveness to recognize in earnings during the term of the hedge. If the critical terms of the hedging instrument and of the entire hedged asset or liability (as opposed to selected cash flows) 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 highly effective and that there will be no ineffectiveness to be recognized in earnings 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.**
- 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 and included directly in earnings 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.**

In these circumstances, the entity may apply an abbreviated method of assessing effectiveness. In this abbreviated method, the entity may forego performing a detailed effectiveness assessment in each period and instead document 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 there is no ineffectiveness to be recorded. In that case, the change in the fair value of the derivative can be viewed as a proxy for the present value of the change in cash flows attributable to the risk being hedged. The documentation that the critical terms of the hedging instrument and hedged item match and that it is probable that the counterparties to the hedging instrument will

not default must be performed at the inception of the hedging relationship and on an ongoing basis throughout the hedging period.

Should the critical terms subsequently change and thus invalidate the assumption of no ineffectiveness, a full detailed effectiveness assessment would be required (i.e., the long-haul method should be applied). Should it no longer be probable that the counterparties to the hedging instrument or the hedged item will not default, then hedge accounting should be discontinued. This abbreviated method of assessing effectiveness is addressed in ASC 815-20-35-9 through 35-13.

Refer to question 6-20 in DHG 6.8 for a discussion on the designation of a cash flow hedge of a forecasted issuance of fixed-rate debt with a treasury rate lock.

PwC Observation: ASC 815-20-25-84 points out to constituents that an entity may not have any ineffectiveness when the conditions in the paragraph are satisfied. We understand through discussions with the FASB staff that, by including ASC 815-20-25-84, the Board did not mean to suggest that an entity (1) does not need to perform any assessments of effectiveness, or (2) may disregard the recognition of any ineffectiveness in earnings when ineffectiveness is definitely present. Since there likely is ineffectiveness in fair value hedges of interest rate exposures because of credit differences between the hedging instrument and hedged item, the FASB staff's view is that only hedges of commodities and foreign exchange may satisfy the conditions of ASC 815-20-25-84. Similarly, many swaps used as hedging instruments might not satisfy the conditions in ASC 815-20-25-84. With respect to cash flow hedges of interest rate exposures, the FASB staff believes the change-in-variable-cash-flows method under ASC 815-30-35-16 through 35-24 or the hypothetical-derivative method under ASC 815-30-35-25 through 35-30 should be followed when measuring the ineffectiveness of a cash flow hedge of interest rate exposures when the shortcut method is not applied. However, the staff would acknowledge that, pursuant to ASC 815-30-35-22 or ASC 815-30-35-29 and as further discussed in Section DH 8.3.2 of this chapter, there may be certain situations in a cash flow hedge of interest rate risk using an interest rate swap whereby no ineffectiveness will be recognized in earnings. Nevertheless, an entity should not apply ASC 815-20-25-84 to a cash flow hedge of interest rate exposures, because ASC 815-30-35-22 or ASC 815-30-35-29 is the appropriate guidance for such hedges when the shortcut method is not applied.

8.3.1 Identifying All Known Sources of Ineffectiveness

In a speech at the 2006 AICPA National Conference on Current SEC & PCAOB Developments, the SEC staff expressed the view that it is not appropriate to simply assume there is no ineffectiveness in a hedging relationship while ignoring known sources of variability that are not perfectly matched. However, the SEC staff subsequently learned that there may be an inconsistency between the manner in which the critical terms match approach has been applied in practice and the views expressed in the speech. Many registrants have historically evaluated the effectiveness of hedging relationships for only those provisions that may have a reasonable possibility of creating more than a de minimis amount of ineffectiveness. Other sources of potential ineffectiveness (i.e., those that pose only a remote chance of giving rise to a significant amount of ineffectiveness) were often evaluated only qualitatively. In practice, many entities believed that only the material aspects of a hedging relationship (i.e., the critical terms) need to be quantitatively assessed and documented to qualify for the application of hedge accounting under ASC 815-20-

25-84, the change-in-variable-cash-flows method under ASC 815-30-35-16 through 35-24 or the hypothetical-derivative method under ASC 815-30-35-25 through 35-30. For example, many in practice believe that if the hedged item and the derivative instrument settle within the same month, the critical terms of the hedging relationship were sufficiently matched. Therefore, no quantitative assessment was performed, and the qualitative assessment of those de minimis sources of ineffectiveness may not have been formally documented.

In view of the pervasiveness of the issue and given that the Board was considering a project to clarify (or possibly revise) the hedge accounting guidance under ASC 815-20-25, the SEC staff announced on March 15, 2007, that it had decided not to take any specific action on the matter at that time and to let the standard-setting process run its course. However, the SEC staff believes that registrants should be able to validate their prior assertions that the hedging relationship was highly effective and the amount of any ineffectiveness would be de minimis. Accordingly, the SEC staff is encouraging registrants to prepare a quantitative analysis to support the appropriateness of these assertions. The SEC staff stated that it is not going to prescribe a specific method for registrants to follow because ASC 815-20-25 allows considerable latitude in the manner in which the hedge effectiveness can be supported and the reasonableness of any analysis would be highly dependent on the nature of the hedging relationship. The SEC staff further stated that its views were limited to only those situations described in a white paper—Hedge Accounting When Critical Terms Match, prepared by the Big Four accounting firms—and would not necessarily extend to other fact patterns or other types of potential deficiencies in hedge documentation.

PwC Observation: Our historical perspective has been that, if there were any sources of variability in a hedging relationship that were not perfectly matched, an assumption of no ineffectiveness under ASC 815-20-25-84 might still have been acceptable if an entity had reasonably demonstrated an expectation of high effectiveness and that any amounts of ineffectiveness would be de minimis.

In the 2006 SEC speech referenced above, the SEC staff discussed this point of view. While the staff stated that it isn't appropriate in most situations to rely on intuition alone to prove that the ineffectiveness present in a hedging relationship is immaterial, they acknowledged that based on the individual facts and circumstances, they have in fact accepted not recording ineffectiveness when there are known sources of ineffectiveness present in the relationship. In these circumstances, the company identified the source of the ineffectiveness, had evaluated the possible impacts under a variety of realistic scenarios that effectively demonstrated that the possible ineffectiveness would be de minimis, and had performed and documented a thorough analysis that demonstrated a continuing and reasonable expectation of effectiveness.

8.3.2 Qualitative and Quantitative Assessment

As discussed within this section, in certain situations where the critical terms of the hedging instrument and the hedged item are exactly the same, an entity may conclude that changes in the fair value of the derivative and the fair value or cash flows of the hedged item (attributable to the risk that is being hedged) are expected to completely offset at the hedge's inception and on an ongoing basis.

Provided that the four conditions described in ASC 815-30-35-16 through 35-24 for the change-in-variable-cash-flows method involving an interest rate swap (see

Section DH 8.5.2 below) are met, an entity (1) can qualitatively assess that the hedge results in no ineffectiveness and (2) is therefore not required to quantitatively assess hedge effectiveness. If any of the four criteria are not met, a quantitative assessment is needed to determine if the hedge is effective for both the prospective and retrospective effectiveness tests.

Similarly, if an entity uses the hypothetical-derivative method, described in ASC 815-30-35-25 through 35-30 to assess hedge effectiveness involving an interest rate swap (i.e., a method whereby the change in fair value of a hypothetical derivative is compared with the change in fair value of the actual derivative) and determines that the terms of the hypothetical derivative exactly match the terms of the actual hedging instrument, the entity may qualitatively assume that there is no ineffectiveness in the hedging relationship. 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. 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 25-106 necessary to qualify for use of the shortcut method except the criterion in ASC 815-20-25-104(e) and the criterion in ASC 815-20-25-104(f) (i.e., the criterion that the index on which the variable leg of the swap is based matches the benchmark interest rate designated as the hedged risk). In that case, the entity is not required to conduct a quantitative assessment. However, if the terms do not exactly match, a quantitative assessment is needed to determine if the hedge is effective both prospectively and retrospectively.

If the entity determines that there is no ineffectiveness in the hedge based on the above, we believe that an ongoing assessment of hedge effectiveness can be made on a qualitative basis, similar to the approach in ASC 815-20-35-9 through 35-13. That is, the entity should monitor whether (1) the critical terms of the derivative and the hedged item have changed during the period of review, and (2) there are adverse developments regarding counterparty default. In addition, the entity should monitor whether the hedged cash flows remain probable and whether the timing of those expected cash flows varies from the original expected dates.

If the entity, at inception of the hedge, documents that it will use a qualitative method to assess hedge effectiveness, it should also document the quantitative methods it will use to measure hedge ineffectiveness if circumstances change over the course of the hedging relationship. If the entity does not document the quantitative methods to measure ineffectiveness in the event of a change, hedge accounting would need to be discontinued in the event of any change in circumstances.

8.4 Long-Haul Method

In those situations when it is not appropriate to use the shortcut method or the critical terms match approach as previously discussed, the assessment of hedge effectiveness will be more complex, and a more detailed analysis of hedge effectiveness will be required.

Long-haul methods commonly accepted under ASC 815-20-35-2 include regression or other statistical analysis and dollar-offset analysis. While ASC 815-20-35-2 provides for choice of method, we have observed that the general practice has been to elect a regression approach for both the required retrospective and prospective testing discussed above in Section DH 8.1.2. Each of these approaches is discussed below.

PwC Observation: These detailed analyses that are discussed in this section are also generally available for purposes of assessing hedge effectiveness in situations where the shortcut method or critical terms match approach discussed above in Sections DH 8.2 and DH 8.3, respectively, is allowed. Because of some of the nuances in eligibility of these abbreviated approaches and the consequences of incorrect application, entities might want to consider application of one of these long-haul methods if they are uncertain as to whether they qualify currently and will continue to qualify under the shortcut or critical terms match methods.

8.4.1 Dollar-Offset Analysis

The dollar-offset method compares the change in the fair value or present value of cash flows of the hedging instrument with 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 consideration and/or the retrospective evaluation and is required to be used for purposes of measuring the amount of hedge ineffectiveness recognized in earnings each period.

PwC Observation: Although ASC 815-20-25-79 does not specifically mention the dollar-offset approach as a method to use in prospective considerations, the dollar-offset approach has been generally viewed as an acceptable method to use in prospective considerations of assessing hedge effectiveness. This is further supported by ASC 815-20-35-13, which states the following: “In addition, the entity must assess whether the hedging relationship is expected to continue to be highly effective (using either a dollar-offset test or a statistical method such as regression analysis).”

As discussed in ASC 815-20-35-5, there are two methods that are permissible in periodically assessing retrospectively the effectiveness of the hedge in having achieved offset 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. The following table illustrates these two methods.

Dollar-Offset Analysis

End of	Derivative	Change	Hedged Item	Change ¹	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%

¹ Represents either the change in the fair value or the change in the present value of the expected future cash flows of the hedged item.

As this table demonstrates, using the discrete period method of assessing effectiveness results in disqualification of the hedge in quarters 3 and 4 and the inability of the entity to apply hedge accounting in those quarters. However, if the cumulative method had been designated and documented as the method

of retrospectively evaluating hedge effectiveness, all periods would have been considered highly effective and would have qualified for hedge accounting.

PwC Observation: While an entity is free to select either the cumulative or the discrete period-by-period method when assessing hedge effectiveness by using the dollar-offset method, once selected, it must abide by the results regardless of the outcome. A different method of assessing hedge effectiveness may never be selected in hindsight, only prospectively. Therefore, practitioners should give careful consideration to their selection of methods at the inception of a hedging relationship.

8.4.1.1 Hypothetical Derivative

In certain situations, it may be difficult for an entity to calculate the change in fair value (or present value of cash flows) of the hedged portion of the hedged item. In those instances, a company may construct a hypothetical derivative: a derivative with terms that match those of the hedged item and would therefore represent the “perfect” derivative (i.e., a derivative that would create no ineffectiveness). Under the dollar-offset method, the entity would then compare the change in fair value of the hypothetical derivative against the change in fair value of the hedging instrument in assessing whether the hedge is highly effective.

PwC Observation: The term *hypothetical derivative* is used within ASC 815-30-35-25 through 35-30, which provides guidance on measuring ineffectiveness for hedges using interest rate swaps. However, the concept of a hypothetical derivative is used throughout practice because it provides a basis for comparison when determining whether a hedging item is highly effective and measuring any ineffectiveness. A hypothetical derivative may be used for options, forwards contracts, swaps, or other derivative instruments and for other exposures in addition to interest rate risk (e.g., foreign currency or commodity price risk).

8.4.1.2 Advantages/Disadvantages to Dollar-Offset

While the dollar-offset method is simple to understand and easy to implement, its use might result in significant problems in demonstrating high effectiveness for the hedging relationship, particularly in situations where there are isolated periods of aberrant behavior in the underlying. Generally, hedging relationships that contain basis differences contain risk of not qualifying for hedge accounting under a retrospective test because such aberration could weigh heavily in the assessment results.

The classic example of such aberrant behavior occurs 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 due to the fact that the basis difference, which is not being captured in the hedging instrument, will potentially represent a far greater portion of the overall change in the hedged item.

For example, in a fair value hedge where the notional amount of the hedged item and the derivative instrument are \$100 million, one might typically expect a movement

in fair value of \$500,000 over the assessment period. In such a period, the change in the fair value of the hedging instrument is expected to be within plus or minus 10 percent of the change in the fair value of the hedged item, and therefore the dollar-offset ratio would be 1.1 (i.e., \$550,000 divided by \$500,000). However, if a period of low volatility for the underlying was experienced, the overall change in fair value of the hedged item may be only \$50,000 during the period. If the change in the fair value of the hedging instrument were \$65,000, then the dollar-offset ratio would be 1.3 and the hedging relationship would fail the effectiveness assessment. Yet, if the result is put in context of the \$100 million notional amount of the hedge item, it certainly does not look like there is a significant element of ineffectiveness present in the basis difference. Because of the risk of losing hedge effectiveness in periods of low volatility, many practitioners prefer to use regression analysis instead of the dollar-offset approach. As discussed in the next section, 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 effectiveness test to fail.

8.4.2 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 (known as independent variables). 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 test, the primary objective of regression analysis is to determine if changes to the hedged item and derivative instrument 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) were 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, then there would be a strong correlation, because approximately 100 percent of the change in the dependent variable can be “explained” by the change in the independent variable.

The degree of explanatory power or correlation between the dependent and independent variables is measured by the coefficient of determination, or R^2 . The R^2 indicates the proportion of variability in the dependent variable that can be explained by variation in the independent variable. Therefore, the higher the R^2 associated with a regression analysis for a hedging strategy, the more effective the relationship is likely to be. Although topic ASC 815 does not provide a specific threshold for R^2 , practice generally requires an R^2 of .80 or higher for a hedging relationship to be considered highly effective.

While the R^2 is certainly a key metric, it is not the only consideration in evaluating the effectiveness of a hedging relationship using regression analysis. The SEC has commented that information regarding the slope coefficient and the t-statistic or F-statistic, the statistical significance of the relationship between the variables, should also be evaluated.

8.4.2.1 Advantages/Disadvantages to Regression Analysis

The use of regression analysis is more likely to enable a company to continue with hedge accounting despite unusual aberrations that may occur in a particular quarter

than the dollar-offset method. 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 regressions. However, the use of regression analysis is complex, it demands considerable effort in the development of the models, and it requires judgment in the interpretation of the results.

8.5 Measuring Ineffectiveness

For any hedge that qualifies for hedge accounting but does not qualify for either the shortcut or critical terms match methods and is not fully effective in achieving the risk management objectives documented at the inception of the hedging relationship, the ineffectiveness will need to be recorded in current period earnings to the extent required (e.g., for a cash flow hedge only, the excess of change in fair value of the derivative over the change in the present value of the hedged forecasted cash flows should be recognized in earnings). The measurement of such ineffectiveness needs to be consistent with the strategy and methods documented at the inception of the hedging relationship. The following subsections describe different methods for measuring effectiveness.

It is important to note that 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). There is an important distinction between the terms *high effectiveness* and *hedge effectiveness*. High effectiveness must be achieved initially and on an ongoing basis in order for a hedging relationship to qualify for hedge accounting. If a hedging relationship ceases to be highly effective, hedge accounting must be discontinued prospectively. High effectiveness does not guarantee, however, that there will be no earnings volatility resulting from hedge ineffectiveness.

Where the hedge is highly effective but not perfectly effective (e.g., the hedge is in the company's documented policy range of 80 to 125 percent effective, but it is not 100 percent effective), there will generally be some volatility in earnings due to the ineffective portion of the hedge. This is because ASC 815 requires that the ineffective portion of a hedge be recorded in current period earnings. 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 (as measured under either the method found in ASC 815-25-55-55, commonly referred to as the "120(c) method," or the method described in Example 11 at ASC 815-25-55-72 through 55-77, commonly referred to as the "FAS 138 method") increases by \$80, a net loss of \$20 will result when gains and losses on both the derivative and the hedged item are recorded in earnings as required. Likewise, in a cash flow hedge with similar changes in cash flows (attributable to the hedged risk, as measured under the Change-in-Variable-Cash-Flows Method under ASC 815-30-35-16 through 35-24, the Hypothetical-Derivative Method under ASC 815-30-35-25 through 35-30 or the Change-in-Fair-Value method, found in ASC 815-30-35-31 and 35-32), only \$80 of the derivative's loss would be deferred in other comprehensive income, while the ineffective portion of \$20 would be recorded in current earnings. In this regard, even though the hedges are highly effective (i.e., within the acceptable range of 80 to 125 percent: $\$100/\$80 = 1.25$), earnings are affected by the amount of ineffectiveness (\$20) in the hedging relationship. The accounting for fair value and cash flow hedges is described in greater detail in DH 5 and DH 6, respectively.

Regardless of whether dollar-offset, regression analysis, or other statistical analysis is used to assess prospective and/or retrospective hedge effectiveness, dollar-offset measurements (using the methods described for determining the fair value changes) must be used to measure the ineffectiveness to be recognized in earnings each reporting period.

ASC 815-25-55 and ASC 815-30-55, illustrate ways in which an entity may assess hedge effectiveness and measure it for specific strategies. The examples are not intended to imply that other reasonable methods are precluded. However, not all possible methods would be reasonable or consistent with ASC 815. ASC 815-25-55 and ASC 815-30-55 also discuss some methods of assessing hedge effectiveness and of determining hedge ineffectiveness that are not consistent with ASC 815 and thus may not be used.

8.5.1 Fair Value Hedges

Any hedge ineffectiveness in a fair value hedge directly affects earnings, since both the entire change in the fair value of the derivative hedging instrument and the entire 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.

In addition, any portion of a hedging instrument's time value excluded from the assessment of hedge effectiveness (as allowed by ASC 815-20-25-82) must be recorded currently in earnings. An example of such a hedging relationship would be a situation involving a purchased option contract in which the time-value component is excluded from the effectiveness assessment. Usually, an entity excludes the time-value component from its assessment of hedge effectiveness in a fair value hedge because that component represents the cost of the hedge and is not effective in offsetting changes in the fair value of the hedged item.

An example of hedge ineffectiveness would be a case in which the entire change in the fair value of inventory does not correspond with the change in the fair value of the derivative contract due to location and transportation costs that the entity must consider in determining the fair value of the hedged inventory. For example, assume that (1) an entity purchased, for \$10, an option contract to sell a commodity and (2) the option contract is designated as a fair value hedge of the entity's existing commodity inventory, with a carrying amount of \$1,000. Further, assume that (1) at the end of the first reporting period, commodity prices have fallen and (2) the change in fair value of the option (excluding the time-value component) does not match the change in fair value of the inventory—with the difference being \$2—due to changes in transportation and other costs that affected the change in fair value of the inventory, but not that of the option. Ineffectiveness also would result if part of the change in the fair value of a derivative is attributable to a change in the counterparty's creditworthiness. The following example demonstrates the impact to current period earnings resulting from the option's time value excluded from the assessment of hedge effectiveness and the ineffectiveness of the hedge that is due to the inventory's location and transportation costs.

Date Option Purchased	Income Statement Impact DR/(CR)	
Time value	\$	10
Intrinsic value		—
Total value	\$	10
Next reporting period's end date (also the expiration of the option)		
<i><u>Analysis of the option contract:</u></i>		
Change in time value — loss	\$	(10)
Change in intrinsic value — gain		50
Total change in fair value	\$	40
Amount recognized in current period earnings to record the option at fair value		\$(40)
<i><u>Analysis of the adjustment in the carrying amount of the inventory:</u></i>		
Beginning carrying amount	\$1,000	
Basis adjustment attributable to the hedged risk (i.e., the change in the entire fair value of the inventory for the period)		(52)
Adjusted carrying amount of the hedged inventory	\$	948
Amount recorded in current period earnings to adjust the basis of the hedged item		52
Net earnings impact of hedging relationship		\$ 12
<i><u>Analysis of the earnings impact:</u></i>		
Fair value changes in the excluded component (i.e., time value) included currently in earnings		\$ 10
Hedge ineffectiveness in the income statement for the period		\$ 2

The net \$12 loss in the income statement is the total of (1) the \$10 change in the option's time-value component that is excluded from the assessment of effectiveness and (2) the \$2 hedge ineffectiveness between the change in the fair value of the inventory (\$52) and the change in the intrinsic value of the option contract (\$50) that was due to location and transportation costs that affected the fair value of the inventory but not that of the option. It is noteworthy that even though the hedge is highly effective in this situation, volatility in earnings results from both any hedge ineffectiveness and the option's time value, which was excluded from the effectiveness assessment.

PwC Observation: In a fair value hedge of an asset, a liability, or a firm commitment, the derivative 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 under ASC 815, the hedged item is adjusted each period only for changes in the fair value that are attributable to the risk arising in that period.

For example, if a company were to hedge the risk of changes in the benchmark interest rate on its 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 (benchmark interest rate) and would not be adjusted for changes in fair value that are attributable to the unhedged risks (e.g., the credit risk).

See DH 5 for a discussion of methods used to measure changes in the fair value of a hedged item attributable to the changes in the benchmark interest rate for a specific period.

8.5.2 Cash Flow Hedges Involving Interest Rate Swaps

The change-in-variable-cash-flows method under ASC 815-30-35-16, the hypothetical-derivative method under ASC 815-30-35-25 and the change-in-fair-value method under ASC 815-30-35-31 discuss alternative methods that may be used to measure ineffectiveness under certain circumstances. The three methods described in these paragraphs may be used to calculate the amount of ineffectiveness to be recognized in earnings for a cash flow hedge that does not meet the requirements for use of the shortcut method and 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. Any of the three methods may be used if, at the inception of the hedge, the fair value of the swap is zero or somewhat near zero. As discussed below, and in ASC 815-30-35-14, if the fair value of the swap is not zero or somewhat near zero, the Change-in-Variable-Cash-Flows Method may not be applied.

ASC 815-30-35-18 through 35-23 discuss the change-in-variable-cash-flows method:

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).

- 35-19** Under this method, the interest rate swap designated as the hedging instrument would be recorded at fair value on the balance sheet. The calculation of ineffectiveness involves a comparison of 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.
- 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.
- 35-21** If hedge ineffectiveness exists, accumulated other comprehensive income shall be adjusted to a balance that reflects the difference between the overall change in fair value of the interest rate swap since the inception of the hedging relationship and the amount of ineffectiveness that shall be recorded in earnings.
- 35-22** The change-in-variable-cash-flows method will result in no ineffectiveness being recognized in earnings 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 LIBOR).
 - 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, ineffectiveness could be created 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.
- 35-23** However, ineffectiveness would be expected to result if any basis differences existed. For example, ineffectiveness would be expected to result from either of the following conditions, among others:
- a. A difference in the indexes used to determine cash flows on the variable leg of the interest rate swap (for example, the three-month U.S. Treasury rate) and the hedged variable cash flows of the asset or liability (for example, three-month LIBOR)
 - b. A mismatch between the interest rate reset dates applicable to the variable leg of the interest rate swap and the hedged variable cash flows of the hedged asset or liability.

PwC Observation: In the December 2006 AICPA National Conference on Current SEC & PCAOB Developments, the SEC staff noted that an assumption of no ineffectiveness 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 above if the interest *payment* dates on the debt and swap do not match. In these circumstances, the SEC staff believes that the potential ineffectiveness arising from the mismatch in payment dates should be assessed. Although it may seem obvious that it would be highly unlikely that a mismatch of a few days related to the date cash is exchanged could cause any amount of ineffectiveness of consequence, practitioners should nevertheless acknowledge this difference in their hedge documentation and assess its potential impact on the overall effectiveness of the hedging relationship.

Hypothetical-Derivative Method (ASC 815-30-35-25)

Under the hypothetical-derivative method, the measurement of hedge ineffectiveness is based on a comparison of the change in fair value of the actual swap designated as the hedging instrument and the change in fair value of a hypothetical swap. That hypothetical swap would have terms that identically match the critical terms of the floating-rate asset or liability (that is, the same notional amount, same repricing dates, the index on which the hypothetical swap's variable rate is based matching the index on which the asset or liability's variable rate is based, mirror image caps and floors, and a zero fair value at the inception of the hedging relationship). Essentially, the hypothetical derivative would need to satisfy all 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 8.2, except the criterion in ASC 815-20-25-104(f) and the criterion in ASC 815-20-25-104(e). Thus, the hypothetical interest rate swap would be expected to perfectly offset the hedged cash flows. Because the requirements of ASC 815-20-25-104(e) were developed with an emphasis on fair value hedging relationships, they do not fit the more general principle that the hypothetical derivative in the cash flow hedging relationship should be expected to perfectly offset the hedged cash flows.

Under the hypothetical-derivative method, the actual swap would be recorded at fair value on the balance sheet, and accumulated other comprehensive income would be adjusted to a balance that reflects the lesser of either the cumulative change in the fair value of the actual swap or the cumulative change in the fair value of a "perfect" hypothetical swap. 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 incorporate credit. The amount of ineffectiveness, if any, recorded in earnings would be equal to the change in the excess of the cumulative change in the fair value of the actual swap over the cumulative change in the fair value of the "perfect" hypothetical swap.

PwC Observation: ASC 815-30-35-28 states: "Under the hypothetical-derivative method, the entity shall do both of the following: (a.) The actual interest rate swap shall be recorded at fair value on the balance sheet, and (b.) accumulated other comprehensive income shall be adjusted to a balance that reflects the lesser of the following amounts: (1.) The cumulative change in fair value of the actual interest rate swap or (2.) The cumulative change in the fair value of a perfect hypothetical interest rate swap." Because changes in fair value can be either positive or negative, the term *lesser* is subject to different interpretations.

(continued)

When measuring hedge ineffectiveness under these methods, accumulated other comprehensive income would be adjusted to a balance that reflects the lesser of the *absolute* cumulative change in fair value of the actual swap or the *absolute cumulative* change in the fair value of a *perfect* hypothetical swap. When applying the hypothetical derivative method pursuant to the guidance for the hypothetical-derivative method, we believe the term *lesser of the cumulative change in fair value* is referencing the absolute change in fair value of the actual derivative versus the hypothetical derivative.

Note that the use of the absolute value in the above guidance is based on the expectation that both the actual derivative's change in fair value and the hypothetical derivative's change in fair value are directionally the same. In the unusual circumstance where the cumulative change in fair value of the actual derivative and the cumulative change in the fair value of the hypothetical derivative move in the opposite direction of each other (e.g., actual derivative cumulative loss of \$110 and the hypothetical derivative cumulative gain of \$100), it would call into question whether the hedge is highly effective and therefore whether hedge accounting should be applied.

Change-in-Fair-Value Method (ASC 815-30-35-31)

Under the change-in-fair-value method, the measurement of hedge ineffectiveness is based on a calculation that compares the present value of the cumulative change in expected variable future interest cash flows that are designated as the hedged transactions and the cumulative change in the fair value of the interest rate swap designated as the hedging instrument. The discount rates applicable to determining the fair value of the swap designated as the hedging instrument should also be applied to the computation of present values of the cumulative changes in the hedged cash flows.

As mentioned above, ASC 815-30-35-13 states that all three methods may be used if, at the inception of the hedge, the fair value of the swap is zero or somewhat near zero. If the fair value of the swap is not somewhat near zero at the inception of the hedge, ASC 815-30-35-14 states that the change-in-variable-cash-flows method may not be used. This is because a swap with a fair value other than zero incorporates a financing element and the calculation performed using the change-in-variable-cash-flows method would not result in the recognition of ineffectiveness related to the interest element of the change in fair value of that financing element.

PwC Observation: It should be noted that the change-in-variable-cash-flows method cannot be used if the swap has a fair value that is not 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 were designated in a hedging relationship at any point after the inception of the swap, an entity would likely be precluded from applying the change-in-variable-cash-flows method to that hedging relationship because the swap's fair value would likely have changed enough to no longer be considered "somewhat near zero."

In addition to the requirements outlined above, cash flow hedges designated under the change-in-variable-cash-flows method, the hypothetical-derivative method and the change-in-fair-value method must also comply with the requirements in ASC 815-20-25-122 that the risks of counterparty default be assessed. An entity must consider the likelihood of the counterparty's compliance with the contractual

terms of the hedging derivative that require the counterparty to make payments to the entity in order to conclude on an ongoing basis that the hedging relationship is expected to be highly effective in achieving offsetting changes in cash flows (i.e., the entity cannot ignore whether it will collect the payments it would be owed under the contractual provisions of the derivative). If the likelihood of the obligor's defaulting is assessed as being probable, the hedging relationship would not qualify for hedge accounting.

8.5.3 Cash Flow Hedges Involving Forward Contracts

ASC 815-20-35-9 through 35-13 discusses the measurement of ineffectiveness to be recognized in earnings for a cash flow hedge that is accounted for under the critical terms match approach discussed in Section DH 8.3 above. Under this approach, if the critical terms of the hedging instrument and of the hedged forecasted transaction are the same so that the changes in cash flows attributable to the risk being hedged are expected to completely offset at the inception of the hedging relationship and on an ongoing basis, an entity is still required to perform and document an assessment of hedge effectiveness at the inception of the hedging relationship and on an ongoing basis throughout the hedge period.

However, based on the fact that, at inception, the critical terms of the hedging instrument and the hedged forecasted transaction are the same, the 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, subsequent assessments can be performed by verifying and documenting whether the critical terms of the hedging instrument and the forecasted transaction have changed during the period in review. Because the assessment of hedge effectiveness in a cash flow hedge involves assessing the likelihood of the counterparty's compliance with the contractual terms of the derivative designated as the hedging instrument, the entity must also assess whether there have been adverse developments regarding the risk of counterparty default, particularly if the entity planned to obtain its cash flows by liquidating the derivative at its fair value. If there are no such changes in the critical terms or adverse developments regarding counterparty default, the entity may conclude that there is no ineffectiveness to be recorded. In that case, the change in fair value of the derivative can be viewed as a proxy for the present value of the change in cash flows attributable to the risk being hedged.

However, if the critical terms of the hedging instrument or the hedged forecasted transaction have changed or if there have been adverse developments regarding the risk of counterparty default, the entity must measure the amount of ineffectiveness that must be recorded currently in earnings. Although the change-in-variable-cash-flows method, the hypothetical-derivative method and the change-in-fair-value method is written from the perspective of a hedge of interest rate risk using an interest rate swap, the guidance is applied by analogy in practice to other types of hedging relationships. In addition, the entity must assess whether the hedging relationship is expected to continue to be highly effective (using either a dollar-offset test or another method, such as regression analysis).

PwC Observation: The assessment of effectiveness to be used should the critical terms of the hedged item and hedging instrument no longer match would have to be consistent with the method selected in one's original contemporaneous hedge documentation and completely documented at the hedge inception date in order to avoid a hedge dedesignation requirement when migrating to the quantitative effectiveness test.

8.5.4 Cash Flow Hedges Involving Option Contracts

ASC 815-20-25-126 through 25-129 discuss the measurement of ineffectiveness to be recognized in earnings for certain cash flow hedges involving options as hedging instruments. For a cash flow hedge in which (1) the hedging instrument is a purchased option or a combination of only options that compose either a net purchased option or a zero-cost collar, (2) 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), and (3) 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, the hedging relationship may be considered to be perfectly effective (resulting in recognizing no ineffectiveness in earnings) if the following conditions are met:

1. 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).
2. 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.
3. 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.
4. The hedging instrument can be exercised only on a single date—its contractual maturity date.

If the entity concludes that the hedging relationship may be considered to be perfectly effective, the entity would simply record all changes in the hedging option's fair value (including changes in the option's time value) in accumulated other comprehensive income.

If those four conditions are not met, the entity must determine whether ineffectiveness must be recognized in earnings by comparing the change in fair value of the actual hedging instrument and the change in fair value of a *perfectly effective* hypothetical hedging instrument. That hypothetical hedging instrument should have terms that meet the four conditions listed above.

When ineffectiveness is required to be recognized, accumulated other comprehensive income would be adjusted to a balance that reflects the lesser of either the cumulative change in the fair value of the actual hedging instrument or the cumulative change in the fair value of the hypothetical derivative. (Consistent with ASC 815-30-35-3(b), that comparison excludes the effect of the hedging instrument's gains or losses previously reclassified from accumulated other comprehensive income into earnings pursuant to ASC 815-30-35-38 through 35-41.) The amount of ineffectiveness, if any, recorded in earnings would be equal to the excess of the cumulative change in the fair value of the actual hedging derivative over the cumulative change in the fair value of the hypothetical derivative. ASC 815-30-35-3(b) indicates that hedge ineffectiveness in a cash flow hedge occurs only if the cumulative gain or loss on the derivative hedging instrument exceeds the cumulative change in the expected future cash flows on the hedged transactions.

8.6 Effects of credit risk on hedge effectiveness and other hedge accounting requirements

8.6.1 ASC 820 and the Effects of Credit Ineffectiveness as Applied by Paragraph ASC 815-20-25-122

ASC 815-30-35-14 through 18 and ASC 815-20-25-122 discuss the effects of credit risk on hedge accounting.

In the case of a fair value hedge, a change in the creditworthiness of the derivative instrument's counterparty would have an immediate impact because it would affect the change in the derivative instrument's fair value, which would immediately affect both:

- The assessment of whether the relationship qualifies for hedge accounting.
- The amount of ineffectiveness recognized in earnings under fair value hedge accounting.

For an entity to conclude on an ongoing basis that a cash flow hedge is expected to be highly effective, the entity cannot ignore whether it will collect the payments it would be owed under the contractual provisions of the derivative instrument. The entity shall assess the possibility of whether the counterparty to the derivative instrument will default by failing to make any contractually required payments to the entity as scheduled in the derivative instrument. In making that assessment, the entity shall also consider the effect of any related collateralization or financial guarantees. The entity shall be aware of the counterparty's creditworthiness (and changes therein) in determining the fair value of the derivative instrument. Although a change in the counterparty's creditworthiness would not necessarily indicate that the counterparty would default on its obligations, such a change shall warrant further evaluation.

The effect of counterparty credit risk on cash flow hedge relationships is slightly different. If the likelihood that the counterparty will not default ceases to be probable, an 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.

If the likelihood that the counterparty will not default is still probable, the impact of credit risk when measuring the ineffectiveness of an interest rate risk cash flow hedge could vary depending on the method applied (refer to DHG 8.5.2 for a detailed description of the three methods discussed below):

- 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 shall be calculated using the discount rates applicable to determining the fair value of the interest rate swap.
- Hypothetical derivative method: The determination of the fair value of both the perfect hypothetical interest rate swap and the actual interest rate swap shall use discount rates based on the relevant interest rate swap curves.
- Change in fair value method: According to ASC 815-30-35-17 a change in the creditworthiness of the derivative instrument's counterparty in a cash flow hedge would have an immediate impact if ineffectiveness were measured under this method. However, no impact would be expected if the same discount rates

applicable to determining the fair value of the interest rate swap designated as the hedging instrument are also applied to the computation of present values of the cumulative changes in the hedged cash flows, as indicated by ASC 815-30-35-32.

As the discount rates applied to the hedged cash flows and to the actual interest rate swap must be the same, no additional ineffectiveness due to changes in the credit worthiness of the derivative's instrument counterparty would be expected when applying the change in variable cash flows or the hypothetical derivatives method, if the likelihood that the counterparty will not default is still probable. However, the amount of ineffectiveness recorded in net income, if any, could change due to changes in the discount rate related to credit risk as it could modify the amount by which the cumulative gain or loss on the derivative hedging instrument exceeds the cumulative change in the expected future cash flows on the hedged transaction.

Refer to FV 7.4.2 for a discussion on assessing the impact of nonperformance risk on hedge accounting.

8.6.2 Effects of Using an Overnight Index Swap (OIS) Curve Instead of LIBOR in the Valuation of Certain Derivatives

Methodologies utilized to value derivative instruments continue to evolve, even for "simple" derivative instruments. Recently, certain market participants, including dealers and clearing houses, have moved to value collateralized derivatives using a discount curve that reflects the funding required to be paid on posted collateral amounts. Said differently, certain collateralized derivatives may be valued by taking projected cash flows based on contractual terms and discounting them at a rate reflective of the cost of collateral. For derivative instruments collateralized with, for example, USD cash collateral, this rate may be equivalent to the OIS rate.

Overnight index swaps are contracts to periodically receive a daily rate in exchange for paying a fixed rate. Observable trades for these swaps of various tenors provide the data upon which the OIS rates are developed.

As a result of this change in the valuation of certain derivatives, questions have arisen relating to the impact to hedge accounting and the calculation of hedge effectiveness. ASC 815 generally does not provide a specific requirement for the rate used to discount the derivative instrument and the hedged instrument in a cash flow hedge. As a result, the use of an OIS discount rate on the collateralized actual derivative may or may not result in the same discount rate being used in the hedged instrument. In a fair value hedge, however, many entities use either the "example 9 method" or the "example 11 method" to calculate effectiveness as discussed in ASC 815-25-55-55 and ASC 815-25-55-72 through 55-77, respectively. These two methods prescribe the discount rates to be used in the present value calculations, which are based on the benchmark rates (currently for U.S. instruments, either LIBOR or U.S. Treasury rates). As a result, we would expect that even if an entity were to change to OIS discounting for the valuation of the hedging instrument, it would not be permitted to change discounting of the hedged item. As a result, this may cause additional ineffectiveness recorded in earnings. In addition to the potential impacts to hedge effectiveness, the change in the valuation of collateralized derivatives may have a significant impact to the company's systems and values, depending on the nature of the company's derivative positions and the difference between the LIBOR curve and OIS curve.

8.7 Questions and Interpretive Responses

Qualifying for the Shortcut Method

Question No. 8-1: When a hedging relationship satisfies all of the shortcut method criteria in ASC 815-20-25-104 through 25-106, as applicable, can an entity proceed to apply the shortcut method to that hedging relationship if it includes the following components?

1. A hedge of an interest-bearing asset or liability, with a combination of interest rate swap contracts used as the hedging instrument
2. Two interest rate swaps that are (1) entered into with different counterparties and (2) used to hedge a single interest-bearing asset or liability
3. Two (or more) interest rate swap contracts that are used in the same fair value hedge of an interest-bearing asset or liability, with the swap contracts being repriced on different dates
4. An interest rate swap that was executed after the acquisition of the designated recognized asset or liability
5. An interest rate swap contract that is used in a hedging relationship in which only a portion of an interest-bearing asset or liability is designated as being hedged

PwC Interpretive Response:

1. Yes. ASC 815-20-25-104(a) states that a swap must meet the following condition in order for the shortcut method to be applied: "The notional amount of the interest rate swap matches the principal amount of the interest-bearing asset or liability being hedged." We believe that a hedging relationship can satisfy this condition through the use of more than one swap, provided that (1) the total of the notional amounts of all the swaps that are used as hedging instruments matches the principal amount of the hedged item and (2) each swap would (on an individual basis) meet all of the applicable conditions in ASC 815-20-25-104(a) through 25-104(g). Combining two or more swaps so that the aggregate notional amount of the swaps matches the principal amount of the interest-bearing asset or liability does not violate the condition in ASC 815-20-25-104(a). This view is consistent with ASC 815-20-25-45, which states that "two or more derivative instruments...may...be viewed in combination and jointly designated as the hedging instrument."

Note that this may be done by entities seeking to diversify counterparty risk.

2. Yes. We do not believe that the use of more than one swap with different counterparties for a single hedging relationship precludes an entity from using the shortcut method of accounting. Although swaps with different counterparties may be priced differently due to different credit ratings, comparable creditworthiness (of the bond issuer and swap counterparty) is not a condition for applying the shortcut method.

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3. Yes. Neither ASC 815-20-25-104(a) nor ASC 815-20-25-105(c) require that, in a combination of two (or more) swap contracts that hedge an interest-bearing asset or liability, the floating-rate legs on the swaps be reset on the same date. However, ASC 815-20-25-105(a) states that the following condition must be fulfilled before an entity may apply the shortcut method: “The expiration date of the interest rate swap matches the maturity date of the interest-bearing asset or liability.” Therefore, each of the swaps designated in the hedging relationship must mature on the same date as the hedged asset or liability.

It should be noted that when two or more swaps are designated in a cash flow hedge, the repricing dates of the two swaps must exactly match the repricing date of the hedged item, pursuant to ASC 815-20-25-106(d).

4. There is no explicit requirement for the application of the shortcut method (or hedge accounting in general) that the swap be executed at the inception or acquisition date of the interest-bearing asset or liability that is being hedged. However, if the fair value of the asset or liability has changed significantly between the acquisition of the asset or liability and the swap execution date, the hedging relationship may not be highly effective.

We believe that if an entity is going to utilize the short cut method, it should ensure, at a minimum, the hedging relationship is highly effective and would not invalidate the assumption of no ineffectiveness. One way this could be demonstrated is through a quantitative calculation demonstrating that the amount of ineffectiveness in the late hedge relationship is no greater, or greater by only a de minimis amount, than the ineffectiveness in a hedge using a swap executed at the inception or acquisition date.

Robust contemporaneous documentation that includes how the criteria were met and quantitative evidence to demonstrate “no ineffectiveness” should be prepared to clearly demonstrate how this conclusion was reached. It should be noted that the Board considered addressing this issue in DIG Issue E23 but decided to not provide guidance as it believed this issue to be less pressing and because the Board is actively considering in connection with its project on accounting for financial instruments, simplifying hedge accounting and potentially eliminating the short cut method described in ASC 815-20-25.

5. Yes. An interest rate swap may qualify for the shortcut method if the notional amount corresponding to the designated proportion of the swap matches the portion of the designated principal amount of the hedged item. Both the designated proportion of the swap and the designated portion of the principal amount of the hedged item must be defined as a percentage of the total notional or principal amount, respectively, and not as a set dollar amount. However, if no proportion is provided, 100 percent is assumed. For example, an interest rate swap with a notional of \$50 million could qualify for the shortcut method as a hedge of 50 percent of a \$100 million debt security. Alternatively, two shortcut method hedging relationships could be created if one interest rate swap is used to hedge two items. For example, 50 percent of an interest rate swap with a notional amount of \$50 million could be designated against Loan A with \$25 million principal, and 50 percent of the interest rate swap could be designated against Loan B with \$25 million principal. In this instance, two separate hedging relationships must be documented and evaluated under the shortcut method requirements.

Application of the Shortcut Method to a Fair Value Hedge of an Available-for-Sale Security

Question No. 8-2: Can the shortcut method be applied to the benchmark interest rate risk hedge of an available-for-sale debt security with an interest rate swap?

PwC Interpretive Response: Yes. Assuming that all of the conditions in ASC 815-20-25-104 and 25-105 have been fulfilled, an entity may apply the shortcut method to a fair value hedge of an available-for-sale debt security that uses an interest rate swap. Under the shortcut method, it is assumed that the gain or loss on the interest rate swap reflects the amount of the gain or loss on the hedged item attributable to the risk that is being hedged. However, in certain circumstances, the actual change in the fair value of an available-for-sale 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 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 with the carrying amount that resulted from applying the shortcut method, and the difference is recorded in other comprehensive income. As a result, changes in the fair value of the available-for-sale debt security that are attributable to risks other than interest rate risk should remain in other comprehensive income, pursuant to ASC 320.

Use of the Shortcut Method Is Prohibited When a Transaction Involves Two Purchased Options

Question No. 8-3: A company issues fixed-rate debt that, at the company's option, is callable at par on specified dates (presumably the company would call the debt at par if interest rates were to fall). On the date that the debt is issued, the company 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 the discretion of the company. The interest rate swap would satisfy the shortcut method criteria in ASC 815-20-25-104 and 25-105 if it weren't for the fact that the interest rate swap includes the right to cancel the swap (which, presumably, the company would do if interest rates were to rise), which is a purchased put option for the company, rather than a mirror-image written call option. Can the company apply the shortcut method in this scenario?

PwC Interpretive 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 entity is the writer of one call option and the holder (or purchaser) of the other call option. Since the company in this example is the purchaser of both options, the transaction cannot be accounted for under the shortcut method.

Impact of Cancellation Rights on Ability to Use Shortcut Method

Question No. 8-4: A long-term interest rate swap agreement used as a hedge of non-prepayable debt may include a provision that allows either party to settle the interest rate swap at fair value. Would such a provision violate the requirements in ASC 815 and thus preclude the use of the shortcut method?

PwC Interpretive Response: No. ASC 815-20-25-114 notes that in the case of an interest-bearing asset or liability, a provision that allows either counterparty to settle that asset or liability at its fair market value would not violate the assumption of no ineffectiveness. Similarly, the cancellation provision in the swap has no market value, because the cancelling party would be required to pay (or receive) an amount equal to the swap's fair value. Therefore, even if one were to extend the provisions of ASC 815-20-25-104(e) to the hedging instrument, swaps that are prepayable at fair value would not be considered prepayable under the conclusion in ASC 815-20-25-114.

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 to the hedging relationship.

Impact of Designating a Proportion of an Interest Rate Swap in a Shortcut Hedge

Question No. 8-5: In a fair value hedge, is the application of the shortcut method permitted when the notional amount of the interest rate swap is greater than the principal amount of the hedged item? For example, may an entity use the shortcut method when 50 percent of an interest rate swap with a notional amount of \$15 million is designated as a hedge of the fair value change in a \$7.5 million asset or liability?

Addressing the opposite situation (i.e., a situation in which the principal amount of the debt is greater than the notional amount of the swap), ASC 815-20-25-105(d), concludes that the shortcut method may be applied to fair value hedges of a proportion of the principal amount of the interest-bearing asset or liability if the notional amount of the interest rate swap that is designated as the hedging instrument matches the portion of the asset or liability that is being hedged. That is, an entity may designate a swap that has a notional amount of \$7.5 million as a hedge of 50 percent of the fair value change in an asset or liability that has a notional amount of \$15 million.

PwC Interpretive Response: Yes. Provided that the hedging relationship satisfies all of the other criteria for applying the shortcut method, an entity may apply the shortcut method to a fair value hedge of an asset or liability if the notional amount corresponding to the proportion of the interest rate swap matches the principal of the asset or liability that is being hedged.

ASC 815-20-25-104 specifies the criteria for applying the shortcut method, one of which is that the notional amount of the swap matches the principal amount of the interest-bearing asset or liability. Based on the language in ASC 815-20-25-45, it is clear that an entity may designate 50 percent of a swap that has a notional

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amount of \$15 million as a hedge of the fair value change in an interest-bearing asset/liability that has a notional amount of \$7.5 million. ASC 815-20-25-45 states that “Either all or a proportion of a derivative instrument...may be designated as a hedging instrument.”

We believe that in the example presented here, the condition in ASC 815-20-25-104(a) is satisfied, because (1) the entity has designated 50 percent of the notional amount of the swap as the hedging instrument in a fair value hedge and (2) that proportion of the swap (50 percent of the notional amount) matches the principal amount of the hedged asset or liability. The fair value changes in the interest rate swap that are associated with the undesignated proportion of the interest rate swap will be recorded in earnings, without an offset, unless that proportion is otherwise designated as a hedge of another item.

Impact of Changing Notional Amounts of the Interest-Bearing Asset or Liability and the Swap on Ability to Use the Shortcut Method

Question No. 8-6: Assume that an entity has issued fixed-rate debt that has an amortizing notional amount. The entity has executed a swap that has the same critical terms as the debt. The swap pays LIBOR and has the same fixed interest rate as the debt, as well as the same payment dates and maturity as the debt. Neither the swap nor the debt is prepayable. The notional amount of the swap also exactly matches that of the debt, and the swap and the debt amortize on the exact same dates.

ASC 815-20-25-104 and 25-105 specify the criteria for using the shortcut method in a fair value hedge. We assume that in this example, all of these requirements (other than the requirements discussed in the subtopic), have been fulfilled.

ASC 815-20-25-104(a) requires that the notional amount of the swap match the principal amount of the interest-bearing asset or liability.

ASC 815-20-25-104(g) requires that any other terms in the interest-bearing financial instruments or interest rate swaps be typical of those instruments and not invalidate the assumption of no ineffectiveness.

May the entity apply the shortcut method to this hedging relationship?

PwC Interpretive 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).

Based on its language, we believe that ASC 815-20-25-104(a) does not require 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.

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In response to ASC 815-20-25-104(g), we believe that the amortization of the notional amount is a typical feature in both debt and swap agreements. Further, amortizing the notional amount does not invalidate the assumption of no ineffectiveness, since the swap and the debt have the same notional amount at all times.

The Board considered this issue in the Exposure Draft of DIG Issue E23. While the Board never actually concluded that ASC 815-20-25-104(a) is met in this circumstance, we understand that when (a) the notional amount of the swap and the principal amount of the hedged item match for each hedged interest payment for a cash flow hedge or match over the entire term of the hedged item for a fair value hedge and (b) the notional amount of the fixed leg of the swap matches the notional amount of the variable leg of the swap throughout the life of the hedging relationship (e.g., through the use of an amortizing interest rate swap to hedge an interest-bearing asset or liability that has an amortizing principal balance), the criterion in ASC 815-20-25-104(a) has been met.

Impact of Differences Between Trade Date and Settlement Date on Ability to Use the Shortcut Method

Question No. 8-7: An entity is about to issue new, non-callable/non-puttable fixed-rate debt. On the “trade date” (or pricing date), the underwriters set the key terms of the debt, including the interest rate to be paid. A few days later (on “the settlement date”), the debt is actually settled (or funded).

The entity wants to economically convert the fixed-rate debt into floating-rate debt and therefore enters into an interest rate swap agreement. Because the exposure to movements in interest rates exists beginning the date the debt is priced, the entity enters into the interest rate swap on the trade date rather than waiting until the debt is settled.

Can the company apply the shortcut method to a fair value hedge of interest rate risk for this interest-bearing liability when the interest rate swap is entered into on the trade date, but the debt is issued on the settlement date?

PwC Interpretive Response: Yes. The shortcut method may still be applied in these circumstances, provided that all of the following conditions are met:

- a. On the trade date, the entity and the underwriter have agreed upon the pricing of the debt issuance such that it contains terms with a fixed element that create a fair value exposure to interest rate risk.
- b. Upon pricing the debt issuance, the entity and the underwriters are firmly committed to the issuance (i.e., the entity is obligated to borrow and the underwriters are obligated to fund the settlement of the borrowing).
- c. The period between the trade date and the settlement date of the debt is within the time generally established by regulations or conventions; that is, it settles within the customary period for transactions in the marketplace or exchange in which the transaction is being executed (i.e., analogous to the “regular way” scope exception in ASC 815-10-15-15).

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- d. To the extent this issue is significant to the 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.
- e. All of the other criteria in ASC 815-20-25-104 and 25-105 for the application of the shortcut method are met and have been documented.

ASC 815-20-25-104 stipulates that the shortcut method applies only to recognized interest-bearing assets and liabilities that are hedged with an interest rate swap and that the fair value of the interest rate swap at the inception of the hedging relationship is zero (i.e., this discussion assumes the hedged item is non-callable/non-puttable).

If the debt is not considered to be a recognized liability at the trade date, it may appear that the requirements to use the shortcut method are not met. In addition, applying the shortcut method on the settlement date would be problematic, because at that point in time the interest rate swap would no longer have a zero fair value due to market movements since the trade/pricing date of the liability.

The FASB did not intend to resolve the question of whether financial instruments should be recognized on the trade date or the settlement date. Because the concern over applying the shortcut method in this fact pattern is fundamentally due to the difference in trade date recognition for the interest rate swap and the settlement date recognition for the debt, we believe that application of the shortcut method is acceptable if conditions (a)–(e) above are satisfied.

The Board concluded in DIG Issue E 23 that the shortcut method may be applied to a qualifying fair value hedge when the relationship is designated on the trade date of both the swap and the hedged item even though the hedged item is not recognized for accounting purposes until the transaction settles (that is, until its settlement date), provided that the period of time between the trade date and the settlement date of the hedged item is within established conventions for that marketplace.

Availability of the Shortcut Method for Hedging Multiple Interest-Bearing Assets or Liabilities

Question No. 8-8: What should a practitioner consider in determining whether a particular hedging relationship involving multiple interest-bearing assets or liabilities is eligible for the shortcut method?

PwC Interpretive Response: When applying the shortcut method to a portfolio of interest-bearing assets or liabilities, all interest-bearing assets or liabilities should be identical except for the notional amounts, counterparties, and for cash flow hedges, the spread over the benchmark interest rate. Each asset or liability needs to individually meet the shortcut criteria. Additionally, the aggregate designated notional amounts of the hedged interest-bearing assets or liabilities must equal the designated notional amount of the swap. Furthermore, as soon as the portfolio changes (e.g., the first asset or liability prepays or there is a default), the shortcut

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method must be discontinued. The rationale is that the hedged item is the portfolio of interest-bearing assets or liabilities itself and as soon as the portfolio changes, the hedged item has changed; therefore, the original hedging relationship must be discontinued. The ability to substitute or replace the assets or liabilities that prepaid or defaulted would not overcome the fact that the hedged item changed. A new hedging relationship may be permitted after that point; however, the shortcut method would not be allowable utilizing the original interest rate swap.

Although administratively more burdensome, an entity may proportionally allocate the interest rate swap and establish separate hedging relationships for each individual hedged asset or liability. As discussed in Question No. 8-5, in designating the hedging relationship, the portion of the principal amount of the interest-bearing asset or liability must match the notional amount corresponding to the proportion of the interest rate swap. A benefit of such an alternative would be that upon prepayment or default of an individual asset or liability, the remaining assets and liabilities hedged would not require the discontinuance of hedge accounting and, therefore, would allow the establishment of a longer hedging relationship.

Availability of the Shortcut Method for Zero-Coupon Bonds

Question No. 8-9: May the shortcut method be applied to a hedge of a zero-coupon bond or significantly discounted notes?

PwC Interpretive Response: No. We do not believe that the shortcut method may be used for hedges of zero-coupon bonds or significantly discounted notes where the notional amount of the interest rate swap equals the proceeds received from the issuance of zero-coupon bonds (or the deep discount notes), as the proceeds received would be discounted relative to the principal amount of the zero-coupon bonds or notes. For example, an investor entering into an interest rate swap with a notional amount of \$80 million to match the proceeds received from the issuance of a \$100 million principal amount of zero-coupon bonds would not meet this requirement because the notional amount on the interest rate swap (i.e., \$80 million) would not match the principal amount on the bonds (i.e., \$100 million due at maturity).

The Board considered this issue in the Exposure Draft of DIG Issue E23. While the Board never actually concluded on this question, we believe that a hedge of a zero-coupon financial instrument fails ASC 815-20 because the interest rate swap contains a financing element (fixed payments on the fixed leg of the swap are being financed) and also fails because the notional amount of the fixed leg of the swap does not match the notional amount of the variable leg of the swap throughout the life of the hedging relationship.

Issues to Consider When Variable-Rate Debt Is Callable

Question No. 8-10: An entity issues variable-rate debt with an interest rate that resets quarterly based on three-month LIBOR, plus a fixed spread (i.e., the credit spread over LIBOR is fixed for the term of the instrument). The instrument is callable by the issuer at par on the quarterly interest rate reset dates. If the issuer hedges its exposure to changes in the benchmark interest rate by entering into an interest rate swap that perfectly matches the debt instrument in terms of the notional amount, interest rate index, reset dates, payment dates, and so forth and that may be terminated by the counterparty at fair value on the interest rate reset dates, may it qualify for the shortcut method?

PwC Interpretive Response: No. The debt instrument 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 (absent the effect of the call provision). In this fact pattern the interest rate reset provisions of the debt instrument are insufficient to ensure the par amount's being equal to the instrument's fair value at the call dates. Because the credit spread on the debt is not reset, its par amount could seldom be expected to equal its fair value at each call date.

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, the prepayment option will likely be exercised by the issuer 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, the issuer 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, the issuer would not have any further exposure to interest payments for that period, as the debt has been extinguished at par.

While this hedging relationship may not qualify for the shortcut method, the issuer might be able to qualify for hedge accounting, assuming that the hedged forecasted interest payments are probable of occurring. Because of the presence of the debt prepayment option, the issuer 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.

Hedging Trust-Preferred Securities and Other Debt with Non-Standard Features

Question No. 8-11: 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. Can an entity hedge interest rate risk arising from a trust-preferred or other similar security using the shortcut method?

PwC Interpretive Response: No. Regardless of whether or not the swap contains a mirror-image interest or dividend deferral feature and regardless of whether that feature affects one or both legs of the swap, an issuer cannot apply the shortcut method to hedges of trust-preferred securities.

In executing a hedge, many companies 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, companies believe that they have exactly matched the terms of the interest rate swap with the terms of the trust-preferred securities, which is a requirement for applying the shortcut method. However, as highlighted by the SEC staff during the 2006 AICPA National Conference on Current SEC & PCAOB Developments, 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 company 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 no ineffectiveness, 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 no ineffectiveness.

Chapter 9: Discontinuance and Other Aspects of Hedge Accounting

Executive Takeaway

- Hedge accounting must be discontinued prospectively if the hedging relationship no longer meets the qualifying criteria.
- Documentation of the hedging relationship, especially with respect to the description of the forecasted transaction in a cash flow hedge, is often critical to the determination of whether and when a hedging relationship must be discontinued, as well as to the subsequent accounting for amounts in other comprehensive income. Therefore, care should be taken in defining the hedged item at the inception of any hedging relationship.
- Hedged assets remain subject to the applicable requirements in generally accepted accounting principles for assessing impairment, which should be applied *after* hedge accounting has been applied for the period.

9.1 Discontinuance

ASC 815-25-40-1 and ASC 815-30-40-1 require that an entity discontinue hedge accounting prospectively for fair value and cash flow hedges, respectively, if the hedging relationship no longer meets the qualifying criteria. Therefore, when any criterion for fair value hedge accounting in ASC 815-20-25-11 and 25-12 or for cash flow hedge accounting in ASC 815-20-25-13 through 25-15A are no longer met, hedge accounting must be discontinued from that point forward. Common reasons to discontinue hedge accounting for a hedged transaction are as follows:

1. The hedging relationship ceases to be highly effective;
2. The derivative instrument expired or was sold, terminated, or exercised;
3. The hedged item is no longer outstanding or is no longer probable of occurring; or
4. The entity elects to discontinue hedge accounting.

An entity, however, 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.

Generally, if a critical term of the hedging relationship is modified, either through modification of the hedging instrument or by changing the documented hedged item, the hedging relationship must be dedesignated and redesignated to continue to apply hedge accounting.

Modifications to a critical term in the hedging instrument may include (but are not limited to):

- Changes to the payment or maturity dates
- Modifications to a payment term of the derivative contract (changing the coupon on an interest rate swap or changing the strike price of a forward or option contract)
- Addition, adjustment, or removal of a floor or cap provision into, or from, the instrument
- Changes to the counterparty in an existing derivative instrument
- “Blend and extend” transactions where a current derivative is settled by entering into a new derivative contract with similar terms whereby the gain or loss on the original contract is settled by the new contract having off-market terms

Modifications to the hedged item may include (but are not limited to):

- Changes to the documented key terms of a forecasted transaction (for example, from hedging the purchase of a commodity in November to the purchase of a commodity in February)
- Substituting a new debt issuance for an existing debt issuance in a fair value hedge of interest rates of a specified debt issuance
- Addition or removal of a floor or cap to or from the agreement

PwC Observation: Subsequent redesignation of a legacy derivative in a new hedging relationship may be challenging, as the derivative will typically have a fair value other than zero due to changes in the market conditions that have occurred since the inception of the instrument. Off-market terms in a derivative instrument, such as a forward contract or swap, create a financing element that is a source of ineffectiveness that must be considered in determining whether the new hedging relationship can qualify for hedge accounting. The more off-market the derivative instrument, the greater the degree of ineffectiveness and the less likely the proposed hedging relationship will qualify for hedge accounting. Even if it qualifies for hedge accounting, the hedging relationship will not be considered perfectly effective and some amount of ineffectiveness associated with the off-market element of the derivative will need to be recognized in earnings each period.

Refer also to DH 9.3, Question Nos. 9-1, 9-3, and 9-8.

9.1.1 Discontinuance of Fair Value Hedges

When a fair value hedge is discontinued, an entity should cease adjusting the carrying amount of the asset, liability, or hedged firm commitment for changes in the risk that was being hedged. The adjustments of the carrying amount of the hedged item prior to discontinuance shall be accounted for in the same manner as other components of the carrying amount of the asset or liability in accordance with ASC 815-25-35-8 and 35-9. Therefore, an adjustment of the carrying amount of a hedged asset held for sale (e.g., 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. An adjustment of the carrying amount of a hedged interest-bearing financial instrument shall be amortized to earnings, which must begin no later than when hedge accounting was discontinued.

An entity should cease adjusting the carrying amount of the hedged item after the last date that hedge accounting was both intact and effective. If an entity cannot identify a specific event or date of noncompliance with the effectiveness criterion, the entity is prohibited from applying hedge accounting from the date at which hedge compliance was last assessed and met. This minimizes the possibility of providing hedge accounting for hedges that no longer qualify as highly effective. If an entity determines at the end of a period that a hedge is no longer effective, it is likely that it was also ineffective during a portion of that period.

For example, on July 31, 20X1, during an entity's monthly effectiveness evaluation, it determines that a hedge was no longer effective. Hedge accounting should be discontinued as of June 30, 20X1, the last date at which the hedged item was assessed and demonstrated high effectiveness, and the carrying amount of the hedged item would cease to be adjusted for the hedged fair value risk as of that date, unless the entity can determine a specific point in time that it failed to be effective. If an entity assesses effectiveness quarterly, and on September 30, 20X1, it determines that the hedging relationship failed the effectiveness criterion and it cannot identify a specific point in time during the quarter that it failed to be effective, the entity should discontinue hedge accounting as of June 30, 20X1, the date hedge accounting was last determined to be effective.

When a hedged firm commitment no longer meets the ASC 815-10-20 definition of a firm commitment, any asset or liability that has been recognized under a fair

value hedge through cumulative fair value adjustments of the firm commitment must be derecognized, and a corresponding gain or loss will be recorded in earnings. However cases in which a hedged item no longer meets the definition of a firm commitment should be rare. A pattern of a discontinuation of hedge accounting and derecognizing of firm commitments would call into question the application of hedge accounting to future hedges of firm commitments.

Unlike the accounting for the hedged item, the accounting for the derivative instrument would not change when a fair value hedge is discontinued. The derivative instrument would continue to be measured at fair value through earnings regardless of whether or not it was to be redesignated as a hedging instrument in another hedging relationship.

Refer also to DH 9.3, Question Nos. 9-2 and 9-10, as well as DH 9.4, Examples 9-1 and 9-2.

9.1.2 Discontinuance of Cash Flow Hedges

When a cash flow hedge is discontinued, the net derivative gain or loss remains in accumulated other comprehensive income unless it is probable that the forecasted transaction will *not* occur in the originally specified time period 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 to 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 and that are outside the control or influence of the entity. If it is probable that the hedged forecasted transaction will not occur by the end of the originally specified time period or within the additional two-month period and the transaction does not qualify for the extenuating circumstances exception, the derivative gain or loss reported in accumulated other comprehensive income should be reclassified to earnings immediately. The probability of the forecasted transactions occurring or not occurring drives the timing of when the related derivative gain (loss) in other comprehensive income gets reclassified into earnings.

Judgment is necessary in determining the probability of a forecasted transaction occurring. The word *probable* has the same meaning in ASC 815-30-40-4 and 40-5 as it does in ASC 450-20-20, *Contingencies*; i.e., the future event or events are likely to occur. When an entity determines it is “reasonably possible” but not “probable” that the forecasted transaction will not occur, gains and losses that are deferred in other comprehensive income will remain in other comprehensive income until earnings are impacted by the forecasted transaction or until it later becomes “probable” of *not* occurring. Refer also to the table included in DH 9.3, Question No. 9-5.

A pattern of determining that hedged forecasted transactions probably will not occur will call into question an entity’s ability to accurately predict forecasted transactions and the propriety of using hedge accounting in the future for similar forecasted transactions.

PwC Observation: An entity is required to disclose the amount of gains and losses reclassified from other comprehensive income into earnings as a result of the discontinuance of hedge accounting because it is probable that a forecasted transaction will not occur. Therefore, an entity’s inability to accurately forecast transactions designated in hedging relationships will be transparent to a reader of financial statements.

ASC 815-30-40-6 states that if an entity had initially reported derivative gains and losses in accumulated other comprehensive income as a result of a cash flow hedge and then reclassified those gains and losses to earnings (because the entity subsequently concluded that it was probable that the forecasted transaction would not occur within the originally specified time period or within the additional two-month period of time thereafter), the entity would not be permitted to reverse the earnings classification and reclassify the gains and losses as accumulated other comprehensive income due to a reassessment of probabilities (e.g., if the entity later concluded the forecasted transaction was again probable of occurring).

When an entity redesignates or voluntarily discontinues a cash flow hedge (e.g., through dedesignation or through the termination or sale of the derivative) and the forecasted transaction giving rise to variability in future cash flows will occur as expected, gains and losses that are accumulated in other comprehensive income will not be affected (i.e., accumulated gains and losses will remain in other comprehensive income until earnings are impacted by the forecasted transaction). The reason for this accounting is that the risk of the variability of future cash flows is not eliminated when the cash flow hedge is discontinued. Future changes in the derivative instrument's fair value (subsequent to the discontinuance of hedge accounting), however, will be reported in current-period earnings if the derivative is not redesignated in a qualifying hedge.

How an entity specifically defines its forecasted transaction can significantly impact (1) when the entity must dedesignate a hedging relationship and (2) when the deferred gains or losses on the hedging instrument get reclassified from other comprehensive income into earnings. Careful consideration should be given to the initial hedge documentation as it will determine when a hedge relationship should be discontinued. In any case, when the forecasted transaction that is expected to occur differs from the hedged forecasted transaction, as defined in the initial hedge documentation, entities must assess whether the hedging instrument is still highly effective at offsetting the cash flows on the hedged forecasted transaction that is expected to occur.

ASC 815-30-55 Example 16, *Impact on Accumulated Other Comprehensive Income of Issuing Debt with a Term That Is Shorter Than Originally Forecasted*, and ASC 815-30-55 Example 21, *Effect on Accumulated Other Comprehensive Income from Issuing Debt at a Date That Is Not the Same as Originally Forecasted*, address the reclassification of amounts recorded in other comprehensive income in various circumstances. The following examples relate to the forecasted issuance of debt and illustrate the concepts of Examples 16 and 21.

Unless otherwise stated, in all cases the entity designates the cash flow hedge in January 20X1 and expects to issue five-year debt with monthly interest payments in June 20X1.

Forecasted Transaction Is Defined as . . .	Transaction That Occurs Is . . .	Should All or Part of the Hedging Relationship Be Dedesignated?	Should All or Part of the Amounts in Other Comprehensive Income Be Reclassified to Earnings Immediately?
I. Proceeds from the issuance of debt with a specified fixed rate of interest on June 30, 20X1. Analogous to ASC 815-30-55-132	Debt issued on August 5, 20X1 at the specified fixed rate of interest.	Yes, the entire hedging relationship must be dedesignated when the issuance of the debt is no longer probable of occurring on June 30, 20X1.	No, all amounts remain in other comprehensive income because the hedged transaction will occur within the two-month period after the forecasted date.
II. Proceeds from the issuance of debt with a specified fixed rate of interest on June 30, 20X1. Analogous to ASC 815-30-55-132	Debt issued on September 10, 20X1 at the specified fixed rate of interest.	Yes, the entire hedging relationship must be dedesignated when the issuance of the debt is no longer probable of occurring on June 30, 20X1.	Yes, all amounts in other comprehensive income are reclassified to earnings because the hedged transaction (proceeds of debt issuance) will not occur within the two-month period after the forecasted date.

(continued)

Forecasted Transaction Is Defined as . . .	Transaction That Occurs Is . . .	Should All or Part of the Hedging Relationship Be Ddesignated?	Should All or Part of the Amounts in Other Comprehensive Income Be Reclassified to Earnings Immediately?
<p>III. 60 monthly interest payments beginning in June 20X1 on fixed-rate debt to be issued in June 20X1 at or near par at the then-current market interest rate.</p> <p>Analogous to ASC 815-30-55-129</p>	Fixed-rate debt issued in September 20X1.	<p>Yes. When the first three forecasted transactions (i.e., individual monthly interest payments) are no longer probable of occurring in June, July, and August 20X1, the entity terminates the hedging relationships for the first three monthly interest payments. The hedging relationships related to the remaining hedged interest payments may remain intact as long as those interest payments remain probable of occurring by the date originally specified.</p> <p>When the debt is actually issued in September 20X1 for the same 60 month term, the last three interest payments (from June through August, 20X6) are not hedged because the defined hedged item did not include these periods.</p>	<p>Yes. The portion of the change in the derivative's fair value related to the three interest payments that did not occur from June to September 20X1 is reclassified from other comprehensive income into earnings. All other gains and losses on the derivative remain in other comprehensive income and will be reclassified to earnings when the forecasted transactions impact earnings (i.e., when interest payments are made).</p>

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Forecasted Transaction Is Defined as . . .	Transaction That Occurs Is . . .	Should All or Part of the Hedging Relationship Be Dedesignated?	Should All or Part of the Amounts in Other Comprehensive Income Be Reclassified to Earnings Immediately?
IV. 60 monthly interest payments beginning in June 20X1 on fixed-rate debt to be issued in June 20X1 at or near par at the then-current market interest rate.	Fixed-rate debt issued in June 20X1 with a term of two years (not five, as expected).	Yes. When the entity decides that the term of the fixed-rate debt to be issued will be changed from five years to two years, it terminates the hedging relationships related to the final three years of interest payments (assuming that it does not expect to issue other debt for the remaining three years).	Yes. The portion of the change in the derivative's fair value related to the final 36 interest payments that will not occur is reclassified from other comprehensive income into earnings. All other gains and losses on the derivative remain in other comprehensive income and will be reclassified to earnings when the forecasted transactions impact earnings (i.e., when interest payments are made).
Analogous to ASC 815-30-55-94		Since the entity issued a two-year debt instrument, the entity determines that it is probable that the first 24 forecasted transactions would occur, since they are now contractual obligations. Thus the hedging relationship for the first two years is not impacted, as long as the hedge can be proven to be effective.	However, there may be some ineffectiveness to be recognized or the entity could conclude that the hedging relationship is no longer highly effective given that the actual variability in the 24 hedged interest payments is now based on the two-year borrowing rates, not on the five-year rates as expected at the inception of the hedge when the entity selected the hedging derivative.

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Forecasted Transaction Is Defined as . . .	Transaction That Occurs Is . . .	Should All or Part of the Hedging Relationship Be Deseignated?	Should All or Part of the Amounts in Other Comprehensive Income Be Reclassified to Earnings Immediately?
V. 60 monthly interest payments beginning in June 20X1 on fixed-rate debt to be issued in June 20X1 at or near par at the then-current market interest rate. Analogous to ASC 815-30-55-94	Fixed-rate debt issued in June, 20X1 with a term of two years. The entity expects to issue fixed-rate debt in June 20X3 with a term of three years.	No. Although the term of the first fixed-rate debt issuance has changed from five years to two years, the final 36 interest payments may continue to be probable of occurring, so the entity may need to dedesignate any hedging relationships. The final 36 payments may be hedged only if the entity is able to demonstrate that the refinancing to occur in 24 months is probable and that the hedge is shown to be effective.	No. However, there may be some ineffectiveness to be recognized or the entity could conclude that the hedging relationship is no longer highly effective given that the hedged interest payments are based on two-year interest rates (and then three-year rates) and the derivative is based on five-year interest rates.
VI. The total variability in 60 monthly interest payments on variable-rate debt beginning in June 20X1.	Debt issued in June 20X1 with payments based on the prime rate.	No, because the forecasted transaction (as defined) occurred.	No. However, there could be some ineffectiveness to recognize in earnings, or the entity could conclude that the hedging relationship is no longer highly effective given that the actual total variability in the hedged interest payments based on the prime rate may differ from the total variability in the rates expected at the inception of the hedge. In that case, the hedging relationship is terminated.

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Forecasted Transaction Is Defined as . . .	Transaction That Occurs Is . . .	Should All or Part of the Hedging Relationship Be Dedicinated?	Should All or Part of the Amounts in Other Comprehensive Income Be Reclassified to Earnings Immediately?
VII. 60 monthly interest payments on LIBOR-based debt beginning in June 20X1.	Debt issued in September 20X1 with payments based on the prime rate.	Yes, the entire hedging relationship is dedesignated as the forecasted transaction (i.e., LIBOR-based debt as defined) did not occur.	Yes, all amounts in other comprehensive income are reclassified to earnings because the forecasted transaction (as defined) did not occur.
VIII. Quarterly interest payments on a five-year borrowing program beginning in June 20X1.	90-day floating-rate notes issued quarterly from June 20X1 to March 20X4. For the June 20X4 to March 20X6 period, the company issued a single two-year fixed-rate note that pays interest on a quarterly basis.	Yes, the hedging relationship is dedesignated in June 20X4 when the entity issues fixed-rate debt because the forecasted transaction no longer has cash flow variability.	No. When the decision is made to issue a single two-year note, no amounts related to the June 20X4 to 20X6 period need be reclassified to earnings, because there will still be quarterly interest payments that will be made under the borrowing program. However, there may be some ineffectiveness to be recognized given that the hedged interest payments from June 20X4 to June 20X6 are based on a fixed two-year rate and the derivative is likely based on 90-day variable rates.

PwC Observation: The examples above demonstrate the importance of the designation and documentation of a forecasted transaction. The key is to be specific enough such that when the transaction occurs, it is clear that it was the hedged transaction. However, the more specific the designation, the more likely unanticipated changes in the terms of the forecasted transaction could result in the termination of the hedging relationship and the potential release of accumulated other comprehensive income because the hedged transaction, as defined, will not occur. Therefore, the entity should not be more specific than is necessary. Refer to Examples VI and VII in the table above, which illustrate how defining the hedged item either generically as variable-rate debt or specifically as LIBOR-based debt can lead to different outcomes when prime-rate debt is ultimately issued.

Refer also to DH 9.3, Question Nos. 9-4 through 9-13, as well as DH 9.4, Examples 9-3 and 9-4.

9.1.3 Discontinuance of Foreign Currency Hedges

The 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 previously discussed. The 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, *Translation of Financial Statements*. ASC 830-30-40 requires entities to remove the amount attributable to a particular foreign entity from the cumulative translation adjustment of equity through earnings upon the sale or complete or substantially complete liquidation of the subsidiary. Similarly, the entity must discontinue hedge accounting prospectively upon sale or complete or substantially complete liquidation of the subsidiary or through the deconsolidation of a subsidiary from a change in control as provided in ASC 810-10.

The accounting treatment required upon the discontinuance of fair value hedge accounting and cash flow hedge accounting is summarized in exhibits 9-1 and 9-2, respectively.

Exhibit 9-1: Discontinuance of Hedge Accounting—Fair Value Hedges

Fair Value Hedge (Including Firm Commitments)	Derivative Hedging Instrument		Hedged Item	
	Continue Fair Value Accounting	Derecognize From the Balance Sheet	Derecognize From the Balance Sheet ¹	Freeze Carrying Value Adjustment ²
Effectiveness criteria failed	✓			✓
Hedging instrument is (1) sold, (2) extinguished, (3) terminated, (4) exercised, or (5) expired		✓		✓
Hedging instrument is dedesignated	✓			✓
Hedging instrument is dedesignated and subsequently redesignated in a new hedging relationship	✓			✓ ³
Firm commitment no longer meets the ASC 815-10-20 definition of a firm commitment	✓		✓	
Hedged item is sold or extinguished	✓		✓	

¹ The derecognition of the hedged item occurs through earnings (e.g., the firm commitment is written off through earnings or, for the sale or extinguishment of the hedged item, the gain or loss is recognized in earnings).

² Subsequent to the date of the specific event (if there is one) that causes the discontinuance of hedge accounting, the hedged item's carrying amount is not adjusted for changes in the risk that was being hedged. Once the carrying amount adjustment on the hedged item is frozen, it either:

a. Continues as part of the carrying amount of the asset up to the date of sale (if the asset was held for sale) or the date on which the firm commitment occurs,

(continued)

- b. Continues as part of the carrying amount of the asset or liability up to the date of extinguishment, or
- c. Is or continues to be amortized to earnings (for interest-bearing assets and liabilities). Amortization shall begin no later than when the hedged item ceases to be adjusted for changes in the fair value that are attributable to the risk that is being hedged.

³ If a new hedging instrument were designated as a hedge of 100 percent of the existing hedged item for the same hedged risk, the carrying amount of the hedged item is adjusted anew, and fair value accounting (for changes in the risk that is being hedged) would be resumed in full. However, if only 30 percent of an item (say, an interest-bearing financial instrument) were redesignated as the hedged item in a new hedging relationship, only 30 percent of the carrying amount of the hedged item (attributable to the risk being hedged) will continue to be measured at fair value. The remaining 70 percent of the hedged interest-bearing financial instrument would not be measured at fair value for the risk that is being hedged. One hundred (100) percent of the carrying amount adjustment that originated pursuant to the previous hedge is amortized earnings, as discussed in footnote 2 above. If the hedged item is not an interest-bearing financial instrument (e.g., a commodity held in inventory), the carrying amount adjustment is recognized in earnings on the date that the item (i.e., the commodity) impacts earnings (e.g., is sold).

Exhibit 9-2: Discontinuance of Hedge Accounting—Cash Flow Hedges

	Derivative Hedging Instrument		Amount Accumulated in Other Comprehensive Income	
	Continue Fair Value Accounting ⁴	Derecognize From the Balance Sheet	Reclassify as Earnings	Freeze Amount in OCI ⁵
Cash Flow Hedge				
Effectiveness criteria failed	✓			✓
Hedging instrument is (1) sold, (2) extinguished, (3) terminated, (4) exercised, or (5) expired		✓		✓
Hedging instrument is dedesignated	✓			✓
Hedging instrument is dedesignated and subsequently redesignated in a new hedging relationship	✓			✓
Forecasted transaction is no longer probable but is reasonably possible of occurring	✓			✓
Forecasted transaction is probable of not occurring	✓		✓ ⁶	
Forecasted transaction is probable of occurring, but on a date more than 2 months subsequent to the initially specified period	✓		✓ ⁷	
Variability of cash flows ceases (e.g., the forecasted transaction becomes a firm commitment)	✓			✓

⁴ The effective portion of changes in the fair value of the derivative are recorded in other comprehensive income when the derivative is designated and qualifies as a cash flow hedge; otherwise, the changes are recorded in earnings.

⁵ The amount that is frozen in other comprehensive income is reclassified into earnings when earnings are impacted by the variability of the cash flows of the hedged item or the hedged forecasted transaction.

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⁶ In order to preclude situations in which entities might manipulate earnings by changing their estimate of probability (i.e., by transferring gains deferred in other comprehensive income to earnings that are due solely to a change in the assessment of probability), ASC 815-30-40-4 requires that amounts deferred in other comprehensive income be recognized only when an 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, except as discussed below.

⁷ 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 which case the net derivative gain or loss related to the discontinued cash flow hedge should continue to be reported in accumulated other comprehensive income until it gets reclassified into earnings pursuant to ASC 815-30-35-38 through 35-41.

Refer also to DH 9.3, Question No. 9-4.

9.1.4 Central Clearing Counterparties

The International Swaps and Derivative Association (ISDA) asked the SEC's Office of the Chief Accountant about the implications under U.S. GAAP when OTC derivative contracts that have been designated as an accounting hedge are novated to a central counterparty. Under Title VII of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd-Frank), certain derivatives that are currently executed in the OTC market may be required to be cleared through derivative clearing organizations or clearing agencies.

When a derivative is cleared through a central clearing counterparty, it is first transacted between two counterparties and then novated to a central clearing counterparty. Subsequent to the novation, there are two contracts (mirror images of each other), one between each counterparty and the central clearing counterparty. In other words, the original counterparties no longer have a contract between each other.

In addition to new transactions, counterparties could elect to voluntarily clear transactions existing prior to the application of a mandatory clearing requirement through a central clearing counterparty.

The specific question posed to the SEC staff was whether novation under these circumstances would result in the termination of the original derivative contract and the associated hedging relationship, such that the use of hedge accounting subsequent to the novation would require redesignation in a new hedging relationship.

The SEC staff responded that it would not object to a conclusion for accounting purposes that the original derivative contract has not been terminated and replaced with a new derivative contract, nor would it object to the continuation of existing hedging relationships when there is a novation of a derivative contract to effect a change in counterparties to the underlying contract, provided that other terms of the contract have not been changed, in any of the following circumstances:

- For an OTC derivative transaction entered into prior to the application of mandatory clearing requirements, an entity voluntarily clears the underlying OTC derivative contract through a central counterparty, even though the counterparties had not agreed in advance (i.e., at the time of entering into the transaction) that the contract would be novated to effect central clearing.
- For an OTC derivative transaction entered into subsequent to the application of mandatory clearing requirements, the counterparties to the underlying contract agree in advance that the contract will be cleared through a central counterparty

in accordance with standard market terms and conventions, and the hedging documentation describes the counterparties' expectations that the contract will be novated to the central counterparty.

- A counterparty to an OTC derivative transaction who is (or expects to be) prohibited by Section 716 of Dodd-Frank from engaging in certain types of derivative transactions novates the underlying contract to a consolidated affiliate that is not insured by the FDIC and does not have access to Federal Reserve credit facilities. In other words, insured deposit-taking institutions and other firms receiving Federal support will be prohibited from engaging in certain types of derivative transactions.

PwC Observation: We understand that the SEC staff generally believes that the counterparty is a critical term of a derivative contract. As a result, following novation of a derivative contract designated in a hedging relationship, such contract would generally be considered a new derivative contract, requiring dedesignation of the original hedging relationship.

However, the SEC staff recognizes that Dodd-Frank will have a far-reaching impact on many institutions and change how central counterparties become involved with transactions. Thus, the SEC staff does not object to certain novations not being viewed as creating new derivative instruments.

The SEC staff's view should not be interpreted as permitting any novation of a derivative contract to be viewed as a continuation of an existing derivative contract. The SEC staff's view is focused solely on those instances outlined above.

It is also important to note that the SEC staff commented that for transactions entered into subsequent to the application of mandatory clearing requirements, the hedging documentation should describe the counterparties' expectations that the contract will be novated to the central counterparty. This may require changes to existing templates or tools companies use for their hedge documentation.

In addition to those instances described in the ISDA inquiry, we believe that derivative novations within the same consolidated group as a result of regulatory changes or certain business combinations would not require a dedesignation and redesignation of the hedging relationship, provided no other terms of the contract have been changed. If an entity acquires derivative instruments through a business combination where the acquiree was applying hedge accounting prior to the business combination, those instruments would need to be redesignated as required by specific guidance.

Scenario A*

Manufacturing Company A has a hedging relationship with Bank B. Bank B is purchased by Bank C and as a result, all of Company A's hedges with Bank B are novated to Bank C as Bank B will no longer be a continuing entity. Company A does not need to dedesignate and redesignate the hedging relationship provided no other terms of the contract are changed.

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* These scenarios do not address the accounting for the contract by the bank.

Scenario B*

Manufacturing Company A has a hedging relationship with Bank B, executed through Bank B's regulated subsidiary, Sub R. A change in regulation requires that all derivatives at Bank B reside in an unregulated subsidiary of the Bank (Sub U) as opposed to where they currently reside (Sub R). As a result, Sub R must novate all trades to Sub U, but both are part of the consolidated Bank B Group. Manufacturing Company A does not need to redesignate those hedging relationships provided no other terms of the contract are changed.

9.2 Impairment

Assets and liabilities that (1) have been designated as hedged items in a hedging relationship and (2) are being accounted for pursuant to the provisions for fair value hedges remain subject to the normal requirements for impairment assessment (or the assessment of the need to recognize an increase in an obligation) that are prescribed by accounting principles generally accepted in the United States (e.g., lower of cost or fair value under ASC 948-310-35-1, *Accounting for Certain Mortgage Banking Activities*; impairment of loans under ASC 310-10-35-20, *Accounting by Creditors for Impairment of a Loan*; impairment of securities under ASC 320-10-15-4, *Accounting for Certain Investments in Debt and Equity Securities*; impairment of long-lived assets under ASC 360-10-35-20, *Accounting for the Impairment or Disposal of Long-Lived Assets*; and valuation of inventory under ASC 330-10-35-13, *Inventory Pricing*).

An entity must apply those impairment requirements *after* hedge accounting has been 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 derivative 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 assessments to the hedged asset or liability.

PwC Observation: Examples of an impairment assessment of a fair value hedged item are:

1. The assessment of the net realizability of inventory,
2. Whether a decline in the fair value of an available-for-sale security to below its amortized cost basis is other than temporary, and
3. Whether an entity that has originated a loan will be able to collect all amounts that, according to the contractual terms of the loan agreement, are due (when an entity is evaluating the impairment of a loan, any specific or allocated loan-loss reserve should be included in the assessment).

For assets and liabilities that give rise to variable cash flows (and for which the variable cash flows have been designated as the hedged item), an assessment of impairment (or the need for the recognition of an increase in an obligation) must be made in accordance with accounting principles generally accepted in the United States that are applicable to those assets or liabilities. An entity should apply those requirements *after* hedge accounting has been applied for the period and without

* These scenarios do not address the accounting for the contract by the bank.

regard to the expected cash flows of the hedging instrument (i.e., gains and losses that are accumulated in other comprehensive income may not be used to assess either impairment or the need for an increase in an obligation of a hedged item).

If under these provisions an impairment loss was recognized for an asset, or an additional obligation was recognized for a liability (to which a forecasted transaction relates), offsetting gains related to the forecasted transaction that have been accumulated in other comprehensive income should be considered to determine if they are required to be reclassified and recognized immediately in earnings. However, the amount of any such gains reclassified to earnings should not be in excess of the impairment loss recognized or the incremental increase in the liability. Similarly, when recoveries are recognized on the asset, or reductions in the liability, to which the forecasted transaction relates, offsetting losses, if any, that have been accumulated in other comprehensive income should also be considered to determine if they are required to be reclassified and recognized immediately in earnings.

ASC 815-30-35-40 specifies that if an entity were to expect that at any time the continued deferral of a loss in accumulated other comprehensive income would lead to the recognition of a net loss when combined with the hedged item in one or more future periods, a loss should be immediately recognized in earnings for the amount that the entity does not expect to recover. For example, if derivative losses related to a hedge of the forecasted purchase of inventory have accumulated in other comprehensive income, and the entity does not expect to recover the (1) aggregate carrying amount of the inventory and (2) deferred derivative losses through the sale of that inventory, the derivative losses in other comprehensive income will be recognized in earnings immediately to the extent of the expected future loss.

PwC Observation: Examples of an impairment assessment of a cash flow hedged item are:

1. Whether the fair value of the loans has declined to an amount below amortized cost in a hedge of a forecasted sale of fixed-rate mortgage loans and
2. Whether net realizability of inventory that is to be sold pursuant to a forecasted transaction exceeds its carrying value.

Refer also to DH 9.3, Question Nos. 9-10 through 9-13.

9.3 Questions and Interpretive Responses

Frequent Terminations and Redesignations of Hedges

Question No. 9-1: 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 Interpretive 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. ASC 815-25-55-19 specifically permits hedge accounting for a delta-neutral hedging strategy, under which the quantity of the hedging instrument is constantly adjusted in order to maintain a desired hedge ratio.

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Strategies known as *dynamic hedging* are also eligible for hedge accounting, provided that 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.

Subsequent Accounting for Carrying Amount Adjustments in a Fair Value Hedge

Question No. 9-2: Company A discontinues a fair value hedging relationship by either dedesignating or terminating the derivative. Subsequently, Company A redesignates the previously hedged item in a new fair value hedging relationship. Should the carrying amount adjustment on the hedged item at the time that the first hedging relationship was discontinued be amortized over the remaining life of the hedged item?

PwC Interpretive Response: Generally yes, the basis adjustment is required to be amortized unless the Example 9 method is used and the hedged item is simultaneously redesignated in a new fair value hedging relationship.

ASC 815-25-35-9 states, “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.”

Thus, upon the discontinuation of a hedging relationship, the hedged item will cease to be adjusted for changes in its fair value that are attributable to the risk that was being hedged in the discontinued hedging relationship. Once a hedging relationship has been discontinued, the amortization of the previous carrying amount adjustment must begin unless the hedged item is simultaneously redesignated in a new fair value hedge relationship. This is only relevant in the Example 9 method, as the basis adjustment may be frozen until the hedging relationship ceases. Unlike the Example 9 method, under the Example 11 method, the basis adjustment is already being amortized. Under the Example 11 method, whether previous basis adjustments are amortized separately or as a part of the new hedging relationship is a policy choice.

Any subsequent hedging relationship would be considered a new designation and therefore should be accounted as a new hedge designation (i.e., prospectively). 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 a further adjustment of the carrying amount of the hedged item and offset the fair value changes of the derivative instrument currently in earnings. Both changes in value should be measured from the date that the new hedging relationship was established. The new carrying amount adjustments may begin to be amortized immediately but must begin no later than upon discontinuance of the new hedge.

Impact on Hedge Accounting When the Terms of a Hedging Derivative Are Modified

Question No. 9-3: Company A enters into an interest rate swap contract that is designated to hedge the benchmark interest rate risk in an existing financial asset. This hedging relationship meets all of the conditions required for hedge accounting.

Subsequent to the inception of the hedging relationship, the interest rate swap counterparty decides to novate the contract to a new counterparty and modify the terms of the swap to alter the spread on the variable leg of the swap (i.e., adjust the fixed spread over LIBOR).

May Company A continue the original hedging relationship when the swap is novated?

PwC Interpretive Response: No. Company A must discontinue the hedging relationship when the interest rate swap is novated to the new counterparty, because the terms of the original interest rate swap have been modified to alter the swap's fair value. In order for the original hedging relationship to remain intact, the original terms of the interest rate swap must remain unchanged (other than for nonsubstantive changes).

Because the altering of the spread changes the original terms of the interest rate swap, the interest rate swap should be viewed as a new contract for accounting purposes. Although hedge accounting is discontinued, Company A may designate the "new" interest rate swap as a hedging instrument in a separate hedging relationship, provided it meets the conditions required for hedge accounting.

Questions have arisen as to the effects of adding provisions for a Credit Support Annex ("CSA") to an existing ISDA master agreement. A 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. Such a modification does change the credit risk profile of each of the counterparties, but not necessarily any differently than would an additional individual derivative trade. For example an interest rate swap with a zero fair value and a fairly short duration has very little effect on credit exposures, while an option contract where significant premium was remitted, absent a CSA, would change credit profiles more so than most CSA amendments. Since any new derivative trades do not typically call into question the existing designations of other trades with the same counterparty under the same ISDA master, similarly, we believe that subsequent executions of most common CSA agreements would not be considered modifications of existing derivative trades nor call into question their existing hedge designations.

Refer also to DH 9.1.4.

Partial Dedesignation of a Hedging Relationship

Question No. 9-4: In January 20X1, a USD functional currency company forecasts 1,000 Euro of inventory sales on November 15, 20X1. The company enters into a foreign exchange forward sale contract with a notional amount of 1,000 Euro that it appropriately designates as the hedging instrument of the foreign currency exchange risk associated with the first 1,000 Euro of forecasted sales of inventory on November 15, 20X1, in accordance with all of the foreign currency cash flow hedging requirements. In March 20X1, the company re-evaluates its foreign currency exposure and determines that it wants to hedge only the first 800 Euros of forecasted sales of inventory expected on November 15, 20X1. May the company dedesignate 200 Euros of the derivative contract and continue hedge accounting for the remaining 800 Euros under the existing hedge relationship?

PwC Interpretive Response: Yes. Given the lack of guidance on partial dedesignation and the specific guidance on redesignation, we believe that partial dedesignation may be an acceptable alternative to full dedesignation and redesignation. As long as the derivative contract has not been amended, terminated or modified in any way, the cash flow hedge relationship remains intact for the proportion associated with the 800 Euros of notional value of the original transaction. This dedesignation only impacts the notional amount of the hedging relationship. As such, no new sources of ineffectiveness have been created. ASC 815-30-40-1 states that “An entity shall discontinue prospectively the accounting specified in ASC 815-30-35-3 and ASC 815-30-35-38 through 35-41 for an existing hedge if any one of the following occurs... c. The entity removes the designation of the cash flow hedge.” In determining whether or not proportional dedesignation is acceptable under ASC 815-30-40-1, consideration was given to ASC 815-20-25-45 which allows a proportion of a derivative to be designated as a hedging instrument. Although ASC 815 is silent to proportional dedesignation, we infer from ASC 815-20-25-45 and ASC 815-30-55-72 that it is allowed for cash flow hedges.

If the company were to partially terminate or modify the derivative contract (i.e., to settle a portion of the contract or change the notional amount), we believe this would require dedesignation and redesignation before cash flow hedge accounting could potentially be continued, as we believe the modified contract should be treated as a new derivative. This is consistent with our views that amendment or modification of a derivative agreement should be treated as a settlement of the original derivative contract and entering into a new derivative agreement.

If the reason for the dedesignation of 200 Euros is because that portion of forecasted inventory sales is no longer considered probable due to a change in forecast, the company should consider other factors, including the following: (1) If the 200 Euros of forecasted sales are probable of not occurring, then ASC 815 would require 20 percent (200/1,000) of the amounts deferred in accumulated other comprehensive income relating to this derivative instrument to be reclassified into current earnings and the appropriate disclosures be made, and (2) Whether this calls into question the company's ability to assert the remaining 800 Euros of sales as probable, since it would be rare that a Company would be able to demonstrate that 100 percent of forecasted sales is probable of occurring. Typically companies hedge a percentage of forecasted sales in accordance with their policies.

Probability of Forecasted Transactions Occurring and the Interaction of Paragraphs ASC 815-30-40-1 through 40-5

Question No. 9-5: A company has designated a derivative (interest rate swap) as a cash flow hedge of a series of forecasted transactions (i.e., forecasted interest payments on variable-rate debt) related to a specific outstanding debt instrument similar to *Example 4: Variable Interest Payments on a Group of Variable-Rate, Interest-Bearing Loans as Hedged Item*, Case B, at ASC 815-20-55-97. Subsequent to period-end, but prior to release of the financial statements, the company retired the specific debt. How should the company determine (1) when hedge accounting should be discontinued and (2) when the cumulative derivative gain or loss deferred in accumulated other comprehensive income should be reclassified into earnings?

PwC Interpretive Response: ASC 815-30-40-1 states that a company should discontinue hedge accounting prospectively if any of the criteria in ASC 815-30-35-3 and ASC 815-30-35-38 through 41 are no longer met. ASC 815-20-25-15(b) states that “the occurrence forecasted transaction is probable.” The word *probable* has the same meaning in ASC 815 as it does in ASC 450-20-20, *Contingencies*. ASC 815-30-40-4 states that the net derivative gain or loss related to a discontinued cash flow hedge should continue to be reported in accumulated other comprehensive income until it is reclassified into earnings pursuant to ASC 815-30-35-38 through 41 (i.e., when the forecasted transaction affects earnings), unless 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 time frame, depending on the circumstances).

If a company determines that a forecasted transaction is not probable of occurring (i.e., the occurrence of the forecasted transaction is reasonably possible or remote, but not probable), the company would need to prospectively discontinue hedge accounting because one of the criteria in ASC 815-20-25-15 would no longer be met. However, the company would not reclassify the net derivative gain or loss into earnings from accumulated other comprehensive income until (1) the forecasted transaction is deemed to be probable of not occurring (i.e., the probability of its occurring is remote) or (2) the forecasted transaction affects earnings. The following table illustrates this difference:

Probability of Forecasted Transactions Occurring	Impact on Hedge Accounting Going Forward	Impact on Accumulated Other Comprehensive Income
Probable of occurring	Continue hedge accounting	Current-period amounts are deferred, and amounts previously deferred are reclassified when the forecasted transaction affects earnings.
Reasonably possible of occurring	Discontinue	Amounts previously deferred remain frozen in accumulated other comprehensive income until the forecasted transaction either affects earnings or subsequently becomes probable of not occurring.
Reasonably possible of not occurring	Discontinue	Amounts previously deferred remain frozen in accumulated other comprehensive income until the forecasted transaction either affects earnings or subsequently becomes probable of not occurring.
Probable of not occurring	Discontinue	Amounts previously deferred are reclassified immediately to earnings.

(continued)

There are examples in ASC 815-20-55-88 through 55-99, Variable Interest Payments on a Group of Variable-Rate Interest-Bearing Loans, and ASC 815-30-55-94 through 55-99, Impact on Accumulated Other Comprehensive Income of Issuing Debt with a Term That Is Shorter Than Originally Forecasted, to further illustrate how probability assessments impact hedge accounting and amounts deferred in accumulated other comprehensive income.

Therefore, the company should evaluate the probability of the originally forecasted transactions occurring and discontinue hedge accounting (and possibly reclassify the cumulative derivative gain or loss out of accumulated other comprehensive income), depending on the results of the assessment. As part of its probability assessment, the company should ensure that it considers all information known to it regarding conditions existing as of the balance sheet date. The amounts previously deferred in accumulated other comprehensive income should be reclassified to earnings immediately when the company determines the forecasted transactions (interest payments on the debt) are probable of not occurring, even though the retirement of the debt subsequent to period-end is a nonrecognized subsequent event.

Accounting for Amounts in OCI Related to a Cash Flow Hedge That Will Be Released to Earnings as a Result of an Early Extinguishment of Debt

Question No. 9-6: Company B has five-year variable-rate debt and enters into a receive-floating, pay-fixed five-year interest rate swap to hedge the variability of cash outflows for the interest on the debt. The interest payments on the five-year debt are designated as the hedged item, and the hedge is deemed to be effective from the hedge inception to the settlement date. The debt was extinguished early, and Company B was relieved of the obligation. Upon the debt extinguishment, the fair value gains/losses on the interest rate swap accumulated in other comprehensive income were released to earnings.

May Company B include in the calculation of extinguishment gain or loss the reclassified amount from other comprehensive income that was related to the interest rate swap?

PwC Interpretive Response: No. ASC 815-30-35-44, *Gains or Losses from Cash Flow Hedges of Debt That Is Extinguished* addresses how the component of other comprehensive income resulting from a cash flow hedge of debt should be classified in the income statement when the debt is extinguished. It states, “If the reclassification to earnings of the amount in accumulated comprehensive income resulting from a cash flow hedge of debt is required under this Subsection when that debt is extinguished, the amount reclassified from accumulated comprehensive income to earnings shall be excluded from extinguishment gain or loss. ASC 225-20-45-1 provides guidance on whether the income statement effects of events or transactions may be presented as extraordinary items.”

ASC 470-50-45-2, significantly limits the ability to classify the gain or loss on extinguishment of debt as extraordinary. Notwithstanding these changes, we believe that the earnings released from other comprehensive income should not be included in the debt extinguishment gain or loss because the hedging gain or loss is related to future interest payments that will now not occur and is not directly related to the extinguishment transaction.

Cash Flow Hedges of Fungible Commodities: Transaction Is Probable of Not Occurring

Question No. 9-7: Company X is an oil and gas company that hedges a certain amount of oil production in a given period by entering into cash flow hedges. Company X hedges the sale of the first 100 barrels of oil produced in October, the sale of the first 100 barrels of oil produced in November, and so on, over several months. If a catastrophic event such as a hurricane (or similarly significant circumstance) occurs and results in insufficient production (i.e., below the hedged volume) for a month or more, when should Company X release the net derivative gain or loss from accumulated other comprehensive income into earnings?

PwC Interpretive Response: The net derivative gain or loss related to a discontinued cash flow hedge should be released from accumulated other comprehensive income into earnings when it is probable that the forecasted transaction will not occur within the originally specified time period (or within an additional two-month period).

In this example, Company X should immediately reclassify to earnings the net accumulated other comprehensive income gain or loss related to the hedged sales associated with the halted or curtailed production. Assuming the remaining hedged forecasted production continues to be probable of occurring, the related net derivative gain or loss should continue to be reported in other comprehensive income.

With respect to a fungible commodity, such as oil, a company is usually not hedging specific production of unique assets (e.g., specific hydrocarbons in the ground) but, rather, is hedging the sales of production for specific months. If production halts or is curtailed, the forecasted transaction does not occur during the shutdown. In the month that production resumes, the sales that occur relate to that month's production, not some prior month's production.

The hedged forecasted transaction should be described with sufficient specificity so that when a transaction occurs, it is clear whether that transaction is or is not the hedged transaction. If there is a delay in production, it should be clear that when production resumes, the originally designated hedged transaction is occurring. In the example above, if Company X was hedging the first sales of 100 barrels of oil occurring after October 1, instead of the sale of the first 100 barrels of oil produced in each month, the halted or curtailed production would not impact Company X's accumulated other comprehensive income because the forecasted transaction would continue to be considered probable of occurring, albeit at some later date.

Discontinuance of Hedge Accounting: Ramifications of Push-Down Accounting to an Acquired Entity's Hedging Relationships

Question No. 9-8: Company ABC acquired 94 percent of the common shares of Company XYZ on May 31, 20X7. Company ABC accounted for the acquisition in accordance with ASC 805, *Business Combinations*, and determines push-down accounting will be applied to the individual assets and liabilities of Company XYZ. Company ABC did not purchase any of the outstanding debt previously issued by Company XYZ.

Before the acquisition, Company XYZ executed interest rate swaps to hedge its long-term debt and accounted for the hedging relationships as cash flow hedges under ASC 815-20-25-6. After the acquisition, the interest rate swaps continue to hedge the long-term debt that remains outstanding. What effect does push-down accounting have on the acquired company's hedging relationships that previously qualified for hedge accounting?

PwC Interpretive Response: On a consolidated reporting level, Company ABC will not be able to continue the hedge accounting previously applied by Company XYZ for its respective outstanding debt, nor will Company XYZ be able to continue the hedge accounting if separate stand-alone financial statements are issued. However, if push-down accounting was not applied to the acquisition of Company XYZ, Company XYZ could continue reporting the original hedge accounting at its subsidiary level, although Company ABC would still not be able to continue the hedge accounting applied by Company XYZ in its consolidated financial statements.

ASC 815-20-55-199, *Example 24: No Continuation of the Shortcut Method Following a Purchase Business Combination*, states that the concept of purchase accounting follows the accounting for acquisitions of individual assets and liabilities. That is, the combined entity should account for the assets and liabilities acquired in the business combination consistent with how it would be required to account for those assets and liabilities if they were acquired individually in separate transactions. The acquisition accounting is based on the premise that in an acquisition, the acquired company ceases to exist and the acquiring company survives. Upon acquisition of the acquired entity, the hedging relationships of each of the individually purchased assets and liabilities of the acquired entity should be terminated as part of the business combination accounting. Hedging relationships may be designated anew by the combined entity (to achieve hedge accounting), but the old hedging relationships cannot be continued. Therefore, the hedging relationships of the acquired entity will need to be reassessed to determine whether they qualify again for hedge accounting.

Although ASC 815-20-55-199 refers to the Shortcut Method, ASC 815-20-25-102 through ASC 815-20-25-106, we interpret the guidance in ASC 815-20-55-199 as applicable for all hedging relationships of assets and liabilities at the acquired-company level. Given that the derivatives used to hedge the assets and liabilities most likely have a fair value other than zero at the acquisition date and the assets and liabilities have a fair value other than their par value, the hedging relationship will not qualify for the shortcut method and may have difficulty qualifying for hedge accounting under the long-haul method.

The guidance in ASC 815-20-55-199 will not affect the previously existing hedging relationships of the assets and liabilities at the acquiring-company level because, as noted in ASC 815-20-55-199, this company continues to exist. However, ASC 815-20-55-199 does not provide guidance for acquired companies that continue to exist within the combined entity and issue stand-alone financial statements. SAB Topic 5-J, *Push Down Basis of Accounting Required in Certain Limited Circumstances* (see ASC 805-50-S99-1), describes the SEC staff's long-standing position that a purchase transaction that results in an entity's becoming substantially wholly owned establishes a *new basis* of accounting. In other words, push-down accounting represents the termination of the old accounting entity

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and the creation of a new one. Therefore, if push-down accounting is applied to the acquired company, the acquired company, as an accounting entity, ceases to exist. Consistent with the guidance with respect to the consolidated financial statements of the acquirer, we believe that when push-down accounting is applied in the stand-alone financial statements of an acquired entity, the hedging relationships at the acquired-company level must be reassessed to determine whether they again qualify for hedge accounting. However, if push-down accounting is not applied, the acquired company may continue to account for its own hedging relationships based on the preacquisition designations in its stand-alone financial statements. This is true even though those hedging relationships must be discontinued and redesignated at the consolidated level.

Impact of Discontinued Operations on Hedge Accounting

Question No. 9-9: On January 1, 20X1, a company enters into a cash flow hedge of the forecasted sales of the first 1,000 units of a specific product that are expected to be sold over the period from January 1, 20X1, to December 31, 20X2. Gains and losses on the hedging instrument are accumulated in other comprehensive income and reclassified into earnings as sales occur. As of August 31, 20X1, the company sold 200 units of the hedged product. On September 1, 20X1, the company decides to sell its operations that produce this product. The company expects the sale to be consummated within a year. Does the company's decision to sell its operations impact its hedge accounting?

PwC Interpretive Response: Yes. If an entity determines that a forecasted transaction is not probable of occurring (i.e., the occurrence of the forecasted transaction is reasonably possible or remote but not probable), it would need to prospectively discontinue hedge accounting because one of the criteria in ASC 815-20-25-15 would no longer be met. If an entity determines it is "reasonably possible" but not "probable" that the forecasted transaction will not occur, gains and losses that are deferred in other comprehensive income will remain in other comprehensive income until earnings are impacted by the forecasted transaction or until it later becomes "probable" of not occurring. All gains and losses deferred in other comprehensive income that are associated with forecasted transactions that are probable of not occurring should be reclassified to earnings.

On September 1, 20X1, given the company's plan to sell the operations that produce the hedged product, the company should assess the probability that the forecasted sales of the remaining 800 units of the hedged product will occur before the sale of the operations is completed, which is expected to be within the year. Because the company has sold only 200 units since January 1, 20X1 (inception of the hedge), it is likely that a portion of the forecasted sales will not occur before the sale of the company's operations is consummated. If the company determines that the forecasted sales are no longer probable of occurring, the company should discontinue hedge accounting immediately. The company should immediately reclassify to earnings the net accumulated other comprehensive income gain or loss related to the hedged sales that are probable of not occurring. All deferred gains or losses in other comprehensive income that are related to hedged forecasted sales that are at least reasonably possible of occurring before the sale of the operations should remain in accumulated other comprehensive income until the sales occur or the sales are judged to be probable of not occurring.

Assessing Impairment in a Fair Value Hedge

Question No. 9-10: On January 1, 20X1, a 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 (i.e., the loan has a gain of \$800,000 attributable to the changes in the interest rate risk that is being hedged). The borrower's credit quality, however, has deteriorated and the loan is considered impaired. In accordance with the requirements of ASC 310-10-35-31, *Loan Impairment—Measurement of Impairment—Impact of Hedging*, the entity 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 under fair value 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 the entity should record?

PwC Interpretive Response: The entity should record an impairment loss of \$2.8 million on the loan. ASC 815-25-35-10 states that "impairment requirements shall be applied after hedge accounting has been applied for the period and the carrying amount of the hedged asset has been adjusted pursuant to the fair-value hedging provisions of ASC 815-25-35-1b." When the recorded investment of a loan has been adjusted under fair value hedge accounting, the effective rate to be used for measuring impairment under ASC 310-10-35-31 is the discount rate that equates the present value of the loan's future cash flows with the adjusted recorded investment in the loan. The loan's original effective interest rate is no longer utilized once the loan amount is adjusted for changes in fair value. The adjustment under fair value hedge accounting of the loan's carrying amount should be considered as an adjustment of the loan's recorded investment. The entity should deduct the estimated present value of \$48 million from the \$50.8 million carrying amount of the loan to arrive at the \$2.8 million impairment loss that must be recognized under ASC 310-10 as a charge to earnings. The fair value of the interest rate swap is not considered in the assessment of impairment for the loan.

The guidance in ASC 815-25-35-11, as discussed above, is applicable to all entities applying ASC 310-10 to financial assets that are hedged items in a fair value hedge—regardless of whether those entities have delayed amortizing to earnings the adjustments of the loan's carrying amount arising from fair value hedge accounting until the hedging relationship is dedesignated.

Assessing Impairment in a Cash Flow Hedge: Recognition of Derivative Losses Recorded in Other Comprehensive Income

Question No. 9-11: Assume Company A periodically purchases inventory from a foreign supplier 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 has accumulated in other comprehensive income. In a subsequent period, the purchased inventory has a carrying amount of \$100 and a fair value of \$110. The entity expects to sell the inventory at a price equivalent to its fair value.

The entity determines that the combined value of the loss deferred in other comprehensive income 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. Based on this fact pattern, how would the loss exposure be accounted for under ASC 815?

PwC Interpretive Response: ASC 815-30-35-40 indicates that when an entity expects that at any time continued deferral of a loss in accumulated other comprehensive income would lead to a recognition of a net loss on the combined hedging instrument and the hedged transaction in one or more future periods, a loss should immediately be reclassified as earnings for the amount that the entity does not expect to recover. In this example, a \$15 loss ($\$100 + \$25 - \110) would be reclassified from other comprehensive income into earnings because the entity does not expect to recover more than the inventory's fair value.

Assessing Impairment in a Cash Flow Hedge: Recognition of Derivative Gains Recorded in Other Comprehensive Income

Question No. 9-12: Assume Company B purchases inventory from a foreign supplier and designates the forecasted purchase of that inventory as the hedged item in a cash flow hedge. At the date that the inventory is purchased, a gain on the hedging instrument of \$25 has accumulated in other comprehensive income. In a subsequent period, the fair value of the purchased inventory, which has a carrying amount of \$100, declines to \$80 and should be written down to the lower of cost or market in accordance with the entity's accounting policy. Based on this fact pattern, should the entity recognize any of the gain deferred in other comprehensive income?

PwC Interpretive Response: ASC 815-30-35-43 indicates that if "an impairment loss is recognized on an asset . . . , any offsetting net gain related to that transaction in accumulated other comprehensive income shall be reclassified immediately into earnings." In this example, the entity will recognize an impairment loss of \$20 ($\$100 - \80). However, the entity will also recognize a portion of the deferred gain from the hedge of the purchase of the inventory by reclassifying from other comprehensive income into earnings a gain of \$20 (i.e., part of the total \$25 deferred gain) in the period the impairment is recognized. The remaining \$5 gain in other comprehensive income would continue to be deferred until the hedged forecasted transaction impacts earnings when the inventory is sold (or if a subsequent impairment is recognized).

Assessing Impairment in a Cash Flow Hedge—Mortgage Banking Activities: Recognition of Derivative Gains Recorded in Other Comprehensive Income

Question No. 9-13: A mortgage banking company has entered into derivative contracts and designated them as hedging instruments in cash flow hedging relationships in which the hedged item is the variability in total cash flows from the forecasted sales of mortgage loans held for sale. As required by ASC 948-310-35-1, *Loans Held for Sale*, the company is accounting for the mortgage loans held for sale on the lower-of-cost-or-fair value (LOCOFV) basis.

As of the end of the current quarter, the company has recognized in current earnings an impairment loss of \$20 million on the mortgage loans held for sale as indicated by the LOCOFV computations for those loans and as required by ASC 948-310-35-1. At the same time, the company has initially recorded in other comprehensive income a gain of \$15 million related to the derivative contracts that are hedging the forecasted sales of these loans.

Should the company offset the \$20-million impairment loss in current earnings by reclassifying the \$15-million gain from other comprehensive income to earnings in the same quarter, or should the reclassification of the derivative gains and losses from other comprehensive income to earnings wait until the forecasted sales of the loans are recognized in earnings in subsequent accounting periods?

PwC Interpretive Response: The company should offset the \$20-million impairment loss in current earnings by reclassifying the \$15-million gain from other comprehensive income to earnings. This accounting is required by ASC 815-30-35-43, which states in part: “If, under existing requirements in GAAP, an impairment loss 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 . . .” (emphasis added). Accordingly, we believe that in the above-described scenario, the company should reclassify in the same accounting period the gain from other comprehensive income to earnings to offset the LOCOM impairment loss on the mortgage loans held for sale. It should be noted, however, that if the gains accumulated in other comprehensive income exceed the impairment loss (e.g., if the gain in other comprehensive income were \$25 million instead of \$15 million as described above), the excess over the impairment loss (\$5 million in this case) should remain in other comprehensive income until the forecasted sales of the loans are recognized in earnings in subsequent accounting periods.

9.4 Examples

Example 9-1: Discontinuance of a Fair Value Hedge: Hedging Instrument Is Terminated

This example assumes the same fact pattern as in DH 5.7 Example 5-1 (Use of a Plain-Vanilla Interest Rate Swap to Hedge Fixed Rate Debt (Shortcut Method), except that Company A decides to discontinue hedge accounting and terminates the interest rate swap at its fair value of \$55,000 on July 1, 20X2. Key facts from Example 5-1 are presented below. Refer to DH 5.7 Example 5-1 for hedge documentation.

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On June 30, 20X1, Company A borrows \$10,000,000 under a three-year 7.5 percent fixed-rate, interest-only nonprepayable debt instrument. There are no issuance costs, premiums, or discounts associated with the debt issuance. The company concurrently enters into a three-year interest rate swap with Bank B to economically convert the debt's fixed rate to a variable rate. Under the terms of the swap, the company receives interest at a fixed rate of 7.5 percent and pays interest at the variable rate equal to the six-month U.S. LIBOR, based on a notional amount of \$10,000,000. Both the debt and the swap require that payments be made or received on December 31 and June 30 (no payments were made upon entering into the swap, because the pay and receive rates on the swap represent prevailing market rates for each counterparty; in this example, the forward yield curve is assumed to be upward sloping). The six-month U.S. LIBOR rate on each reset date determines the variable portion of the interest rate swap for the following six-month period. Company A designates the swap as a fair value hedge of the fixed-rate debt, with changes in the fair value that are due to changes in the benchmark interest rate being the specific risk that is hedged.

Both at the inception of the hedge and on an ongoing basis, Company A assumes that there is no ineffectiveness in the hedging relationship involving the interest-bearing debt and the interest rate swap because all of the applicable conditions for the shortcut method (ASC 815-20-25-102 through 25-105 and 25-107 through 25-111) have been met.

Because Company A concludes that the swap will be highly effective in offsetting changes in the fair value of the debt, it uses the changes in the fair value of the interest rate swap to measure the offsetting changes in the fair value of the debt.

The six-month U.S. LIBOR rates and the swap and debt fair values are assumed to be as follows for the first year of the swap and debt agreements:

Date	Six-Month U.S. LIBOR¹	Swap Fair Value Asset (Liability)²	Debt Carrying Value
06/30/X1	6.0%	\$ —	\$(10,000,000)
12/31/X1	7.0	(323,000)	(9,677,000)
06/30/X2	5.5	55,000	(10,055,000)

¹ All rate changes are assumed to take place on the date indicated.

² These fair values are assumed to be subsequent to net swap settlements for the period, should there be any.

Calculation of Interest Expense

Semiannual Period Ended	(a) Difference between Fixed Rates	(b) Variable Rate on Swap	(c) Sum (a) + (b)	(d) Debt's Principal Amount	(e) Semiannual Interest Expense ((c) x (d)) / 2
12/31/X1	0.00%	6.00%	6.00%	\$10,000,000	\$300,000
06/30/X2	0.00	7.00	7.00	10,000,000	350,000

On July 1, 20X2, Company A decides to discontinue hedge accounting and terminates the interest rate swap at its fair value of \$55,000. Company A plans to repay the fixed-rate debt at its scheduled maturity on June 30, 20X4.

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At the time of discontinuance of the fair value hedge, the carrying amount of the debt is to be accounted for prospectively in accordance with U.S. GAAP applicable to that item. Previous adjustments that were made to the carrying amount of the hedged debt will be amortized as interest expense over the remaining life of the debt on an effective yield basis, with amortization beginning no later than when the swap was terminated (i.e., no later than when the debt ceased to be adjusted for changes in its fair value that were attributable to the risk that was being hedged).

Accounting Entries	Debit	Credit
June 30, 20X1^{3,4}		
1. Cash	\$10,000,000	
Debt		\$10,000,000
To record the issuance of the debt		
December 31, 20X1		
2. Interest expense	375,000	
Accrued interest payable		375,000
To accrue semiannual interest on the debt at a fixed rate of 7.5%		
3. Accrued interest payable	375,000	
Cash		375,000
To record the semiannual debt interest payment		
4. Cash	75,000	
Interest expense		75,000
To record the settlement of the semiannual swap amount receivable at 7.5%, less the amount payable at LIBOR, 6%		
5. Debt ⁵	323,000	
Gain on hedge activity		323,000
To record the change in the debt's fair value that is attributable to changes in the benchmark interest rate (e.g., six-month U.S. LIBOR) at the end of Company A's first reporting period		
6. Loss on hedge activity	323,000	
Swap contract		323,000
To record the change in the fair value of the swap at the end of Company A's first reporting period		
June 30, 20X2		
7. Interest expense	375,000	
Accrued interest payable		375,000
To accrue semiannual interest on the debt at a fixed rate of 7.5%		

³ No entry is made to record the fair value of the swap contract at the hedge's inception, because its fair value is zero.

⁴ The accounting entries for the swap contract have been simplified.

⁵ Carrying amount adjustments to the debt are implicitly amortized each period through subsequent carrying amount adjustments that are made for changes in the fair value of the swap.

(continued)

Accounting Entries	Debit	Credit
8. Accrued interest payable	\$375,000	
Cash		\$375,000
To record the semiannual debt interest payment		
9. Cash	25,000	
Interest expense		25,000
To record the receipt of the semiannual swap amount receivable at 7.5%, less the amount payable at LIBOR, 7%		
10. Loss on hedge activity	378,000	
Debt		378,000
To record the change in the debt's fair value that is attributable to changes in the benchmark interest rate (e.g., six-month U.S. LIBOR) at the end of Company A's second reporting period		
11. Swap contract	378,000	
Gain on hedge activity		378,000
To record the change in the fair value of the swap at the end of Company A's second reporting period		
July 1, 20X2		
12. Cash	55,000	
Swap contract with Bank B		55,000
To record the cash received (fair value of the swap) on the termination of the swap		
December 31, 20X2		
13. Interest expense	375,000	
Cash		375,000
To record the semiannual interest paid on the fixed-rate debt		
14. Debt	13,029	
Interest expense ⁶		13,029
To record the amortization of the debt premium		
June 30, 20X3		
15. Interest expense	375,000	
Cash		375,000
To record the semiannual interest paid on the fixed-rate debt		

⁶ In accordance with ASC 815-25-35-8 and 35-9, the adjustment of the carrying amount of a hedged liability shall be accounted for in the same manner as other components of the carrying amount of that liability. Amortization of the premium is recorded on an effective yield basis in accordance with ASC 835-30-55-3, as it is an adjustment of a hedged interest-bearing financial instrument.

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Accounting Entries	Debit	Credit
16. Debt	\$ 13,499	
Interest expense		\$ 13,499
To record the amortization of the debt premium		
December 31, 20X3		
17. Interest expense	375,000	
Cash		375,000
To record the semiannual interest paid on the fixed-rate debt		
18. Debt	13,984	
Interest expense		13,984
To record the amortization of the debt premium		
June 30, 20X4		
19. Interest expense	375,000	
Cash		375,000
To record the semiannual interest paid on the fixed-rate debt		
20. Debt	14,488	
Interest expense		14,488
To record the amortization of the debt premium		
21. Debt	10,000,000	
Cash		10,000,000
To record the repayment of the fixed-rate debt at maturity		

Example 9-2: Discontinuance of a Fair Value Hedge: Effectiveness Criteria Failed

This example assumes the same fact pattern as in DH 5.7 Example 5-4 (Fair Value Hedge of Copper Inventory Using Futures Contracts), except that the spot price of copper in Colorado on February 20, 20X2—the date the company closes out the futures contracts—is 94 instead of 93.1. On February 20, 20X2, the company determines that the hedging relationship no longer qualifies for hedge accounting, as it is no longer highly effective. Key facts from Example 5-4 are presented below. Refer to DH 5.7 Example 5-4 for hedge documentation.

On October 1, 20X1, a mining company in Colorado has 10 million pounds of copper inventory on hand at an average cost of 65 cents per pound. To protect the inventory from a possible decline in copper prices, the company hedges its position by selling 400 copper contracts through the New York Mercantile Exchange's COMEX Division (each copper contract is for 25,000 pounds) at 93 cents a pound for delivery in February 20X2—to coincide with its expected physical sale of its copper inventory. (The company designates the hedge as a fair value hedge; i.e., it is hedging changes in the inventory's fair value, not changes in cash flows from anticipated sales.) The margin deposit payable on each copper contract is \$700, and the COMEX copper spot price on October 1, 20X1, is 91 cents per pound.

(continued)

The company's strategy is to hedge against changes in fair value of its copper inventory. If prices fall during the next five months, the gain from the COMEX futures contracts is expected to substantially offset the decline in the fair value of the company's copper inventory. The hedge relationship may not be perfectly effective due to the existence of basis risk because the company's inventory is located in Colorado, while the price of the futures contracts (hedging instrument) is based on delivery of copper in New York. Basis risk is the risk that a price difference exists because of differences in delivery location, quality or grade of commodity, or other commodity-specific variables.

Based on the results of mathematical analysis using historical data, the company determines that the spot price of their copper in Colorado and the spot price of copper on the COMEX have a strong positive correlation. Accordingly, the company concludes that the changes in the fair value of the futures contracts related to changes in the spot price of copper on the COMEX are expected to be highly effective in offsetting future changes in the fair value of the copper inventory located in Colorado.

On December 31, 20X1, the company's fiscal year-end, the February 20X2 copper futures price on the COMEX has fallen to 91 cents a pound, and the COMEX spot price has fallen to 89 cents a pound.

On February 20, 20X2, the company closes out its futures contracts by entering into an offsetting contract in which it agrees to buy 400 February 20X2 copper futures contracts at 92 cents a pound. The company sells copper in the open market on February 20, 20X2, at the spot price of 94 cents per pound.

On February 20, 20X2, the company's effectiveness analysis (based on changes in spot prices) indicates that the hedging relationship is no longer highly effective, as the effectiveness ratio is 75 percent. The company is unable to determine the specific point in time that the hedge failed the effectiveness criterion. Accordingly, the last date on which the company complied with the effectiveness criterion is presumed to be December 31, 20X1. Subsequent to December 31, 20X1, changes in the fair value of the futures contracts are recognized in earnings, with no offsetting entries related to the changes in the fair value of the copper inventory. The carrying amount adjustment to the copper inventory recorded through December 31, 20X1, remains frozen until the copper inventory is sold.

Date	COMEX Copper Prices		Colorado Copper Prices
	Spot	February 20X2 Futures	Spot
October 1, 20X1	91¢	93¢	92.2¢
December 31, 20X1	89	91	90.0
February 20, 20X2	92	92	94.0

(continued)

As permitted by ASC 815-20-25-82(d), the company assesses hedge effectiveness based on changes in fair value attributable to changes in spot prices as follows:

Retrospective Hedge-Effectiveness Analysis

Date	Change in the Spot Price of		Effectiveness Ratio for the Period
	COMEX Copper (Gain) Loss	Inventory (Gain) Loss	
12/31/20X1	\$(200,000) ¹	\$ 220,00 ²	0.91
02/20/20X2	300,000 ³	(400,000) ²	0.75

¹ \$0.89 – \$0.91 on 10,000,000 pounds.

² The company estimates the change in the fair value of the copper inventory in Colorado by starting with the current COMEX spot price and adjusting it to reflect the differences that are due to changes in transportation costs, storage costs, and regional supply and demand conditions: \$0.922 – \$0.90 on 10,000,000 pounds for 12/31/20X1, and \$0.90 – \$0.94 on 10,000,000 pounds for 2/20/20X2.

³ \$0.92 – \$0.89 on 10,000,000 pounds.

The company elected to assess hedge effectiveness based on changes in spot prices rather than changes in forward prices by using the period-by-period approach outlined in ASC 815-20-35-5(a). The effect of changes in the difference between the spot prices and the future prices is excluded from the company's hedge effectiveness assessment.

The above analysis, which reflects only the spot price changes, was prepared solely for the purpose of retrospectively assessing hedge effectiveness. The journal entries that follow reflect the actual gains and losses on the futures contracts and are based on changes in futures prices.

Application of Hedge Accounting

The hedge of the commodity price exposure in the fair value of an asset is considered a fair value hedge. ASC 815-20-25-12(e) specifies that in a fair value hedge of a nonfinancial asset (copper inventory in this example) the designated risk that is being hedged is the risk of changes in the fair value of the entire hedged asset (reflecting its actual location, because it is a physical asset). ASC 815-20-35-1(b) and ASC 815-25-35-1 through 35-4 specify the accounting for qualifying fair value hedges. The futures contracts are recognized on the balance sheet as assets or liabilities, and gains or losses on the futures contracts are recognized currently in earnings. Gains or losses on the copper inventory (the hedged item) are also recognized currently in earnings by adjusting the carrying amount of the hedged item. As a result, any ineffective portion of the hedge is recognized currently in earnings.

(continued)

Accounting Entries	Debit	Credit																																							
October 1, 20X1⁴																																									
1. Treasury securities pledged ⁵	\$280,000																																								
Treasury securities		\$280,000																																							
To record the initial margin deposit on 400 copper contracts																																									
December 31, 20X1																																									
2. Loss on hedge activity ⁶	220,000																																								
Copper inventory		220,000																																							
To adjust the carrying amount of the inventory for changes in its fair value																																									
3. Margin deposits ⁷	200,000																																								
Gain on hedge activity		200,000																																							
To record the gain on futures contract																																									
February 20, 20X2																																									
4. Cash ⁸	100,000																																								
Loss on hedge activity ⁹	100,000																																								
Margin deposits		200,000																																							
To recognize the loss on the futures contracts from 12/31/20X1 to 2/20/20X2 and to eliminate the \$200,000 receivable from the broker for the gain recorded on 12/31/20X1																																									
<p>⁴ No entry is made to record the fair value of the futures contracts, because at the time of their inception their fair value is zero.</p> <p>⁵ A margin deposit of \$700 per contract is deposited with the broker, as required by the futures contracts (\$700 x 400). Income earned on the initial margin deposit and on open trade equity (i.e., variation margin) is ignored for purposes of this example.</p> <p>⁶ The company's estimate of the change in fair value of its copper inventory: see hedge-effectiveness analysis.</p> <p>⁷</p> <table> <tr> <td>\$</td> <td>.93</td> <td>February copper futures price at 10/1/20X1</td> </tr> <tr> <td></td> <td>(.91)</td> <td>February copper futures price at 12/31/20X1</td> </tr> <tr> <td></td> <td><u>.02</u></td> <td>gain per pound</td> </tr> <tr> <td>x</td> <td>10,000,000</td> <td>pounds</td> </tr> <tr> <td>\$</td> <td><u>200,000</u></td> <td>gain on futures contracts from 10/1/20X1 to 12/31/20X1</td> </tr> </table> <p>⁸</p> <table> <tr> <td>\$</td> <td>200,000</td> <td>10/1/20X1 to 12/31/20X1 gain on futures contract (see footnote 7)</td> </tr> <tr> <td></td> <td>(100,000)</td> <td>12/31/20X1 to 2/20/20X2 loss on futures contract (see footnote 9)</td> </tr> <tr> <td>\$</td> <td><u>100,000</u></td> <td>net gain on futures contract</td> </tr> </table> <p>⁹</p> <table> <tr> <td>\$</td> <td>.91</td> <td>February copper futures price at 12/31/20X1</td> </tr> <tr> <td></td> <td>(.92)</td> <td>February copper futures price at 2/20/20X2</td> </tr> <tr> <td></td> <td><u>(.01)</u></td> <td>loss per pound</td> </tr> <tr> <td>x</td> <td>10,000,000</td> <td>pounds</td> </tr> <tr> <td>\$</td> <td><u>(100,000)</u></td> <td>loss on futures contracts from 12/31/20X1 to 2/20/20X2</td> </tr> </table>			\$.93	February copper futures price at 10/1/20X1		(.91)	February copper futures price at 12/31/20X1		<u>.02</u>	gain per pound	x	10,000,000	pounds	\$	<u>200,000</u>	gain on futures contracts from 10/1/20X1 to 12/31/20X1	\$	200,000	10/1/20X1 to 12/31/20X1 gain on futures contract (see footnote 7)		(100,000)	12/31/20X1 to 2/20/20X2 loss on futures contract (see footnote 9)	\$	<u>100,000</u>	net gain on futures contract	\$.91	February copper futures price at 12/31/20X1		(.92)	February copper futures price at 2/20/20X2		<u>(.01)</u>	loss per pound	x	10,000,000	pounds	\$	<u>(100,000)</u>	loss on futures contracts from 12/31/20X1 to 2/20/20X2
\$.93	February copper futures price at 10/1/20X1																																							
	(.91)	February copper futures price at 12/31/20X1																																							
	<u>.02</u>	gain per pound																																							
x	10,000,000	pounds																																							
\$	<u>200,000</u>	gain on futures contracts from 10/1/20X1 to 12/31/20X1																																							
\$	200,000	10/1/20X1 to 12/31/20X1 gain on futures contract (see footnote 7)																																							
	(100,000)	12/31/20X1 to 2/20/20X2 loss on futures contract (see footnote 9)																																							
\$	<u>100,000</u>	net gain on futures contract																																							
\$.91	February copper futures price at 12/31/20X1																																							
	(.92)	February copper futures price at 2/20/20X2																																							
	<u>(.01)</u>	loss per pound																																							
x	10,000,000	pounds																																							
\$	<u>(100,000)</u>	loss on futures contracts from 12/31/20X1 to 2/20/20X2																																							

(continued)

Accounting Entries	Debit	Credit
5. Treasury securities	\$ 280,000	
Treasury securities pledged		\$ 280,000
To record the return of the margin deposit		
6. Accounts receivable ¹⁰	9,200,000	
Cost of goods sold ¹¹	6,280,000	
Copper sales		9,200,000
Copper inventory		6,280,000
To record the sale of 10,000,000 pounds of copper inventory at 92 cents per pound		
<hr/>		
¹⁰ \$ 0.92	spot price at 2/20/20X2 x 10,000,000 pounds	
¹¹ \$6,500,000	average cost of copper inventory at 10/1/20X1	
(220,000)	adjustment to carrying value at 12/31/20X1 (see footnote 6)	
<u>\$6,280,000</u>		

Example 9-3: Discontinuance of a Cash Flow Hedge: Hedging Instrument Is Terminated

This example assumes the same fact pattern as in DH 6.9 Example 6-1a (Ineffectiveness Measurement of a Plain-Vanilla Interest-Rate Swap to Hedge Variable Rate Debt (Long Haul Method), except that Company A decides to discontinue hedge accounting and terminates the interest-rate swap at its fair value of \$331,000 on December 31, 20X1. Company A plans to repay the variable-rate debt at its scheduled maturity on June 30, 20X4. Key facts from Example 6-1a are presented below. Refer to DH 6.9 Example 6-1a for hedge documentation.

On June 30, 20X1, Company A, a manufacturer with high-quality credit, borrows \$10,000,000 of three-year, variable-rate interest-only debt at par, with interest payments equal to the six-month U.S. LIBOR. The debt includes a typical prepayment option, which allows the company to prepay the debt at par. The company concurrently enters into a three-year interest rate swap with Bank B (also with a high credit quality) to economically convert the debt's variable rate to a fixed rate. Under the swap contract, the company pays interest at a fixed rate of 5.9817 percent and receives interest at a variable rate equal to the six-month U.S. LIBOR, based on a notional amount of \$10,000,000. The swap is not contractually prepayable. Both the debt and the swap require that payments be made or received semiannually, on December 31 and June 30 (a \$5,000 premium was paid upon the company's entering into the swap, because the pay and receive rates on the swap did not represent prevailing rates for Bank B; in this example, the yield curve is assumed to be flat). The six-month U.S. LIBOR on each reset date of December 31 and June 30 determines the variable interest rate on the debt and the swap for the following six-month period. Company A immediately designates the swap as a cash flow hedge, which hedges the exposure to variability in the cash flows of the variable-rate debt, with changes in cash flows that are due to changes in the six-month LIBOR being the specific risk that is hedged.

Company A decides to discontinue hedge accounting and terminates the interest rate swap at its fair value of \$331,000 on December 31, 20X1. The company plans to repay the variable-rate debt at its scheduled maturity on June 30, 20X4. At December 31, 20X1, the hedged forecasted interest payments continue to be probable of

(continued)

occurring. Accordingly, any gains/losses accumulated in other comprehensive income at this date remain deferred and will be reclassified into earnings in the periods during which the hedged forecasted transaction affects earnings (i.e., when interest payments are made on the debt). The gains/losses in accumulated other comprehensive income at December 31, 20X1, will be amortized into earnings as an adjustment to interest expense over the remaining life of the three-year original hedge by using the swaplet method, as long as the variable-rate debt is outstanding.

Application of Hedge Accounting

The interest payments on the debt are variable, which will subject the future interest cash flows on the debt to gains or losses should the general level of market interest rates change. The hedge of the changes in cash flows (attributable to a particular risk) on a recognized liability (i.e., the variable-rate debt) is considered a cash flow hedge, provided that it meets the eligibility requirements of ASC 815-20-25-13 through 25-15A. Accordingly, the fair value of the swap (the hedging instrument) is recorded on the balance sheet as an asset or a liability (ASC 815-10-25-1 and ASC 815-10-30-1). The effective portion of the swap's gain or loss (change in fair value attributable to the hedged risk) is reported in other comprehensive income, and the ineffective portion is reported in earnings (ASC 815-20-35-1(c) and ASC 815-30-35-3). Amounts accumulated in other comprehensive income are reclassified to earnings when the related interest payments (that is, the hedged forecasted transactions) affect earnings (ASC 815-30-35-38 through 35-41).

Because the hedging relationship does not meet all of the conditions of ASC 815-20-25-102 through ASC 815-20-25-106, the company cannot assume that there will be no ineffectiveness and apply the shortcut method. Specifically, because the interest-bearing debt is prepayable while the hedging interest rate swap does not contain an embedded written call option considered to be a mirror image of the call option embedded in the hedged debt, and the swap has a fair market value that is not equal to zero at inception of the hedging relationship, the conditions under paragraphs ASC 815-20-25-104(b) and ASC 815-20-25-104(e), respectively, are not met. However, because the notional amount, interest rate, reset dates, and settlement dates match those of the interest bearing debt, the company expects the hedging relationship to be highly effective. Despite the prepayable nature of the variable-rate debt, the company believes it is probable that the designated interest rate payments will occur. The company elected to apply the Hypothetical Derivative Method, ASC 815-30-35-25 through 35-30 to measure ineffectiveness.

The six-month U.S. LIBOR and the swap's fair values are assumed to be as follows for the first six months of the swap agreement:

Date	Six-Month U.S. LIBOR¹	Swap Fair Value Asset (Liability)²
06/30/X1	6.0 %	\$ 5,000
09/30/X1	5.7955	(47,000)
12/31/X1	7.4449	331,000

¹ All rate changes are assumed to take place on the date indicated.

² These fair values are subsequent to net swap settlements, if there are any. Accrued interest is excluded from the swap's fair value.

(continued)

Period	LIBOR Yield	Discount Factor	Fixed-Leg Payments	Discounted Fixed Leg	Variable-Leg Payments	Discounted Variable Leg	Swap's Fair Value	Discounted Net	% of Fair Value
03/31/X2	7.4449%	0.981728	\$149,542	\$ 146,809	\$186,124	\$ 182,723		\$ 35,914	10.85%
06/30/X2	7.4449%	0.963789	149,542	144,127	186,124	179,384		35,257	10.65%
09/30/X2	7.4449%	0.946179	149,542	141,493	186,124	176,106		34,613	10.46%
12/31/X2	7.4449%	0.928890	149,542	138,908	186,124	172,888		33,981	10.27%
03/31/X3	7.4449%	0.911917	149,542	136,370	186,124	169,729		33,360	10.08%
06/30/X3	7.4449%	0.895254	149,542	133,878	186,124	166,628		32,750	9.89%
09/30/X3	7.4449%	0.878896	149,542	131,431	186,124	163,583		32,152	9.71%
12/31/X3	7.4449%	0.862836	149,542	129,030	186,124	160,594		31,564	9.54%
03/31/X4	7.4449%	0.847070	149,542	126,672	186,124	157,660		30,988	9.36%
06/30/X4	7.4449%	0.831592	149,542	124,358	186,124	154,779		30,421	9.19%
				\$1,353,075		\$1,684,075	\$331,000	\$331,000	100.00%

Company A's interest payments on the variable-rate-debt payments and net payments (receipts) on the interest rate swap are as follows for the first semiannual period:

	12/31/X1
Variable-rate-debt interest payment	\$300,000
Interest-rate swap receipt	(916)
Net cash payment	\$299,084

In measuring ineffectiveness under the Hypothetical Derivative Method, ASC 815-30-35-25 through 35-30, the company will compare the cumulative change in fair value of the actual swap with the cumulative change in fair value of a hypothetical swap that has terms that identically match those of the forecasted interest cash flows on the debt, including having a zero fair value at the inception of the hedge. In a separate document, the company has concluded that despite the prepayable nature of the debt being hedged, it is probable that it will remain outstanding during the term of the hedging relationship, and this assessment will be subsequently updated each period. Any cumulative change in fair value of the actual swap that exceeds the cumulative change in fair value of the hypothetical swap will be the amount of ineffectiveness recorded in earnings. The comparison is presented in the following table:

Period	Cumulative Change in Fair Value of the Actual Swap ³	Cumulative Change in Fair Value of a Hypothetical Swap ⁴	Ineffectiveness for the Period	Accumulated Other Comprehensive Income
06/30/X1–09/30/X1	\$ (52,000)	\$ (50,000)	\$(2,000) ³	\$ (50,000)
09/30/X1–12/31/X1	326,000 ⁵	330,000 ⁵	2,000 ³	326,000

³ Hedge ineffectiveness in a cash flow hedge is considered to occur only if the cumulative gain or loss on the hedging instrument exceeds the cumulative change in the expected future cash flows of the hedged transaction. Under the Hypothetical Derivative Method, changes in the fair value of the hypothetical derivative are regarded as a proxy for the cumulative change in the expected future cash flows of the hedged transaction. Accordingly, only \$2,000 of ineffectiveness is recognized for the first period. This amount reverses in the second period because on a cumulative basis, the derivative was under effective.

(continued)

- ⁴ The discount rate used to discount the cash flows in determining the fair values of the actual and the hypothetical swaps would be identical. Depending upon whether the derivative and the hypothetical are assets or liabilities will determine whether the non-performance risk of Company A or Bank B is considered. Company A considered measures of its own credit risk such as the prevailing credit default swap rates for Company A when determining the fair value of the derivative and hypothetical derivatives.
- ⁵ The non-performance risk of Bank B's liability (Company A's asset) is small as it was noted in the introduction as being of high-credit quality. Company A considered measures of credit risk such as prevailing credit default swap rates for Bank B when determining the fair value of the derivative and hypothetical derivatives.

Amortization Schedule of Frozen Amount in Other Comprehensive Income

Date	Amount in Other Comprehensive Income to Be Released Quarterly into Earnings*	Amount Remaining in Other Comprehensive Income
03/31/X2	\$35,914	\$295,086
06/30/X2	35,257	259,829
09/30/X2	34,613	225,216
12/31/X2	33,981	191,235
03/31/X3	33,360	157,875
06/30/X3	32,750	125,125
09/30/X3	32,152	92,973
12/31/X3	31,564	61,409
03/31/X4	30,988	30,421
06/30/X4	30,421	—

* Calculated on the swaplet method. We believe the amortization method used should be dependent on the nature of the hedged item. In this example, because we were hedging variable-rate debt, the swaplet method is one appropriate method. However, if we were hedging a forecasted issuance of fixed-rate debt, the effective-yield method may be appropriate.

Accounting Entries	Debit	Credit
June 30, 20X1		
1. Cash	\$10,000,000	
Debt		\$10,000,000
To record the issuance of the debt		
2. Swap contract	5,000	
Cash		5,000
To record the premium payment on the swap that represents the fair value at inception		
September 30, 20X1		
3. Interest expense	150,000	
Accrued interest payable		150,000
To accrue quarterly interest on the debt at a variable rate of 6.0%		

(continued)

Accounting Entries	Debit	Credit
September 30, 20X1		
4. Accumulated other comprehensive income	\$50,000	
Other income/expense	2,000	
Swap contract		\$52,000
To record the change in the fair value of the swap at the end of Company A's first reporting period and related ineffectiveness		
5. Swap contract	458	
Accumulated other comprehensive income		458
To record the quarterly accrual of the swap amount receivable at LIBOR: 6.00% less amount payable at 5.98170% as an adjustment of interest expense and other comprehensive income for the quarter		
6. Accumulated other comprehensive income	458	
Interest expense		458
To record the recognition of interest income on the swap for the quarter and the applicable reclassification from accumulated other comprehensive income to earnings		
December 31, 20X1		
7. Swap contract	458	
Accumulated other comprehensive income		458
To record the quarterly accrual of the swap amount receivable at LIBOR: 6.00% less amount payable at 5.98170% as an adjustment of interest expense and other comprehensive income for the quarter		
8. Accumulated other comprehensive income	458	
Interest expense		458
To record the recognition of interest income on the swap for the quarter and the applicable reclassification from accumulated other comprehensive income to earnings		
9. Swap contract	378,000	
Accumulated other comprehensive income		376,000
Other income/expense		2,000
To record the change in the fair value of the swap at the end of Company A's second reporting period		
10. Cash	916	
Swap contract		916
To record the receipt of the semiannual swap interest amount receivable at LIBOR: 6.00% less amount payable at 5.9817%		

(continued)

Accounting Entries	Debit	Credit
11. Cash	\$331,000	
Swap contract		\$331,000
To record the cash received on the termination of the swap		
12. Interest expense	150,000	
Accrued interest payable		150,000
To accrue quarterly interest on the variable-rate debt at 6%		
13. Accrued interest payable	300,000	
Cash		300,000
To record the semiannual debt interest payment		
<hr/>		
March 31, 20X2		
14. Interest expense	186,123	
Accrued interest payable		186,123
To accrue quarterly interest on the debt at a variable rate of 7.4449%		
15. Accumulated other comprehensive income	35,914 ⁴	
Interest expense		35,914
To release the deferred gains in accumulated other comprehensive income		

⁴ Calculated on the swaplet method. We believe the amortization method used should be dependent on the nature of the hedged item. In this example, because we were hedging variable-rate debt, the swaplet method may be one appropriate method. However, if we were hedging a forecasted issuance of fixed-rate debt, the effective-yield method may be one appropriate method.

Information and journal entries for the periods subsequent to March 31, 20X2, are not presented. Gains in other comprehensive income will continue to be amortized quarterly as a reduction of interest expense as long as the debt is outstanding.

Example 9-4: Discontinuance of a Cash Flow Hedge: Variability of Cash Flows Ceases; the Forecasted Transaction Becomes a Firm Commitment and Then an Existing Asset of the Company

On November 1, 20X1, XYZ Company, which produces a grain-based product, determines that it will need 100,000 bushels of wheat in the last week of March 20X2.

On November 1, the company enters into March 20, 20X2, futures contracts (each contract is for 5,000 bushels of wheat) to purchase wheat at \$3.00 per bushel. The contracts meet the definition of a derivative rather than a firm commitment to receive a commodity. The company designates the futures contracts as a hedge of its forecasted inventory purchase of 100,000 bushels of wheat on March 24, 20X2 (i.e., a cash flow hedge).

On December 31, 20X1, the company issues a purchase order to buy 100,000 bushels of wheat at \$2.80 per bushel, to be delivered on March 24, 20X2. The

(continued)

purchase order meets the criteria of a normal purchase, and the company elects the scope exception in ASC 815-10-15-22. The company dedesignates its hedge relationship, since it is no longer exposed to changes in cash flows arising from changes in the spot price of wheat. On December 31, 20X1, the enterprise's fiscal year-end, the closing price of the March 20X2 contracts is \$2.80 per bushel. On March 24, 20X2, the company closes out the futures contracts that were purchased on November 1, 20X1.

Initial Hedge Documentation

The hedging relationship and entity's risk management objective and strategy for undertaking the hedge

Cash flow hedge of future wheat purchases by purchasing futures contracts for wheat. We require purchases of wheat for production of our inventory. Wheat prices are subject to volatility. Our risk management objective is to protect our cash flows associated with the risk of variability in the total price of wheat purchased for our production.

In order to meet our risk management objective, we have decided to purchase wheat futures contracts to protect us from the risk of increasing wheat prices.

The hedging instrument

20 wheat futures contracts, for 5,000 bushels (total notional of 100,000 bushels) each at \$3.00 per bushel. The futures are for the month of March 20X2. The futures contracts will be settled on a net basis.

The hedged item or transaction

Forecasted purchase on March 24, 20X2, of 100,000 bushels of wheat at the then spot price.

The nature of the risk being hedged

The total variability in cash flows associated with purchasing wheat from Suppliers X, Y, and Z between now and our forecasted purchase date of March 24, 20X2.

The method that will be used to retrospectively and prospectively assess the hedging instrument's effectiveness¹

We are using a dollar-offset analysis, in accordance with the company's accounting policy, to assess effectiveness on both retrospective and prospective bases throughout the term of the hedging relationship. We have determined that the hedge will be highly effective. We are assessing the hedge's effectiveness based on changes in futures prices (i.e., forward prices inclusive of time value). See assessment of effectiveness below. *Note:* The initial hedge effectiveness analysis is not included herein.

The method that will be used to measure hedge ineffectiveness¹

Ineffectiveness will be measured by performing a cumulative dollar-offset analysis based on the difference in the change in futures prices of the futures contracts as compared to the changes in cash flows of the anticipated inventory purchases (based on changes in the futures prices, plus location basis differences).

(continued)

¹ Actual documentation should be more specific than what is described in this example. In general, reperformance of effectiveness assessments and ineffectiveness measurements should be possible based on the initial hedge documentation.

The changes in the fair value of the contracts during 20X1 and 20X2 are as follows:

	Period From	
	November 1, 20X1, to December 31, 20X1	December 31, 20X1, to March 24, 20X2
Futures price at the beginning of the period	\$ 3.00	\$ 2.80
Futures price at the end of the period	2.80	3.10
Change in the price, per bushel	<u>(0.20)</u>	<u>0.30</u>
Bushels under contract (20 contracts at 5,000 bushels each)	<u>x 100,000</u>	<u>x 100,000</u>
Change in the fair value of the contracts—gain (loss)	\$ (20,000)	\$ 30,000

Hedge Effectiveness Analysis

Date	Change in Cash Flows of		Effectiveness Ratio	
	Futures Contracts (Gain) Loss	Anticipated Inventory Purchase (Gain) Loss		
			For the Period	Cumulative
December 31, 20X1	\$20,000	\$(22,000) ^{1a}	0.91	0.91

^{1a} The company assesses hedge effectiveness based on changes in futures prices. Only a retrospective test was performed because the hedge was discontinued on December 31, 20X1, with the issuance of the purchase order. The \$2,000 difference between the changes in the fair value of the derivative and the hedged item relates to transportation and other location factors.

Application of Hedge Accounting

A derivative instrument that hedges the cash flows associated with a forecasted purchase is considered a cash flow hedge (ASC 815-20-25-13). The fair value of the futures contracts is recorded on the balance sheet as either an asset or a liability (ASC 815-10-25-1 and ASC 815-10-30-1). ASC 815-20-25-15(i) specifies that in a cash flow hedge of a forecasted purchase of a nonfinancial asset (wheat, in this example), the designated risk that is being hedged is the risk of changes in the cash flows relating to all changes in the purchase price of the asset (i.e., the wheat). Accordingly, the effective portion of the futures contracts' gain or loss is reported in other comprehensive income, and the ineffective portion (i.e., changes in the wheat's fair value that are due to transportation and other location factors) is reported currently in earnings (ASC 815-20-35-1(c) and ASC 815-30-35-3). If the futures contracts' fair value changes at a rate less than the change in the present value of the expected future cash flows of the hedged transaction (i.e., an underhedge), it will not result in any ineffectiveness's being recognized in earnings. All changes in fair value of the derivative instruments in underhedges are recognized in accumulated other comprehensive income. Amounts accumulated in other comprehensive income are reclassified as earnings when the related inventory is sold.

For the period from November 1, 20X1, through December 31, 20X1, the company's projected grain purchases for March 20X2 are forecasted transactions. With the December 31, 20X1, purchase order, the forecasted transaction is converted into an unrecognized firm commitment and there is no longer any variability in cash

(continued)

flows. From that time forward, the company shall prospectively discontinue hedge accounting for the existing cash flow hedge. Any gain or loss on the futures contract that is accumulated in other comprehensive income remains deferred there until the sale of the wheat actually occurs.

For the period from January 1, 20X2, through March 24, 20X2, the company has a contract (the purchase order) to purchase grain at a fixed price, which represents an unrecognized firm commitment that is not being hedged. Generally, the company would be expected to close out the futures contracts on the day a purchase order for the wheat is issued, because at that point the risk of variability of cash flows would cease. However, in this example, the company did not, and therefore the futures contracts will be measured at fair value through current earnings. Changes in the fair value of the firm commitment that are attributable to commodity price fluctuations are not recognized because the company has elected the scope exception. When the grain product is finally sold (which will be at some point subsequent to March 24), the gain or loss that has accumulated in other comprehensive income will be reclassified as current earnings.

The company's accounting policy is to classify cash flows from derivative instruments that are accounted for as cash flow hedges in the same category as the cash flows from the items being hedged. Because hedge accounting was discontinued on December 31, 20X1, in accordance with ASC 230-10-45-27, cash flows related to the derivative subsequent to this date shall be classified consistent with the nature of the instrument. Accordingly, the cash flows related to the closing out of the futures contracts on March 24, 20X2, will be classified in the investing section of the statement of cash flows.

(continued)

The accounting entries related to the purchase of the November 1, 20X1, futures contracts and the December 31, 20X1, purchase order (firm commitment) follow (Note: Amounts deposited to the margin account have been ignored, and any interest earned or expensed associated with margin receipts or deposits has been ignored.):

Accounting Entries	Debit	Credit
November 1, 20X1²		
No entry recorded		
December 31, 20X1		
1. Other comprehensive income ³	\$20,000	
Futures contracts		\$20,000
To record the change in the fair value of the futures contracts		
March 24, 20X2		
2 Futures contracts ⁴	30,000	
Gain on futures contracts		30,000
To record the change in the fair value of the futures contracts		
3. Cash	10,000	
Futures contracts		10,000
To record the settlement of the futures contracts		
4. Grain inventory	280,000	
Cash		280,000
To record the purchase of the grain inventory pursuant to the December 31, 20X1, purchase commitment		

² No entry is made to record the fair value of the futures contracts, because at the time of their purchase their fair value is zero. Margin deposits are ignored in this example.

³ An underhedge does not result in any ineffectiveness's being recognized in earnings; all changes in fair value of the futures contracts in underhedges are recognized in accumulated other comprehensive income. The deferred loss on the futures contracts in other comprehensive income will be recovered and recognized in income when the grain product is sold.

⁴ Hedge accounting was discontinued because the forecasted transaction became a firm commitment.

Chapter 10:

Presentation and Disclosure

Executive Takeaway

- The accounting model under ASC 815, *Derivatives and Hedging*, reflects the Board's fundamental belief that derivative instruments represent rights or obligations that meet the definition of assets or liabilities and should be presented in an entity's financial statements.
- In March 2008, in response to constituent concerns and the increased use and complexity of derivative instruments and hedging activities in recent years, the FASB issued FAS 161, which amends and expands the disclosure framework for derivative instruments to better provide transparency to financial statement users.
- The ultimate goal of the comprehensive disclosure requirements codified in ASC 815 is to provide investors and creditors an enhanced understanding of (1) how and why an entity uses derivative instruments, (2) how derivative instruments and related hedged items are accounted for under ASC 815 and its related interpretations, and (3) how derivative instruments affect an entity's financial position, financial performance, and cash flows.
- SEC registrants are also required to follow the SEC's market risk disclosure rules and should include certain derivative disclosures both outside the financial statements as required by the SEC's rules and in the footnotes as required by ASC 815.

10.1 Overview

ASC 815, *Derivatives and Hedging*, amended ASC 825, *Financial Instruments*, to make it consistent with ASC 815's measurement provisions. Additionally, ASC 825-10-50-3, makes the disclosures about fair value of financial instruments optional for entities that meet all of the following criteria: (1) the entity is a non-public entity, (2) the entity's total net assets are less than \$100 million on the date of the financial statements, and (3) the entity has no instrument that, in whole or in part, is accounted for as a derivative under ASC 815 during the reporting period.

Amendments to ASC 815 expand the disclosure requirements for hybrid financial instruments measured at fair value at the election of the entity. ASC 815-15-50 requires the disclosure of information to assist users in better understanding the effect of changes in the fair value of hybrid financial instruments.

ASC 820, *Fair Value Measurements and Disclosures*, amended ASC 815 to provide a new definition of fair value and establishes a framework for measuring fair value in accordance with generally accepted accounting principles.

FAS 161 amended ASC 815 to enhance the current disclosure framework. This disclosure guidance applies to all interim and annual reporting periods for which a statement of financial position (e.g., balance sheet) and statement of financial performance (e.g., income statement) are presented.

FSP FAS 133-1 and FIN 45-4 was issued in September 2008 in response to the significant increase in the use of credit derivatives and recent events that resulted in sellers of credit derivatives experiencing adverse financial obligations referenced in those credit instruments. This FSP amends ASC 815 to require additional disclosures by sellers of credit derivatives, including credit derivatives embedded in a hybrid instrument.

In March 2010, the FASB issued ASU 2010-11 which amended the disclosure requirements for sellers of credit derivatives in ASC 815-10-50-4K. The amended disclosure guidance applies to all credit derivative features embedded in beneficial interests in securitized financial assets, with the exception of those created by the subordination of one tranche to another.

In December 2011, the FASB issued ASU 2011-11, which requires disclosures intended to help reconcile differences in the offsetting requirements under U.S. GAAP and IFRS. These differences account for a significant difference in the amounts presented in statements of financial position prepared in accordance with U.S. GAAP and IFRS for certain entities and reduce comparability. The new disclosures are required for annual reporting periods beginning on or after January 1, 2013, and interim periods within those annual periods.

As a result of the feedback received on its proposal, the FASB issued ASU 2013-01 amending the scope of its offsetting disclosure requirements by limiting the scope to derivatives, sale and repurchase agreements and reverse sale and repurchase agreements and securities borrowing and lending arrangements.

10.2 Presentation

One of the fundamental concepts that forms the foundation for the guidance set forth in ASC 815 is that derivative instruments represent rights or obligations that meet the definition of assets or liabilities and they should therefore be presented in

an entity's financial statements. The Board believes that by recognizing derivative instruments as assets and liabilities, the financial statements will be more complete and informative for the reader.

10.2.1 Statement of Financial Position Presentation of Derivatives

ASC 815-10-25-1, states “an entity shall recognize all of its derivative financial instruments in its statement of financial position as either assets or liabilities depending on the rights or obligations under the contracts.” All derivative financial instruments are to be recognized at fair value in the statement of financial position. ASC 820 defines fair value and establishes a model for measuring fair value in accordance with generally accepted accounting principles.

While ASC 815 requires all derivative instruments to be recorded on the statement of financial position at fair value, it does not provide specific guidance on the related classification. The general guidance is found in ASC 210-10-45, *Balance Sheet—Other Presentation Matters*.

Applying the definitions in ASC 210-10-45 results in an approach to statement of financial position classification that is based on whether the asset or liability will or can be settled within one year. For assets, that determination will depend on management's intentions. For example, inventory that is expected to be liquidated within one year is a current asset, but cash designated for the acquisition or construction of non-current assets is a non-current asset. For liabilities, that determination will depend largely on the contractual terms, rather than on management's intention for settlement. For example, long-term debt that is callable by the lender within one year is a current liability regardless of the likelihood of it being called unless the exception in ASC 470-10-45, *Debt—Other Presentation Matters*, is met.

Applying this general guidance to a derivative instrument may be difficult given that a derivative may be either an asset or a liability at any point in time; that it may switch from an asset in one period to a liability in the next (or vice versa); and that its fair value is often a “net” number that may consist of a current asset and a non-current liability or a non-current asset and a current liability at any point in time. Additionally, because of the unique characteristics of derivative instruments, comparison to other statement of financial position accounts may not be helpful. Even securities subject to ASC 320-10, *Investments—Debt and Equity Securities*, which are classified in accordance with ASC 210-10-45, do not share all of the characteristics of derivative instruments. Further, an analysis of past practice may not be helpful, as the principal users of derivative instruments have been financial institutions, which typically do not prepare classified statements of financial position.

Given the lack of specific guidance, we believe that the following general rules should govern the determination of the statement of financial position classification for a derivative instrument in a classified statement of financial position.

1. A derivative instrument that matures within one year should be classified as current.
2. A derivative instrument that allows the counterparty to terminate the derivative instrument at fair value at any time must be classified as current when its fair value is a net liability, as is required for liabilities due on demand by ASC 210-10-45. (This would also result in current classification for options that are written by the entity and exercisable within one year.) Note that such termination provisions

may be documented in either the trade confirmation or the master agreement with the counterparty.

3. If the guidance in item (1) or item (2) does not apply, the derivative instrument should be separated into its current and non-current components depending on the timing of the cash flows. That is, the fair value related to the cash flows occurring within one year should be classified as current, and the fair value related to the cash flows occurring beyond one year should be classified as non-current.

The exceptions to the above general rules are:

1. A derivative instrument that would otherwise have been classified as a current liability in whole or in part may be shown as non-current if (a) the derivative instrument is designated as a hedge of the forecasted issuance of long-term debt, (b) before the statement of financial position is issued, the enterprise has issued long-term debt (or entered into a financing arrangement that clearly permits the entity to refinance on a long-term basis), and (c) all of the other applicable conditions of ASC 470-10-45 have been met. This approach is supported by the provisions of ASC 470-10-45 regarding the refinancing of short-term debt on a long-term basis.
2. A derivative instrument that would otherwise have been classified as a current asset because (a) its fair value is a net asset and (b) its final maturity is within one year should be presented as non-current if the derivative instrument is designated as a hedge of a forecasted transaction involving (1) the acquisition or construction of a non-current asset or (2) the liquidation of long-term debt. This approach is supported by the provisions of ASC 210-10-45 regarding the classification of assets designated for expenditure in the acquisition or construction of non-current assets or segregated for the liquidation of long-term debt.

PwC Observation: Regardless of the approach adopted, an entity with a significant number of derivative instruments should disclose its accounting policy with respect to determining the statement of financial position classification of derivatives.

From a practical standpoint, the bifurcation of derivative instruments into their current and non-current portions and the determination of the fair values thereof may add another layer of complexity to applying the provisions of ASC 815. Therefore, in lieu of the above treatment, we would not object to the following approach to the classification of derivative instruments with cash flows both within one year and beyond one year:

To the extent that discounting is not considered significant to the valuation of the current portion of the derivative instrument, an entity may choose to present the current portion based on the net cash flows expected within one year without discounting them (i.e., to present the current portion on an undiscounted basis, with the noncurrent portion reflecting the difference between the total fair value and that shown as current).

In addition, an entity may choose not to bifurcate a derivative instrument into its current and long-term portions, provided that:

1. A derivative instrument whose fair value is a net liability is classified in total as current.

2. A derivative instrument whose fair value is a net asset is classified in total as non-current, except if the current portion is a liability, in which case the current portion should be presented as a current liability. An entity must review those individual derivative instruments whose fair values are net assets to ascertain whether the current portion is a liability. An entity will often know (or be able to estimate) whether the current portion of a derivative instrument is a liability (1) through its knowledge of forward prices/rates for the underlying or (2) from details contained in the derivative instrument's valuation report.
3. This approach is consistently applied to all derivative instruments and in all periods.

Derivative instrument assets and liabilities should not be netted in the statement of financial position unless they have met the conditions in ASC 210-20-45. ASC 815-10-45 gives preparers an exception to one of the criteria in ASC 210-20-45 (ASC 210-20-45-1-c) if the derivatives are with the same counterparty and the entity has the right to setoff the amounts owed under the derivative instruments pursuant to a master netting arrangement that is enforceable at law. ASC 815-10-45-5 states, "a master netting arrangement exists if the reporting entity has multiple contracts, whether for the same type of derivative instrument or for different types of derivative instruments, with a single counterparty that are subject to a contractual agreement that provides for the net settlement of all contracts through a single payment in a single currency in the event of default on or termination of any one contract." If these conditions are met, then an entity may elect, but is not required, to report the fair value of its derivative transactions on a net basis by counterparty.

The choice to offset or not is an accounting policy election and must be disclosed and applied consistently. As the marketplace for derivative instruments has developed over the years, the standard contracts for over the counter derivative instruments developed by the International Swaps and Derivatives Association, Inc. contain such provisions and qualify for the netting treatment provided they are enforceable at law in the jurisdiction in which they are transacted. In order to avail themselves of the net presentation, reporting entities should ensure that their contractual arrangements include the appropriate terms and that they are enforceable.

ASC 815-10-45-6 requires a reporting entity that reports its derivative instruments net under ASC 815 to also offset fair value amounts recognized for the right to reclaim cash collateral (a receivable) or the obligation to return cash collateral (a payable) against fair value amounts recognized for derivative instruments executed with the same counterparty under the *same* master netting agreement. If the entity does not report its derivative instruments on a net basis, it is also precluded from netting the related fair value amounts for cash collateral. The disclosure requirements for entities that offset the fair value amounts recognized for cash collateral against the fair value amounts recognized for derivative instruments are discussed later in this chapter.

The SEC staff has stated that an embedded derivative that has been bifurcated may be presented on a combined basis with the related host contract in the statement of financial position since the combined presentation is reflective of the overall cash flows for that instrument.

Refer to DH 10.5 Question No. 10-7 for a discussion on classifying derivative instruments for trading purposes. Refer also to DH 10.5 Question No. 10-12 for the classification of margin deposits.

10.2.2 Income Statement Presentation of Derivative Gains and Losses

The accounting for the changes in the fair value of a derivative (i.e., gains or losses) depends on whether the derivative has been designated and qualifies as part of a hedging relationship.

10.2.2.1 Gross or Net Income Statement Presentation of Derivative Gains and Losses

Generally, the determination of whether gains and losses on derivatives should be reported as separate line items in the income statement (gross) or combined in a single financial statement line item (net) is a matter of judgment that depends on the relevant facts and circumstances. The guidance set forth in ASC 845, *Nonmonetary Transactions*, relative to nonmonetary exchanges and the gross versus net reporting indicators provided in ASC 605-45, *Revenue Recognition—Principle Agent Considerations*, should be considered in making this determination. Further, as discussed in ASC 815-10-55, to support gross presentation, there should be economic substance to the transaction and disclosure of the entity's policy for the presentation of gains and losses in the income statement (including presentation on a gross or net basis) in the footnotes.

10.2.2.2 Income Statement Presentation of Gains and Losses in Derivatives Held for Trading Purposes

ASC 815-10-45-9 indicates that gains and losses (realized and unrealized) on all derivative instruments within the scope of ASC 815 should be shown net in the income statement, whether or not settled physically, if the derivative instruments are held for trading purposes as defined in ASC 320-10-35-1.

ASC 815 does not provide other specific guidance on the income statement presentation of derivative gains and losses with respect to derivatives instruments that are not designated in a hedging relationship. Thus, diversity has developed in practice as to the classification within the income statement of gains or losses on derivative instruments that do not qualify for hedge accounting.

Generally, the banking industry applies the practice of reporting all derivative instruments that do not qualify for hedge accounting in a single line item in the income statement. Other companies, including many insurance companies, determine income statement classification on an instrument by instrument basis, treating similar derivatives in a consistent manner. For example, derivatives that an insurance company believes economically hedge policyholder benefit obligations may be recognized in the benefits expense line item, while derivatives entered into purely for investment reasons may be classified with investment income. We believe the classification of non-hedging derivatives within the income statement is a policy decision that should be reasonable and applied consistently. However, splitting a single derivative into more than one income statement line item would not be appropriate. An entity's policy regarding classification should be disclosed in the footnotes.

As discussed in greater detail below, our view is consistent with that of the SEC, which objects to classifying in multiple income statement line items the gains and losses attributable to derivatives that do not qualify for hedge accounting. Specifically, including realized gains and losses in one location and unrealized gains and losses in a different location is generally not appropriate.

10.2.2.2.1 The SEC's Views on the Income Statement Classification of Non-Hedging Derivatives

At the September 2003 meeting of the AICPA SEC Regulations Committee, the SEC staff discussed a registrant matter in which it objected to the income statement presentation of gains and losses on certain derivative transactions. The issue related to the presentation of derivative gains and losses that either were not designated as hedges or did not qualify as hedges under ASC 815. Some believed that these relationships are “economic hedges” and, therefore, should follow the same or similar income statement presentation as that for derivatives gains and losses that did qualify for hedge accounting under ASC 815. However, the SEC staff objected to such income statement presentation. At the September 2003 meeting, the SEC staff gave the following example of income statement presentation:

A registrant in the oil and gas industry appropriately presented the unrealized gains and losses on derivatives that were not designated as hedges (but were considered “economic hedges”) in a separate line item described as “risk management activities” in the income statement. However, when the gains and losses on these derivatives were realized, the registrant reclassified those gains and losses from the “risk management activities” line item to the line item for the “economically” hedged item (e.g., to interest expense for interest rate related derivatives and to revenues for derivatives related to forecasted sales). In other words, the registrant treated the realized gains and losses on the undesignated derivatives as if they were designated (and qualified) as hedges under FAS 133 [ASC 815].

The SEC staff noted that this presentation is similar to the pre-ASC 815 “synthetic accounting” model, which is not permitted under ASC 815. Further, at a separate meeting with the AICPA Insurance Expert Panel, the SEC staff commented that it discussed this issue with the FASB staff and believed that ASC 815 allows for multiple line item reporting in the income statement only for the effective and ineffective portions of gains and losses related to derivatives that are designated and qualify for hedge accounting. Otherwise, all changes in fair value of a derivative must be shown in a single line item in the income statement. ASC 815 also requires entities to disclose where (i.e., the location and the line item) in the income statement or other statement of financial performance the derivatives gains and losses are presented.

In addition to the oil and gas industry example described above, the SEC staff communicated (at the meeting with the AICPA Insurance Expert Panel) that it has noted similar income statement presentations for credit derivatives offsetting loan losses in the banking industry, for treatment of credit default swaps in the financial guarantee industry, and for derivatives related to equity-indexed annuities in the insurance industry.

PwC Observation: Financial guarantee companies that write freestanding derivatives that are not used for hedging may, depending on facts and circumstances, present the gains and losses related to the instruments in different line items for premiums received, unrealized gains and losses, and cash settlements. If a registrant uses this presentation, it must be applied consistently and fully disclosed.

Another example of such reporting of derivative gains and losses that may be found in any industry is a situation where a company enters into an interest rate swap as an economic hedge of its debt but elects not to account for the relationship as a hedge under ASC 815. Since the swap is an economic hedge of the debt, the company presents the periodic net settlements on the swap as interest expense and the remaining changes in the swap's fair value as other income or expense. We believe it would not be appropriate to split the total change in the fair value of a nonhedging derivative for purposes of presentation in more than one line item in the income statement. As such, the company should present the entire change in fair value of the swap (including the periodic net settlement amounts) as interest expense to reflect its economic-hedging relationship with the debt or as some other line item in the income statement, such as other income or expense, in recognition of the fact that it was not designated as a hedge. In either case, the company should disclose the income statement line item in which the nonhedging-derivative gains and losses are included and consistently apply the classification for each reporting period. We believe that this view is consistent with the comments expressed by the SEC staff on this issue.

At the December 2003 AICPA SEC Conference, the SEC staff further commented that the registrant should (1) disclose in the financial statements and management discussion and analysis (MD&A) where in the financial statements the gains and losses are presented and (2) clearly explain the hedges and economic hedges so readers can understand the differences.

10.2.2.3 Income Statement Presentation of Gains and Losses in Hedging Derivatives

The changes in fair value of derivative instruments designated as fair value hedges, as well as the offsetting changes in fair value of the hedged item, should be recognized in earnings in the same accounting period. Similarly, the changes in fair value of a hedging derivative instrument in a hedge of an available-for-sale security and the offsetting changes in fair value of the hedged available-for-sale security should be recognized in earnings.

The ineffective portion of the changes in fair value of derivative financial instruments designated as a cash flow hedging instrument should be recognized in earnings, while the effective portion of changes in fair value of such cash flow hedges should be deferred as a component of other comprehensive income in accordance with ASC 220, *Comprehensive Income*, and reclassified into earnings in the same period in which the forecasted transaction impacts earnings.

The changes in fair value of derivative instruments designated and qualifying as a foreign currency hedge of a foreign-currency-denominated firm commitment should be recognized along with the offsetting changes in fair value of the hedged firm commitment in earnings. The effective portion of the gains or losses on the hedging derivative instrument in a hedge of a forecasted foreign-currency-denominated transaction should be reported as a component of other comprehensive income (out of earnings) and reclassified into earnings in the same period in which the hedge forecasted transaction affects earnings, while the gain or loss on a hedging derivative instrument or non-derivative instrument in a hedge of a net investment in a foreign operation should be reported in other comprehensive income (outside earnings) as part of the cumulative translation adjustment to the extent that the hedge is effective.

Beyond this general guidance, ASC 815 does not specify the income statement line item presentation of changes in fair value of derivative instruments that are designated as hedges. Over time, an industry practice of reflecting the changes in the fair value of derivative instruments in the same financial statement line item

as that of the hedged item has developed. For example, a derivative instrument designated as a fair value hedge, if it is 100 percent effective, will have no impact on the income statement because the change in fair value of the derivative would be reflected in the same line item and thus completely offset by the change in fair value of the hedged item. For a cash flow hedge, the predominant practice is to present the reclassification of the derivative gain or loss from accumulated other comprehensive income to earnings on the same line item in the income statement as that of the hedged item. For example, if the entity were hedging a forecasted sales transaction, the gain or loss on the derivative when reclassified would be presented as a part of the revenue line item in the income statement.

As discussed later in this chapter, ASC 815 requires entities to disclose where the net gain or loss on derivatives designated as fair value or cash flow hedges are reported in the income statement.

Refer to DH 10.5 Question Nos. 10-8 through 10-10 for further discussion on the classification of gains and losses on derivative instruments in the income statement.

10.2.3 Statement of Cash Flows Presentation of Derivative Transactions

ASC 230, *Statement of Cash Flows*, and ASC 815 provide guidance on the statement of cash flows presentation of cash receipts and payments related to derivative instruments. Generally, the cash receipts or payments from a derivative should be classified according to the nature of the derivative without regard to whether the cash flows stemmed from an item intended as a hedge of another item. For example, the proceeds of a borrowing are a financing cash inflow even though the debt is intended as a hedge of a net investment in a foreign operation, and the purchase or sale of a futures contract is an investing activity even though the contract is intended as a hedge of a firm commitment to purchase inventory.

As an alternative, an entity may elect as an accounting policy to classify the cash flows from derivative instruments that have been designated as fair value or cash flow hedges under ASC 815 in the same category as the cash flows from the items being hedged, provided that the accounting policy is disclosed. However, if for any reason, hedge accounting for an instrument that hedges an asset, liability, firm commitment, or forecasted transaction is discontinued, then any cash flows subsequent to the date of discontinuance shall be classified consistent with the nature of the instrument. Any change in an entity's policy for classifying hedging activities in the statement of cash flows that results from a change in the entity's overall accounting policy and not from the discontinuance of hedge accounting, would be considered a change in accounting principle. For guidance on derivatives designated as economic hedges please refer to Question No. 10-5.

Regardless of which approach is adopted, ASC 815-10-45 requires all of the cash flows associated with derivative instruments that contain an other-than-insignificant financing element at inception, other than a financing element inherently included in an at-the-market derivative instrument with no prepayments, to be presented by the borrower as cash flows from financing activities. Derivatives with up-front cash payments, off-market conditions, or both often contain financing elements. Determining if a derivative instrument contains an other-than-insignificant financing element requires judgment based on the facts and circumstances.

Refer to DH 10.5 Question Nos. 10-3 through 10-6 and 10-11 for further discussion on the reporting of derivative transaction in the statement of cash flows.

PwC Observation: We believe the choice between an investing and an operating activity classification of the termination settlement of a derivative designated as a cash flow hedge of a liability is an accounting policy decision. However, this accounting policy decision should be disclosed as well as consistently applied in all periods for similar transactions.

For example, assume a company classifies the amount received on the termination of a purchased interest rate cap designated as a cash flow hedge of a borrowing as an operating cash flow. The company subsequently restructures other debt and as consequence terminates an interest rate swap with a significant negative fair value, which had been designated as a cash flow hedge of the borrowing. In this case, it may be difficult for the company to argue that the amount paid for the termination of the interest rate swap is not an operating cash outflow.

10.2.4 Presentation of Derivative Transactions in Other Comprehensive Income

For cash flow hedges, ASC 815 requires that entities display, as a separate classification within other comprehensive income, the net gains and losses on derivative instruments that qualify as cash flow hedges. Entities must also separately disclose a “roll-forward” of the activity for such net gains and losses that are deferred in other comprehensive income, pursuant to ASC 220, *Comprehensive Income* (i.e., entities must disclose the beginning and ending accumulated net derivative gain or loss, the related change in the net gain or loss that is associated with current-period transactions, and any amount of the net gain or loss that was reclassified as earnings during the period).

Gains and losses reflected in accumulated other comprehensive income must be reclassified into earnings in the same period or periods during which the hedged forecasted transaction affects earnings. In many situations, applying this concept will be relatively straight forward because the gain or loss arising from the settlement of a single derivative can be directly linked to the specific transaction that was hedged. In other situations, applying this concept may be more challenging because the derivative instrument, for example, an interest rate swap, will have multiple settlements over a number of periods that must be linked to the hedged transactions, for example, future interest payments, which also occur over multiple periods. If the hedging relationship remains in place over the entire life of the debt instrument, the reclassification of amounts in other comprehensive income should not be difficult to determine because the realization of the derivative gains or losses will likely occur at the same time as the settlement of the hedged transaction. However, if a hedging relationship involving multiple periods is terminated early, the gains and losses in other comprehensive income must be ascribed to the hedged transactions that have not yet occurred.

In practice, different methods of releasing other comprehensive income have developed. For administrative ease, some entities apply an effective yield method, while others apply a straight-line approach, which may not produce a result significantly different from an effective-yield method. A third method, the swaption method (i.e., where the gain or loss is attributed to each period based on that period’s impact on the overall derivative’s valuation), may be the preferable method if variable-rate debt is being hedged. However, if a forecasted issuance of fixed-rate debt is being hedged, the straight-line or effective-yield methods may be more appropriate.

The issue has been presented to the FASB for consideration in its project related to various ASC 815 hedge accounting issues. Until the FASB provides definitive guidance on this issue, the determination of the appropriate method, given a particular set of facts and circumstances, should be based on the nature of the hedge transaction. The approach selected for a particular transaction should be applied consistently from period to period and for all similar transactions.

Example 10-1 in DH 10.6 provides a numerical example of the presentation of derivative transactions in other comprehensive income.

10.3 Disclosure Objectives

To meet its objective of making the guidance on financial reporting related to derivatives principles based, the FASB explicitly includes three primary disclosure objectives to enable users to understand an entity's derivative activity. As described in ASC 815-10-50-1, those objectives are to disclose information to help the users understand (1) how and why an entity uses derivative instruments, (2) how derivative instruments and related hedging items are accounted for, and (3) how derivative instruments and related hedging activities affect an entity's financial position, financial performance, and cash flows. Meeting these objectives requires comprehensive disclosure for derivative instruments.

10.3.1 Qualitative Disclosure Requirements

As described in ASC 815-10-50-1A, an entity that holds or issues derivative instruments (or nonderivative instruments that are designated and qualify as hedging instruments pursuant to the standards) shall disclose, for every annual and interim reporting period where a balance sheet and income statement are presented, a description of the objective, context and strategies for issuing or holding derivatives. The purpose of these disclosures is to enhance the overall transparency of an entity's derivative transactions by helping investors and creditors understand what an entity is trying to accomplish with its derivatives. As discussed in ASC 815-10-50-5, these qualitative disclosures may be more meaningful if described in the context of an entity's overall risk-management profile. The qualitative disclosures require an entity to (a) distinguish between objectives and strategies for derivative instruments used for risk management purposes and those used for other purposes (at a minimum based on the instruments primary underlying risk exposure such as interest rate risk, credit risk, etc.), and (b) distinguish between the accounting designations of derivative instruments (e.g., cash flow hedging, fair value hedging, and net investment hedging relationships). For derivative instruments not designated as hedging instruments, a description of the purpose of the derivative activity is also required.

Also, ASC 815-10-50-1B indicates that information that would enable users to understand the volume of derivative activity is also required. For example, information about an entity's volume of derivative activity might include the total notional amount of interest rate derivatives, described and segregated in a meaningful way to allow a user to understand the gross or net financial implications.

If information on derivative instruments (or nonderivative instruments that qualify and are designated as hedging instruments) is disclosed in more than one footnote, an entity should cross-reference in the derivative footnote any other footnotes in which derivative-related information is disclosed as discussed in ASC 815-10-50-4I.

The disclosures described above were deemed necessary to assist investors, creditors, and other users of financial statements in understanding the nature of an entity's derivatives and evaluating the success of those activities, their importance to the entity and their effect on the entity's financial statements.

Refer to DH 10.5, Question No. 10-2 for further discussion on qualitative disclosures interim reporting requirements.

10.3.2 Quantitative Disclosure Requirements

The quantitative disclosures about derivative instruments may be more useful, and less likely to be perceived to be out of context or otherwise misunderstood, if similar information is disclosed about other financial instruments or nonfinancial assets and liabilities to which the derivative instruments are related by activity. Accordingly, in those situations, an entity is encouraged, but not required, to present a more complete picture of its activities by disclosing that information. The disclosures outlined below are primarily quantitative in nature, but may have embedded qualitative features that are intended to provide context and a more complete picture of an entity's derivative or hedging activities. Refer to DH 10.5, Question Nos. 10-1 and 10-2 for further discussion on quantitative disclosures requirements.

An entity that holds or issues derivative instruments (or nonderivative instruments that are designated and qualify as hedging instruments pursuant to the standards) shall disclose the following, for every annual and interim reporting period where a balance sheet and income statement are presented:

- a. The location and fair value amount of derivative instruments (and nonderivative instruments that are designated and qualify as hedging instruments pursuant ASC 815-20-25-58 and 815-20-25-66)
 1. Present fair value on a gross basis (i.e., not giving effect to netting arrangements or collateral).
 2. Segregate assets from liabilities and (a) segregate derivative instruments that are qualifying and designated as hedging instruments from those that are not; within those two categories, segregate by type of contract, and (b) disclose the line item(s) in the balance sheet in which the fair value amounts are included.

(a. above is described in ASC 815-10-50-4A through 50-4E.)

10.3.2.1 Fair Value Hedges

- b. The location and amount of gains and losses related to the following:
 1. Derivative instruments qualifying and designated as hedging instruments in fair value hedges (tabular format required).¹
 2. Related hedged items qualifying and designated in fair value hedges.

(b. above is described in ASC 815-10-50-4A through 50-4E.)

¹ Examples illustrating the application of the required disclosures in tabular format are located at ASC 815-10-55-182 through 55-184. These examples illustrate the application of the disclosure objectives and do not address all possible ways of applying the disclosure requirements.

- c. For derivative instruments, as well as nonderivative instruments that may give rise to foreign currency transaction gains or losses under ASC 830, that have been designated and have qualified as fair value hedging instruments, and for the related hedged items, an entity shall disclose:
 - 1. The net gain or loss recognized in earnings during the reporting period representing (a) the amount of the hedges' ineffectiveness and (b) the component of the derivative instruments' gain or loss, if any, excluded from the assessment of hedge effectiveness.
 - 2. The amount of net gain or loss recognized in earnings when a hedged firm commitment no longer qualifies as a fair value hedge.

(c. above is described in ASC 815-25-50-1.)

PwC Observation: Complying with these requirements can be complex. For example, in the case of fair value hedges, an entity will need to make separate disclosures for (1) the net gain or loss recognized in earnings (during the reporting period) that represents the amount of the hedges' ineffectiveness and (2) the component of the derivatives' gain or loss that is excluded from the assessment of hedge effectiveness. Accordingly, entities will need to maintain effective controls over the accumulation of the data needed to comply with these disclosure requirements.

10.3.2.2 Cash Flow Hedges

- d. The location and amount of gains and losses by type of contract related to:
 - 1. The effective portion recognized in other comprehensive income (tabular format required).
 - 2. The effective portion subsequently reclassified to earnings (tabular format required).
 - 3. The ineffective portion and the amount excluded from effectiveness testing (tabular format required).
- (d. above is described in ASC 815-10-50-4A through 50-4E.)
- e. A description of the transactions or other events that will result in the reclassification into earnings of gains and losses that are reported in accumulated other comprehensive income.
 - f. The estimated net amount of the existing gains or losses at the reporting date that is expected to be reclassified into earnings within the next 12 months.
 - g. The maximum length of time over which the entity is hedging its exposure to the variability in future cash flows for forecasted transactions excluding those forecasted transactions related to the payment of variable interest on existing financial instruments.
 - h. The amount of gains and losses reclassified into earnings as a result of the discontinuance of cash flow hedges because it is probable that the original forecasted transactions will not occur by the end of the originally specified time period or within the additional period of time discussed in the standard.

(e. through h. are as described in ASC 815-30-50-1.)

PwC Observation: ASC 815-30-50 states that when determining the amount of gains and losses that will be reclassified into earnings in the next 12 months for hedging relationships where multiple cash flow exposures are designated as the hedged item for a single derivative, the total amount reported in accumulated other comprehensive income must first be allocated to each of the forecasted transactions. The sum of the amounts expected to be reclassified into earnings in the next 12 months for each of those items would then be the amount disclosed, which could result in an amount greater than the net amount reported in accumulated other comprehensive income.

- i. Display, as a separate classification within other comprehensive income (OCI) the net gain or loss on derivative instruments designated and qualifying as cash-flow hedging instruments that are reported in OCI (as described in ASC 815-30-50-2).

10.3.2.3 Net Investment Hedges

- f. Location and amount of gains and losses by type of contract related to the following:
 1. The effective portion recognized in other comprehensive income (tabular format required).
 2. The effective portion subsequently reclassified to earnings (tabular format required).
 3. The ineffective portion and the amount excluded from effectiveness testing (tabular format required).

(f. above is described in ASC 815-10-50-4A through 50-4E.)

10.3.2.4 Non-Qualifying or Non-Designated Derivatives

- h. Separately disclose the location and amount of gains and losses related to derivative instruments not qualifying or designated as hedging instruments (tabular format required).

Note: If it is an entity's policy to include in its trading activities derivative instruments that are not designated or qualifying as hedging instruments, in lieu of the disclosures required by h. above, the entity may elect to not make separate disclosures relating to these activities provided all of the following are disclosed:

1. The gains and losses on trading activities recognized in the income statement, disaggregated by major types of items (e.g., fixed income/interest rates, foreign exchange, equity, commodity, and credit).
2. The line items in the income statement in which trading activities gains and losses are included.
3. A description of the nature of its trading activities and related risks and how the entity manages those risks.

(h. above is as described in ASC 815-10-50-4C(e) and 815-10-50-4F.)

- i. For a non-hedging derivative, such as an economic hedge, it is not appropriate to split the total change in fair value of a non-hedging derivative into more than one line item on the income statement. As such, an entity should present the entire change in fair value (including the periodic net settlement amounts) in a single

line, such as interest expense, other income, or other expense. Refer also to DH 10.2.2.

10.3.2.5 Credit-Risk-Related Contingent Features

- j. Existence and nature of derivative instruments that contain credit-risk-related contingent features and the circumstances in which those features could be triggered in derivatives that are in a net liability position at the end of the reporting period.
- k. Aggregate fair value amounts of derivative instruments that contain credit-risk-related contingent features that are in a net liability position at the end of the reporting period.
- l. Aggregate fair value of assets already posted as collateral at the end of the reporting period.
- m. Aggregate fair value of additional assets that would be required to be posted as collateral and/or needed to settle the instrument immediately, if the credit-risk-related contingent features were triggered.

(j. through m. above are as described in ASC 815-10-50-4H.)

10.3.2.6 Credit Derivatives

- n. For each balance sheet presented, the seller of credit derivatives (e.g. credit default swaps, credit spread options, credit index products, etc.) shall disclose the following for each credit derivative (or each group of similar credit derivatives) and hybrid instrument that has an embedded credit derivative, even if the likelihood of the seller's having to make payment under the credit derivative is remote:
 - 1. The nature of the credit derivative, including the approximate term of the credit derivative, the reason(s) for entering into the credit derivative, the events or circumstances that would require the seller to perform under the credit derivative, and the current status (that is, as of the date of the statement of financial position) of the payment/performance risk of the credit derivative. Note: the current status of the payment/performance may be based either on recently issued external credit ratings or current internal groupings used by the entity to manage its risk.
 - 2. The maximum potential amount of future payments the seller could be required to make under the derivative arrangement (and if applicable, including if the credit derivative provides for no limitations to the maximum potential future payments). The maximum potential amount of future payments should be presented on an undiscounted basis and should not be reduced by any recourse or collateral provisions. If the seller is unable to develop an estimate of the maximum potential amount of future payments, the reasons why such an estimate cannot be made should be disclosed.
 - 3. The fair value of the credit derivative.
 - 4. The nature of any recourse provisions that enable the seller, as well as any collateral held by third parties that the seller can liquidate, to recover all or a portion of the amounts paid under the credit derivative.

5. The approximate extent to which the proceeds of collateral held by third parties that the seller can use to reduce the maximum potential amount of future payments under the credit derivative.

(n. above is as described in ASC 815-10-50-4K.)

PwC Observation: Entities that use internal groupings as the basis for disclosing the current status of the payment/performance risk are required to disclose how those groupings are determined and used for managing risk. Given the latitude provided by the FASB to use internal groupings, diversity in practice regarding these disclosures exists and judgment is needed to determine that the information disclosed achieves the objective of the required disclosure. Additional contextual information may be needed to provide users with a better framework for understanding these disclosures and to enhance comparability.

Note the disclosures required above do not apply to an embedded derivative feature related to the transfer of credit risk that is only in the form of subordination of one financial instrument to another as described in ASC 815-15-15-9.

PwC Observation: ASC 815-10-50-4K requires certain disclosures be made by sellers of credit derivatives including any hybrid instruments that have embedded credit derivatives. Prior to the adoption of the provisions released in ASU 2010-11, many investors in synthetic collateralized debt obligations did not provide these disclosures because they invoked the scope exception in ASC 815-15-15-8 which stated that such embedded features “shall not be considered an embedded derivative....”

The revised guidance released in the ASU eliminates this scope exception resulting in these embedded credit derivative features now being subject to the disclosure requirements in ASC 815-10-50-4K. Additionally, these disclosures are equally applicable to investments classified as trading as they are to investments classified as available-for-sale. Therefore investors have to inventory all investments in beneficial interests, including trading securities and those for which the fair value option has been applied, to determine whether they are sellers of credit derivatives as a result of their investment and thus subject to the disclosure requirements in ASC 815-10-50-4K.

It should be noted that the ASU did amend ASC 815-10-50-4K to clarify that the disclosure requirements do not apply to embedded derivative features relating to the transfer of credit risk that is only in the form of subordination of one financial instrument to another (i.e., when the subordination scope exception in ASC 815-15-15-9 applies). Therefore, an investor in, or issuer of, beneficial interests in a fully funded cash vehicle would not be subject to these disclosures to the extent there were no other written credit derivatives present in the vehicle.

10.3.2.7 Loan Commitments Accounted for as Derivatives

For loan commitments accounted for as derivative instruments entities must disclose:

1. The accounting policy for loan commitments.
2. The disclosures required by ASC 825 and Item 305 of Regulation S-K, including the methods and assumptions used to estimate fair value and any associated hedging strategies.
3. Disclosures required by Item 303 of Regulation S-K and the related interpretive guidance.

10.3.2.8 Hybrid Financial Instruments Measured at Fair Value

ASC 815-15-30 allows an entity to elect fair value accounting for a hybrid financial instrument that contains an embedded derivative that otherwise would require bifurcation under ASC 815-15-25-1. For hybrid instruments measured at fair value under the election and under the practicability exception in ASC 815-15-30-1, an entity shall:

1. Report hybrid financial instruments in a manner that separates the reported fair values from the carrying amounts of assets and liabilities subsequently measured using another measurement attribute on the face of the statement of financial position. To accomplish that separate reporting, an entity may either in accordance with ASC 815-15-45-1:
 - a. display separate line items for the fair value and non-fair-value carrying amounts or
 - b. present the aggregate of those fair value and non-fair-value amounts and parenthetically disclose the amount of fair value included in the aggregate amount.
2. Provide information that will allow users to understand the effect of changes in the fair value of hybrid financial instruments measured at fair value on earnings or other performance indicators for entities that do not report earnings in accordance with ASC 815-15-50-2.

10.3.2.9 Disclosures Related to Offsetting or Netting Derivatives

An entity should disclose their policy of entering into master netting arrangements to mitigate the credit risk of financial instruments. Information about the arrangements for which the entity is a party and a brief description of those terms, including the extent to which they would reduce the entity's maximum amount of loss due to credit risk should also be disclosed.

With respect to offsetting derivatives against cash collateral, ASC 815-10-50-8 indicates that a reporting entity that has made an accounting policy decision to offset fair value amounts should separately disclose amounts recognized for the right to reclaim cash collateral or the obligation to return cash collateral that has been offset against net derivative positions. A reporting entity that has made an accounting policy decision to offset fair value amounts is not permitted to offset amounts recognized for the right to reclaim cash collateral or the obligation to return cash collateral against net derivative positions if those amounts (1) were not fair value amounts or (2) arose from instruments in a master netting arrangement that are not eligible to be offset.

If an entity does not net its derivatives, it cannot net the related fair value amounts for cash collateral. A reporting entity must separately disclose amounts recognized for the right to reclaim cash collateral or the obligation to return cash collateral under master netting arrangements that have not been offset against net derivative positions. As discussed in ASC 815-10-50-8, a reporting entity that has made an accounting policy decision to *not* offset fair value amounts shall separately disclose the amounts recognized for the right to reclaim cash collateral or the obligation to return cash collateral under master netting arrangements.

10.3.2.9.1 Disclosures to Help Reconcile Differences in the Offsetting Requirements Under U.S. GAAP and IFRS

In December 2011, the FASB issued ASU 2011-11 which requires disclosures to provide information to help reconcile differences in the offsetting requirements under U.S. GAAP and IFRS. These disclosures are required for annual reporting periods beginning on or after January 1, 2013, and interim periods within those annual periods.

The new disclosure requirements mandate that entities disclose both gross and net information about instruments and transactions eligible for offset in the statement of financial position as well as instruments and transactions subject to an agreement similar to a master netting arrangement (for example a derivative clearing agreement). In addition, the standard requires disclosure of collateral received and posted in connection with master netting agreements or similar arrangements.

An entity will be required to disclose the following information for assets and liabilities within the scope of the new standard:

- a. The gross amounts of those recognized assets and liabilities.
- b. The amounts offset to determine the net amounts presented in the statement of financial position.
- c. The net amounts presented in the statement of financial position.
- d. The amounts subject to an enforceable master netting arrangement or similar agreement not otherwise included in (b) above:
 1. The amounts related to recognized financial instruments and other derivative instruments that either:
 - a. Management makes an accounting policy election not to offset.
 - b. Do not meet some or all of the guidance to be offset in either Section 210-20-45 or Section 815-10-45.
 2. The amounts related to financial collateral (including cash collateral).
- e. The net amount after deducting the amounts in (d) from the amounts in (c).

The standard permits flexibility with respect to how certain items are disclosed. For example, companies can choose to disclose items (c) through (e) above either by class of financial instrument or by counterparty.

ASU 2011-11 indicates that the disclosures described above are minimum requirements. To meet the objective of the ASU 2011-11, an entity may need to supplement the disclosures with additional (qualitative) disclosures depending on the terms of the enforceable master netting arrangements and related agreements, including the nature of the rights of setoff and their effect or potential effect on the entity's financial position.

The standard contains several examples intended to illustrate its application.

PwC Observation: The FASB received feedback indicating that inclusion of trade payables and receivables in the scope of ASU 2011-11 would require a comprehensive review of all contracts to determine if the provisions of each contract would be considered a master netting or similar agreement, which would raise operational issues given the 1 January 2013 effective date. Similarly, U.S. constituents stated concerns about the inclusion of regular way purchases and sales because this may require a system by system analysis of the related activity as this information is usually not currently tracked.

In response to these concerns, the FASB amended the scope of its offsetting disclosure requirements by limiting the scope to derivatives, sale and repurchase agreements and reverse sale and repurchase agreements and securities borrowing and lending arrangements.

10.3.2.10 Embedded Derivatives

When an embedded conversion option previously accounted for as a derivative under the standards no longer meets the separation criteria, as described in ASC 815-15-50-3, an entity shall disclose (1) a description of the principal changes causing the embedded conversion option to no longer require bifurcation, and (2) the amount of the liability for the conversion option reclassified to stockholder's equity.

10.3.3 SEC Perspectives

In addition to ASC 815's disclosure requirements, SEC registrants are required to follow the SEC's market risk disclosure rules. Accordingly, SEC registrants should include certain derivative disclosures both in the footnotes as required by ASC 815 and outside the financial statements as required by the SEC's rules.

10.3.3.1 SEC Disclosure Requirements for Derivatives

In 1997, the SEC released its rule on disclosure of market risk, Financial Reporting Release No. 48, Disclosure of Accounting Policies for Derivative Financial Instruments and Derivative Commodity Instruments, and Disclosure of Quantitative and Qualitative Information about Market Risk Inherent in Derivative Financial Instruments, Other Financial Instruments and Derivative Commodity Instruments (FRR 48). This guidance was released largely in response to concerns regarding the adequacy of disclosures about derivatives. The concerns were exemplified in the remarks made by the AICPA Special Committee on Financial Reporting that stated:

... users are confused, they complain that business reporting is not answering important questions such as ... What [innovative financial] instruments has the company entered into, and what are their terms? How has the company accounted for those instruments and how has that accounting affected the financial statements? What risks has the company transferred or taken on?

FRR 48 attempts to address these concerns by clarifying and expanding existing requirements for financial statement footnote disclosures (for both dealers and corporate end users) about accounting policies for derivatives and requires disclosures outside the financial statements of qualitative and quantitative

information about the market risk inherent in derivatives and other financial instruments.

Recognizing that the SEC's market risk and derivatives accounting policy disclosure requirements (Rule 4-08 of Regulation S-X, Item 305 of Regulation S-K, and Item 310 of Regulation S-B) may, in some cases, overlap those of ASC 815 (primarily the disclosures related to (1) an entity's risk-management policies that encompass the use of derivative instruments and (2) an entity's specific objectives for entering into hedge transactions), the SEC staff has indicated that it will review its market-risk disclosure requirements in light of ASC 815's disclosure requirements.

PwC Observation: As of April 2013, the SEC staff had not amended these rules. These items include the accounting policy disclosures required under SEC Regulation S-X, Rule 4-08(n), and the definitions and terminology in SEC Regulation S-K, Item 305, and Form 20-F, Item 9A. Entities are required to follow the current SEC market risk disclosure rules and should include certain derivative disclosures (e.g., disclosures about risk-management policies that involve the use of derivative instruments) both outside the financial statements (as required by the SEC's market-risk disclosure rules) and in the footnotes to the financial statements (as required by ASC 815).

FRR 48 has three significant disclosure sections as follows:

1. Accounting Policy Disclosures

The registrant's disclosures regarding accounting policies shall include descriptions of the accounting policies used for derivative financial instruments and derivative commodity instruments and the methods of applying those policies that materially affect the determination of financial position, cash flows, or results of operations. This description shall include, to the extent material, each of the following items:

1. A discussion of each method used to account for derivative financial instruments and derivative commodity instruments;
2. The types of derivative financial instruments and derivative commodity instruments accounted for under each method;
3. The criteria required to be met for each accounting method used, including a discussion of the criteria required to be met for hedge or deferral accounting and accrual or settlement accounting (e.g., whether and how risk reduction, correlation, designation, and effectiveness tests are applied);
4. The accounting method used if the criteria specified in (4) above are not met;
5. The method used to account for terminations of derivatives designated as hedges or derivatives used to affect directly or indirectly the terms, fair values, or cash flows of a designated item;
6. The method used to account for derivatives when the designated item matures, is sold, is extinguished, or is terminated. In addition, the method used to account for derivatives designated to an anticipated transaction, when the anticipated transaction is no longer likely to occur; and
7. Where and when derivative financial instruments and derivative commodity instruments, and their related gains and losses, are reported in the statements of financial position, cash flows, and results of operations.

In making such disclosure, registrants should distinguish between accounting policies used for derivatives entered into for trading purposes from those that are entered into for purposes other than trading.

These disclosures are required unless the registrant's derivative activities are not material. When assessing materiality under Rule 4-08(n) and Item 310, the commission expects registrants to consider:

(i) the financial statement effects of all derivatives, including those not recognized in the statement of financial position and (ii) the relative effects of using the accounting method selected as compared with the other methods available (e.g., accrual, deferral, or fair value methods of accounting). Materiality should be measured by the fair values of derivative financial instruments and derivative commodity instruments at the end of each reporting period and during each reporting period. However, the release is silent as to what the fair values should be compared with in order to judge materiality. Therefore, registrants should consider materiality in the context of SAB 99 (SAB Topic 1-M).

2. Quantitative Disclosures

Item 305(a) of Regulation S-K requires disclosure, outside the financial statements, of quantitative market risk information about derivative financial instruments, other financial instruments, and derivative commodity instruments. These disclosures are required if any of the following items are material: (a) the fair values of market risk sensitive instruments outstanding at the end of the current reporting period or (b) the potential loss in future earnings, fair values, or cash flows of market-risk-sensitive instruments from reasonably possible market movements. These disclosures are required for registrants that have material investments in other financial instruments, even though they have no investments in derivatives.

Registrants can select any of the following three alternatives summarized by risk exposure category (i.e., interest rate, foreign exchange rate, commodity price, and other similar price risks) for reporting quantitative information about trading and non-trading portfolios. A registrant also may choose, from the three alternatives, one disclosure alternative for market risk sensitive instruments entered into for trading purposes and another disclosure alternative for market risk sensitive instruments entered into for other than trading purposes. Alternatively, a registrant may choose any disclosure alternative, from among the three alternatives, for each risk exposure category within the trading and other than trading portfolios. Registrants are allowed to change methods; however, they would need to disclose the reason for the change and provide summarized comparable information for the preceding period. The disclosures required have are:

1. Tabular presentation of information related to market-risk-sensitive instruments; such information shall include fair values of market-risk-sensitive instruments and contract terms sufficient to determine the future cash flows from those instruments, categorized by expected maturity dates;
2. Sensitivity analysis expressing the possible loss in future earnings, fair values, or cash flows of market-risk-sensitive instruments from selected hypothetical changes in interest rates, foreign currency exchange rates, commodity prices and other relevant market rates and prices; or
3. Value at risk disclosures expressing the potential loss in future earnings, fair values, or cash flows of market-risk-sensitive instruments over a selected period of time, with a selected likelihood of occurrence, from changes in interest rates,

foreign currency exchange rates, commodity prices, and other relevant market rates or prices.

Registrants must discuss material limitations that result in the disclosures not fully reflecting the net market exposures of the entity. Additionally, registrants must provide separate quantitative information for trading and other-than-trading instruments. Registrants are also required to provide summarized information for the comparable preceding period and to provide a discussion of the reasons for material changes.

3. Qualitative Disclosures

FRR 48 encompasses trading derivatives and other trading financial instruments and requires registrants to evaluate and describe material changes in their primary risk exposures and material changes in how those exposures are managed. In particular, a registrant must disclose outside the financial statements: (a) its primary market risk exposures as they exist at the end of the period and (b) how those exposures are managed currently (e.g., a description of the objective, general strategies, and instruments, if any, used to manage those exposures). For example, if a registrant has a material exposure to foreign currency exchange rate risk and, within this category of market risk, is most vulnerable to changes in dollar/yen, dollar/pound, and dollar/peso exchange rates, the registrant should disclose those exposures. The registrant would also describe how those risks are currently managed for example, through the designation of derivatives as fair value, cash flow, or net investment in foreign operation hedges.

As with the quantitative disclosures, separate qualitative narratives should be presented for trading instruments and other-than-trading instruments. Registrants are required to describe material changes during the reporting period in how their primary risk exposures are managed and how they are expected to change in future periods. The same materiality guidelines for quantitative information apply to qualitative information.

10.3.3.2 Registrants Excluded From FRR 48

The rule pertaining to qualitative and quantitative information about market risk does not apply to registered investment companies and small reporting companies. However, to the extent market risk represents a material known trend, event, or uncertainty, small reporting companies, like other registrants, would be required to discuss the impact of market risk on past and future financial condition and results of operations, pursuant to SEC rules relating to MD&A.

10.3.3.3 SEC Question and Answer Guide

In July of 1997, the SEC issued *Questions and Answers About the New "Market Risk" Disclosure Rules*, which covers frequently asked questions and answers posed to the SEC and answers (available on <http://sec.gov/divisions/corpfin/guidance/derivfaq.htm>). The staffs of the Office of the Chief Accountant and the Division of Corporate Finance prepared these interpretive answers. Related questions are grouped under topic headers and include such topics as (1) companies affected by the new rules, (2) when is compliance required, (3) market risks addressed by the rules, (4) accounting policy disclosures, (5) quantitative disclosures (general, interim reports, tabular information, sensitivity analysis, and value-at-risk), (6) qualitative disclosure requirements, and (7) safe harbor requirements. The SEC staff will make subsequent revisions available on its Web site www.sec.gov.

10.3.3.4 SEC Release on Certain Trading Activities Involving Non-Exchange Traded Contracts Accounted for at Fair Value

Financial Reporting Release No. 61, *Commission Statement About Managements Discussion and Analysis of Financial Condition and Results of Operations* (FRR 61), suggests steps that financial statement issuers should consider in meeting their disclosure obligations with respect to the following topics:

1. Liquidity and capital resources, including off-balance-sheet arrangements;
2. Certain trading activities involving non-exchange-traded contracts accounted for at fair value; and
3. Relationships and transactions with persons or entities that derive benefits from their non-independent relationship with the registrant or the registrant's related parties.

This release focuses on the disclosures regarding certain trading activities. It arose in response to the SEC's concern about a lack of transparency and clarity with respect to the disclosure of trading activities involving commodity contracts that are accounted for at fair value, but for which a lack of market price quotations necessitates the use of fair value estimation techniques.

The contracts that are the subjects of the release may be indexed to measures of (1) weather, (2) commodities prices, or (3) quoted prices of service capacity, such as energy storage and bandwidth capacity contracts. Companies engaged to a material extent in trading activities involving such contracts should consider providing disclosures in MD&A that supplement the disclosures that are currently required in the financial statements. That supplemental information should include any contracts that are derivatives involving the same commodities that are part of those trading activities (for example, energy derivatives that are part of energy trading activities).

Accounting standards currently require financial statement disclosures of material energy trading and risk management activities, and SEC rules already require discussion in MD&A of material trends and uncertainties arising from those activities. The release encourages registrants to consider including information about these trading activities, contracts and modeling methodologies, assumptions, variables and inputs along with explanations of the different outcomes reasonably likely under different circumstances or measurement methods, in management's discussion of how the activities affect reported results for the latest annual period and subsequent interim period and how financial position is affected as of the latest balance sheet date. Accordingly, registrants should consider the need to furnish information as quantified to the extent practicable that does the following:

1. Disaggregates realized and unrealized changes in fair value,
2. Identifies changes in fair value attributable to changes in valuation techniques,
3. Disaggregates estimated fair values at the latest balance sheet date based on whether fair values are determined directly from quoted market prices or are estimated, and
4. Indicates the maturities of contracts at the latest balance sheet date (e.g., within one year, within years one through three, within years four and five, and after five years).

10.3.3.5 SEC Staff Views on Disclosures Related to Derivative Instruments

The SEC staff expects registrants to provide all of the ASC 815 required disclosures, including both qualitative and quantitative disclosures. Registrants should disclose where on the income statement (i.e., on which line item) they are recording hedge ineffectiveness. If a registrant determines that there is no hedge ineffectiveness or the amount of the hedge ineffectiveness was not material for disclosure, a statement to that effect (i.e., "Hedge ineffectiveness was immaterial") should be included in their financial statements. With respect to cash flow hedges, the SEC staff has emphasized the disclosure of the estimated net amount of the existing gain or loss that is expected to be reclassified into earnings within the next twelve months. Additionally, the SEC staff also expects registrants to disclose the amount, even if it is immaterial, of the gains or losses reclassified into earnings as a result of the discontinuance of cash flow hedges because it was probable that the original forecasted transactions will not occur by the end of the originally specified time period or within an additional two-month period of time thereafter. Finally, the SEC staff has stated that a registrant should, to the extent possible, make all ASC 815 disclosures in one place in the financial statements.

10.4 Disclosure Exhibits

Several illustrative examples of the disclosures required under ASC 815 are presented in the following exhibits. These exhibits are focused primarily on the accounting policies and certain qualitative disclosures required by ASC 815, including the objectives and strategies for holding or issuing derivative instruments. Additional quantitative disclosures are required that are not represented in these exhibits. See Section 10.3 and its subsections above for a comprehensive discussion of the disclosure requirements. Below is an index of the exhibits:

Exhibit Number	Description
10-1	Footnote Disclosure of Significant Accounting Policies for Derivative Instruments and Hedging Activities (<i>All Entities</i>)
10-2	Additional Footnote Disclosures of Derivative Instruments and Hedging Activities (<i>Financial Institutions</i>)
10-3	Additional Footnote Disclosures of Derivative Instruments and Hedging Activities (<i>Commercial/Industrial Entities</i>)
10-4	Footnote Disclosure of the Accounting Policy for Assessing Impairment of Hedged Assets and Liabilities

These exhibits are for illustrative purposes only. Readers should not rely on the exhibits as a substitute for the actual requirements in the Codification.

Exhibit 10-1: Footnote Disclosure of Significant Accounting Policies for Derivative Instruments and Hedging Activities (*All Entities*)

Accounting for Derivatives Instruments and Hedging Activities

All derivatives are recognized on the balance sheet at their fair value. On the date that the Company enters into a derivative contract, it designates the derivative as

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(1) a hedge of (a) the fair value of a recognized asset or liability or (b) an unrecognized firm commitment (a fair value hedge), (2) a hedge of (a) a forecasted transaction or (b) the variability of cash flows that are to be received or paid in connection with a recognized asset or liability (a cash flow hedge), (3) a foreign-currency fair value or cash flow hedge (a foreign currency hedge), (4) a hedge of a net investment in a foreign operation, or (5) an instrument that is held for trading or non-hedging purposes (a “trading” or “nonhedging” instrument).

Changes in the fair value of a derivative that is highly effective and that is designated and qualifies as a fair value hedge, along with changes in the fair value of the hedged asset or liability that are attributable to the hedged risk (including changes that reflect losses or gains on firm commitments), are recorded in current-period earnings. Changes in the fair value of a derivative that is highly effective as and that is designated and qualifies as a cash flow hedge, to the extent that the hedge is effective, are recorded in other comprehensive income, until earnings are affected by the variability of cash flows of the hedged transaction (e.g., until periodic settlements of a variable-rate asset or liability are recorded in earnings). Any hedge ineffectiveness (which represents the amount by which the changes in the fair value of the derivative exceed the variability in the cash flows of the forecasted transaction) is recorded in current-period earnings.

Changes in the fair value of a derivative that is highly effective as and that is designated and qualifies as a foreign-currency hedge is recorded in either current-period earnings or other comprehensive income, depending on whether the hedging relationship satisfies the criteria for a fair value or cash flow hedge. If, however, a derivative is used as a hedge of a net investment in a foreign operation, the changes in the derivative’s fair value, to the extent that the derivative is effective as a hedge, are recorded in the cumulative-translation-adjustment component of other comprehensive income. Changes in the fair value of derivative trading and nonhedging instruments are reported in current-period earnings.

The Company occasionally purchases a financial instrument in which a derivative instrument is “embedded.” Upon purchasing the financial instrument, the Company assesses whether the economic characteristics of the embedded derivative are clearly and closely related to the economic characteristics of the remaining component of the financial instrument (i.e., the host contract) and whether a separate, non-embedded instrument with the same terms as the embedded instrument would meet the definition of a derivative instrument. When it is determined that (1) the embedded derivative possesses economic characteristics that are not clearly and closely related to the economic characteristics of the host contract and (2) a separate, stand-alone instrument with the same terms would qualify as a derivative instrument, the embedded derivative is separated from the host contract, carried at fair value, and designated as either (1) a fair value, cash flow, or foreign-currency hedge or (2) a trading or nonhedging derivative instrument. However, if the entire contract is measured at fair value, with changes in fair value reported in current earnings, or if the Company can not reliably identify and measure the embedded derivative for purposes of separating that derivative from its host contract, the entire contract is carried on the balance sheet at fair value and is not designated as a hedging instrument.

The Company formally documents all relationships between hedging instruments and hedged items, as well as its risk-management objective and strategy for undertaking various hedge transactions. This process includes linking all derivatives that are designated as fair value, cash flow, or foreign-currency hedges to (1) specific assets and liabilities on the balance sheet or (2) specific firm commitments or

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forecasted transactions. The Company also formally assesses (both at the hedge's inception and on an ongoing basis) whether the derivatives that are used in hedging transactions have been highly effective in offsetting changes in the fair value or cash flows of hedged items and whether those derivatives may be expected to remain highly effective in future periods. When it is determined that a derivative is not (or has ceased to be) highly effective as a hedge, the Company discontinues hedge accounting prospectively, as discussed below.

The Company discontinues hedge accounting prospectively when (1) it determines that the derivative is no longer effective in offsetting changes in the fair value or cash flows of a hedged item (including hedged items such as firm commitments or forecasted transactions); (2) the derivative expires or is sold, terminated, or exercised; (3) it is no longer probable that the forecasted transaction will occur; (4) a hedged firm commitment no longer meets the definition of a firm commitment; or (5) management determines that designating the derivative as a hedging instrument is no longer appropriate or desired.

When hedge accounting is discontinued due to the Company's determination that the derivative no longer qualifies as an effective fair-value hedge, the Company will continue to carry the derivative on the balance sheet at its fair value but cease to adjust the hedged asset or liability for changes in fair value. When hedge accounting is discontinued because the hedged item no longer meets the definition of a firm commitment, the Company will continue to carry the derivative on the balance sheet at its fair value, removing from the balance sheet any asset or liability that was recorded to recognize the firm commitment and recording it as a gain or loss in current-period earnings. When the Company discontinues hedge accounting because it is no longer probable that the forecasted transaction will occur in the originally expected period, the gain or loss on the derivative remains in accumulated other comprehensive income and is reclassified into earnings when the forecasted transaction affects earnings. However, if it is probable that a forecasted transaction will not occur by the end of the originally specified time period or within an additional two-month period of time thereafter, the gains and losses that were accumulated in other comprehensive income will be recognized immediately in earnings. In all situations in which hedge accounting is discontinued and the derivative remains outstanding, the Company will carry the derivative at its fair value on the balance sheet, recognizing changes in the fair value in current-period earnings, unless it is designated in a new hedging relationship.

Exhibit 10-2: Additional Footnote Disclosures of Derivative Instruments and Hedging Activities (Financial Institutions)

Derivative Instruments and Hedging Activities

The Company maintains an overall interest rate risk-management strategy that incorporates the use of derivative instruments to minimize the impact of interest rate volatility. The Company's goal is to manage interest rate sensitivity by modifying the repricing or maturity characteristics of certain balance sheet assets and liabilities so that the net-interest margin is not, on a material basis, adversely affected by movements in interest rates. As a result of interest rate fluctuations, hedged fixed-rate assets and liabilities will appreciate or depreciate in market value. The effect of this unrealized appreciation or depreciation is expected to be substantially offset by the Company's gains or losses on the derivative instruments that are linked to

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these hedged assets and liabilities. Another result of interest rate fluctuations is that the contractual interest income and interest expense of hedged variable-rate assets and liabilities, respectively, will increase or decrease. The effect of this variability in earnings is expected to be substantially offset by the Company's gains and losses on the derivative instruments that are linked to the forecasted cash flows of these hedged assets and liabilities. The Company considers its strategic use of derivatives to be a prudent method of managing interest-rate sensitivity, as it prevents earnings from being exposed to undue risk posed by changes in interest rates.

Derivative instruments that are used as part of the Company's interest rate risk-management strategy include interest rate swaps, futures contracts, and option contracts that have indices related to the pricing of specific balance sheet assets and liabilities. As a matter of policy, the Company does not use highly leveraged derivative instruments for interest rate risk management. Interest rate swaps generally involve the exchange of fixed- and variable-rate interest payments between two parties, based on a common notional principal amount and maturity date. Interest rate futures generally involve exchange-traded contracts to buy or sell Treasury bonds and notes in the future at specified prices. Interest rate options represent contracts that allow the holder of the option to (1) receive cash or (2) purchase, sell, or enter into a financial instrument at a specified price within a specified period. Some of these contracts also give the Company the right to enter into interest rate swaps and cap and floor agreements with the writer of the option.

The Company also enters into various interest rate and foreign-exchange derivative contracts for trading and macro risk-management purposes. Trading activities (that include derivative transactions that are entered into for risk-management purposes and do not otherwise qualify for hedge accounting) primarily involve providing various derivative products for customers; managing foreign-currency exchange risk on a macro basis (due to foreign-currency translation), managing overall enterprise risk and risks in other trading portfolios; and taking positions in various currencies in countries where the Company operates in order to maximize the Company's margin from its operating entities in those countries.

By using derivative instruments, the Company exposes itself to credit and market risk. If a counterparty fails to fulfill its performance obligations under a derivative contract, the Company's credit risk will equal the fair-value gain in that derivative. Generally, when the fair value of a derivative contract is positive, this indicates that the counterparty owes the Company, thus creating a repayment risk for the Company. When the fair value of a derivative contract is negative, the Company owes the counterparty and, therefore, assumes no repayment risk. The Company minimizes the credit (or repayment) risk in derivative instruments by entering into transactions with high-quality counterparties that are reviewed periodically by the Company's credit committee. Further, when the circumstances are deemed appropriate, the Company may request that collateral be provided by the counterparty.

The Company also maintains a policy of requiring that all derivative contracts be governed by an International Swaps and Derivatives Association Master Agreement; depending on the nature of the derivative transaction, bilateral collateral arrangements may be required as well. When the Company is engaged in more than one outstanding derivative transaction with the same counterparty and also has a legally enforceable master netting agreement with that counterparty, the "net" mark-to-market exposure represents the netting of the positive and negative exposures with that counterparty. When there is a net negative exposure, the Company regards its credit exposure to the counterparty as being zero. The net mark-to-market

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position with a particular counterparty represents a reasonable measure of credit risk when there is a legally enforceable master netting agreement (i.e., a legal right of a setoff of receivable and payable derivative contracts) between the Company and that counterparty.

In all instances where the Company is a party to a master netting agreement, it maintains an accounting policy to offset the receivable or payable recognized upon payment of cash collateral against the fair value amounts recognized for derivative instruments that have also been offset under such master netting agreements. As of December 31, 20X0, the Company has recorded the fair value of derivative instrument assets of \$XXX in (balance-sheet line item caption) and derivative instrument liabilities of \$XXX in (balance-sheet line item caption). These amounts reflect the netting of certain derivative instrument assets and liabilities only when the conditions in ASC 210-20, *Balance Sheet-Offsetting*, have been met. As of December 31, 20X0, the amount recognized in (balance-sheet line item caption) for the right to reclaim cash collateral totaled \$XXXX. The amounts recognized in (balance-sheet line item caption) for the obligation to return cash collateral totaled \$XXXX. The amounts discussed above are also referenced in Footnote X.

Market risk is the adverse effect that a change in interest rates, currency, or implied volatility rates might have on the value of a financial instrument. The Company manages the market risk associated with interest rate and foreign-exchange contracts by establishing and monitoring limits for the types and degree of risk that may be undertaken. The Company regularly measures this risk by using a value-at-risk methodology.

The Company's derivative activities are monitored by its risk-management committee as part of that committee's oversight of the Company's asset/liability and treasury functions. The Company's asset/liability committee is responsible for approving hedging strategies that are developed through its analysis of data derived from financial simulation models and other internal and industry sources. The resulting hedging strategies are then incorporated into the Company's overall interest rate risk-management and trading strategies. Responsibility for the implementation of hedging strategies is delegated to the Company's treasury risk-management centers.

Fair Value Hedges

The Company enters into interest rate swaps to (1) convert its nonprepayable fixed-rate long-term debt to floating-rate debt, and (2) convert fixed-rate certificates of deposit to variable-rate deposits. The Company's risk management policy is to convert 30 to 50 percent of all nonprepayable fixed-rate debt to floating-rate debt, with the percentage depending on contract interest rates and maturities. The percentage of fixed-rate certificates of deposit that are converted to variable rates varies with the volume of such liabilities.

The Company sells interest rate floor contracts to offset corresponding rate floors that exist in its variable-rate long-term debt. The Company's risk-management policy is to convert approximately 100 percent of all debt with rate floors to standard variable-rate debt.

For the year ended December 31, 20X0, the Company recognized a net loss of \$XXX (reported as [financial-statement line item caption] in the statement of operations), which represented the ineffective portion of all fair value hedges, including the time value of option contracts. All components of each derivative's gain or loss were included in the assessment of hedge effectiveness, except for the time value of

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option contracts. The Company also recognized a net gain of \$XXX (reported as [financial-statement line item caption] in the statement of operations) in relation to firm commitments that no longer qualified as fair value hedge items. The amounts discussed above are also referenced in Footnote X.

Cash Flow Hedges

The Company uses various types of interest rate swaps to convert floating-rate loans to fixed-rate loans. Specific types of loans and amounts that the Company hedges are determined based on prevailing market conditions and the current shape of the yield curve. The Company also uses basis swaps to “lock in” a desired spread between the Company’s interest-earning assets and interest-bearing liabilities. These swaps, which qualify for hedge accounting, usually have a term of two to three years, with (1) a pay rate indexed to the rates received on the Company’s variable-rate assets and (2) a receive rate indexed to rates paid on the Company’s various deposit liabilities. The specific terms and notional amounts of the swaps are determined based on management’s assessment of future interest rates, as well as on other factors, including loan-to-deposit ratios and short-term strategic initiatives.

By employing this strategy, the Company minimizes its exposure to volatility in LIBOR.

For the year ended December 31, 20X0, the Company recognized a net loss of \$XXX (reported as [financial-statement line item caption] in the statement of operations), which represented the total ineffectiveness of all cash flow hedges. All components of each derivative’s gain or loss were included in the assessment of hedge effectiveness. Also, because the Company determined that it was probable that certain forecasted transactions would not occur by the end of the originally specified time period or within an additional two-month period of time thereafter, the Company reclassified into earnings (financial-statement line item caption) \$XXX of net derivative gains from other comprehensive income. The amounts discussed above are also referenced in Footnote X.

For cash flow hedges, the gains and losses on derivative contracts that are reclassified from accumulated other comprehensive income to current-period earnings are included in the line item in which the hedged item is recorded in the same period the forecasted transaction affects earnings. As of December 31, 20X0, \$XXX of the deferred net gains on derivative instruments accumulated in other comprehensive income is expected to be reclassified as earnings during the next twelve months. This expectation is based on the expected timing of the occurrence of the hedged forecasted transactions. The maximum term over which the Company is hedging its exposure to the variability of future cash flows (for all forecasted transactions) is approximately three years. The amounts discussed above are also referenced in Footnote X.

Hedges of Net Investments in Foreign Operations

The Company uses forward-exchange contracts, currency swaps, and foreign-currency-denominated debt to hedge its net investments in foreign operations against adverse movements in exchange rates. The Company generally hedges 50 to 75 percent of the total beginning-period amount of net investments in foreign operations. The Company measures ineffectiveness based upon the change in spot rates.

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For the year ended December 31, 20X0, \$XXX of net losses related to these derivatives and foreign-currency denominated debt were included in the cumulative translation adjustment. For the same period, \$XXX of net losses was recorded in earnings representing the amount of the hedges' ineffectiveness. The amounts discussed above are also referenced in Footnote X.

Trading and Non-Hedging Activities

Risk Management

The Company purchases interest rate caps and put options on futures contracts and sells futures contracts to lock in reset rates on pay-variable-rate interest rate swaps. The Company uses this strategy to minimize its exposure to volatility in LIBOR. These products are not linked to specific assets and liabilities that appear on the balance sheet or to a forecasted transaction and, therefore, do not qualify for hedge accounting.

The Company also uses various purchased option-based products for overall asset/liability-management purposes, including options on interest rate swaps, floor contracts, and cap contracts. These purchased products are not linked to specific assets and liabilities that appear on the balance sheet and, therefore, do not qualify for hedge accounting.

Other

The Company enters into various interest rate and foreign-exchange derivative contracts as part of its other trading activities, which focus primarily on (1) providing customers with derivative products and (2) managing the Company's foreign-currency exchange risk on a macro basis. The Company also uses derivative instruments to manage risk in other trading portfolios, such as portfolios of emerging-markets securities.

Interest rate derivative instruments that the Company uses in its trading operations include interest rate swaps and options.

Foreign-exchange contracts that the Company enters into for trading purposes include foreign-currency spot contracts, forward contracts, futures contracts, option contracts, and swap contracts. When the circumstances are deemed appropriate, the Company structures its balance sheet in a manner that allows the Company to take positions in the currencies of emerging markets and foreign countries where it operates. Usually the Company takes these positions because it believes that it can maximize its spread from foreign operations by (1) funding local-currency assets with U.S. dollars rather than by using local-currency liabilities or (2) funding U.S.-dollar assets with local-currency liabilities. These positions will expose the Company to losses if the local currencies weaken against the U.S. dollar at a rate greater than the spread of the local-currency interest rate over the U.S. dollar interest rate; such losses could be significant if a major unanticipated devaluation were to occur. To date, however, these positions have been liquid in nature, and management has been able to close and re-open these positions as necessary.

Disclosures related to the activity of derivative-instrument gains and losses in other comprehensive income are not presented here, since ASC 220, *Comprehensive Income*, addresses those requirements. Refer to Example 10-1, Display of Cash-Flow Hedges in Other Comprehensive Income, included in this chapter.

Exhibit 10-3: Additional Footnote Disclosures of Derivative Instruments and Hedging Activities (Commercial/Industrial Entities)**Derivative Instruments and Hedging Activities**

The Company has operations in over thirty countries and sells machinery and equipment to automotive and equipment manufacturers in over one hundred markets. Fifty percent of the Company's revenues are generated from international customers. The Company's activities expose it to a variety of market risks, including risks related to the effects of changes in foreign-currency exchange rates, interest rates, and commodity prices. These financial exposures are monitored and managed by the Company as an integral part of its overall risk-management program. The Company's risk-management program focuses on the unpredictability of financial markets and seeks to reduce the potentially adverse effects that the volatility of these markets may have on its operating results.

The Company maintains a foreign-currency risk-management strategy that uses derivative instruments to protect its interests from unanticipated fluctuations in earnings and cash flows that may arise from volatility in currency exchange rates. Movements in foreign-currency exchange rates pose a risk to the Company's operations and competitive position, since changes in exchange rates may affect the profitability, cash flow, and business and/or pricing strategies of non-U.S.-based competitors. These movements affect cross-border transactions that involve direct-export machinery sales conducted in foreign currencies and raw-material purchases incurred in foreign currencies. Additionally, various amounts of debt and subsidiary royalties, as well as all investments in foreign subsidiaries, are denominated in foreign currency, thereby creating exposures to changes in exchange rates. The Company uses foreign-currency forward-exchange contracts, swaps, options, and non-U.S.-dollar-denominated debt to hedge these risks.

The Company maintains an interest rate risk-management strategy that uses derivative instruments to minimize significant, unanticipated earnings fluctuations that may arise from volatility in interest rates. The Company's specific goals are to (1) manage interest rate sensitivity by modifying the repricing or maturity characteristics of some of its debt and (2) lower (where possible) the cost of its borrowed funds. Fluctuations in interest rates create an unrealized appreciation or depreciation in the market value of the Company's fixed-rate debt when that market value is compared with the cost of the borrowed funds. The effect of this unrealized appreciation or depreciation in market value, however, will generally be offset by the income or loss on the derivative instruments that are linked to the debt.

The Company maintains a commodity-price risk-management strategy that uses derivative instruments to minimize significant, unanticipated earnings fluctuations that may arise from volatility in commodity prices. The manufacturing of some of the Company's products requires a significant volume of copper and aluminum. Price fluctuations in copper and aluminum commodities cause (1) an unrealized appreciation or depreciation of the Company's firm commitments to purchase metal when purchase prices under the firm commitment are compared with current commodity prices, (2) market values of copper and aluminum inventory to differ from the cost of those commodities under the firm commitment, and (3) actual cash outlays for the purchase of metal to differ from anticipated cash outlays. The Company uses futures and options contracts to hedge these risks.

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The Company also maintains a policy of requiring that all derivative contracts be governed by an International Swaps and Derivatives Association Master Agreement; depending on the nature of the derivative transaction, bilateral collateral arrangements may be required as well. When the Company is engaged in more than one outstanding derivative transaction with the same counterparty and also has a legally enforceable master netting agreement with that counterparty, the “net” mark-to-market exposure represents the netting of the positive and negative exposures with that counterparty. When there is a net negative exposure, the Company regards its credit exposure to the counterparty as being zero. The net mark-to-market position with a particular counterparty represents a reasonable measure of credit risk when there is a legally enforceable master netting agreement (i.e., a legal right of a setoff of receivable and payable derivative contracts) between the Company and that counterparty.

In all instances where the Company is a party to a master netting agreement, it maintains an accounting policy to offset the receivable or payable recognized upon payment of cash collateral against the fair value amounts recognized for derivative instruments that have also been offset under such master netting agreements. As of December 31, 20X0, the Company has recorded the fair value of derivative instrument assets of \$XXX in (balance-sheet line item caption) and derivative instrument liabilities of \$XXX in (balance-sheet line item caption). These amounts reflect the netting of certain derivative instrument assets and liabilities only when the conditions in ASC 210-20, *Balance Sheet—Offsetting*, have been met. As of December 31, 20X0, the amount recognized in (balance-sheet line item caption) for the right to reclaim cash collateral totaled \$XXXX. The amounts recognized in (balance-sheet line item caption) for the obligation to return cash collateral totaled \$XXXX. The amounts discussed above are also referenced in Footnote X.

By using derivative financial instruments to hedge exposures to changes in exchange rates, interest rates, and commodity prices, the Company exposes itself to credit risk and market risk. Credit risk is the risk that the counterparty might fail to fulfill its performance obligations under the terms of the derivative contract. When the fair value of a derivative contract is positive, the counterparty owes the Company, which creates repayment risk for the Company. When the fair value of a derivative contract is negative, the Company owes the counterparty and, therefore, does not assume repayment risk. The Company minimizes its credit (or repayment) risk in derivative instruments by (1) entering into transactions with high-quality counterparties whose credit ratings are AA/Aa or higher, (2) limiting the amount of its exposure to each counterparty, and (3) monitoring the financial condition of its counterparties. The Company also maintains a policy of requiring that all derivative contracts be governed by an International Swaps and Derivatives Association Master Agreement and, depending on the nature of the derivative transaction, also be governed by bilateral collateral arrangements.

Market risk is the risk that the value of a financial instrument might be adversely affected by a change in interest rates, currency exchange rates, or commodity prices. The Company manages the market risk associated with interest rate, commodity-price, and foreign-exchange contracts by establishing and monitoring parameters that limit the types and degree of market risk that may be undertaken.

The Company’s derivative activities are subject to the management, direction, and control of its Risk Management Committee (RMC). The RMC is composed of the Company’s chief executive officer, president, chief financial officer, and other officers

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within the Company. The RMC reports to the board of directors on the scope of the Company's derivatives activities. The RMC also (1) establishes a corporate policy that defines the risk-management objectives and philosophy relating to the Company's derivative activities; (2) provides guidelines for derivative-instrument usage; and (3) sets forth procedures for (a) control and valuation, (b) counterparty credit approval, and (c) monitoring and reporting derivative activity.

Fair Value Hedges

The Company enters into forward-exchange contracts to hedge the foreign-currency exposure of its firm commitments to purchase certain production parts from Germany and Brazil. The forward contracts that are used in this program mature in eighteen months or less, consistent with the related purchase commitments. The Company generally hedges between 60 and 80 percent of its total firm-commitment purchase contracts.

The Company uses interest rate swaps to economically convert a portion of its nonprepayable fixed-rate debt into variable-rate debt. The resulting cost of funds is lower than it would have been if variable-rate debt had been issued directly. Under the interest rate swap contracts, the Company agrees with other parties to exchange, at specified intervals, the difference between fixed-rate and floating-rate interest amounts, which is calculated based on an agreed-upon notional amount. The level of variable-rate debt (after the effects of interest rate swaps have been considered) is maintained at 35 to 50 percent of the total Company debt.

The value of the Company's inventory of copper and aluminum raw materials changes daily, consistent with price movements in the respective commodities markets. The Company uses futures contracts to manage price risks associated with this inventory and generally hedges 70 to 75 percent of the inventory's total value.

For the year ended December 31, 20X0, the Company recognized a net gain of \$XXX, (reported as [financial-statement line item caption] in the statement of operations), which represented the ineffective portion of all of the Company's fair value hedges. All components of each derivative's gain or loss were included in the assessment of hedge effectiveness. The Company also recognized a net gain of \$XXX (reported as [financial-statement line item caption] in the statement of operations) in relation to firm commitments that no longer qualified as fair value hedge items. The amounts discussed above are also referenced in Footnote X.

Cash Flow Hedges

The Company's direct-foreign-export sales are denominated in the customers' local currency. The Company purchases foreign-exchange put options and forward-exchange contracts as hedges of anticipated sales denominated in foreign currencies. The Company enters into these contracts to protect itself against the risk that the eventual dollar-net-cash inflows resulting from direct-foreign-export sales will be adversely affected by changes in exchange rates. Based on the Company's estimate of future foreign exchange rates, it hedges 50 to 75 percent of anticipated sales for the following twelve months.

The Company receives royalties from each of its European subsidiaries. The Company uses foreign-currency forward-exchange contracts and swap contracts that expire in less than twelve months to hedge against the effect that fluctuations in exchange rates may have on forecasted intercompany royalty cash flows.

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The Company purchases foreign-currency put options, with contract terms that normally expire within less than six months to hedge against the adverse effects that fluctuations in exchange rates may have on foreign-currency-denominated trade receivables.

The Company uses interest rate swaps to economically convert a portion of its variable-rate debt to fixed-rate debt. The resulting cost of funds is lower than it would have been had fixed-rate borrowings been issued directly. The level of fixed-rate debt, after the effects of interest rate swaps have been considered, is maintained at 50 to 65 percent of the total Company debt.

The Company enters into long-term sales contracts at spot prices with a number of its customers. As a hedge against possible price fluctuations in anticipated commodity purchases (which will be necessary to fulfill the sales contracts), the Company purchases copper and aluminum futures and options contracts. The futures and options contracts limit the unfavorable effect that potential price increases would have on metal purchases, and the futures contracts likewise limit the favorable effect of potential price declines.

For the year ended December 31, 20X0, the Company recognized a net loss of \$XXX (reported as [financial-statement line item caption] in the statement of operations), which represented the total ineffectiveness of all cash flow hedges. All components of each derivative's gain or loss were included in the assessment of hedge effectiveness. In addition, after discontinuing certain of its cash flow hedges, the Company determined that it was not probable that certain forecasted transactions would occur by the end of the originally specified time period or within an additional two-month period of time thereafter. Therefore, the Company reclassified a net gain of \$XXX as [financial-statement line item caption] into the statement of operations from accumulated other comprehensive income. The amounts discussed above are also referenced in Footnote X.

As of December 31, 20X0, \$XXX of deferred net gains on derivative instruments accumulated in other comprehensive income are expected to be reclassified as earnings during the next twelve months. Transactions and events that (1) are expected to occur over the next twelve months and (2) will necessitate reclassifying the derivative gains as earnings include (a) royalties earned, (b) actual direct-foreign-export sales, (c) the repricing of variable-rate debt, and (d) the sale of machinery and equipment that includes previously hedged purchases of aluminum and copper raw materials. The maximum term over which the Company is hedging exposures to the variability of cash flows (for all forecasted transactions, excluding interest payments on variable-rate debt) is eighteen months. The amounts discussed above are also referenced in Footnote X.

Hedges of Net Investments in Foreign Operations

The Company has numerous investments in foreign subsidiaries. The net assets of these subsidiaries are exposed to volatility in currency exchange rates. The Company uses both derivative and nonderivative financial instruments to hedge this exposure and measures the ineffectiveness of such hedges based on the change in spot foreign exchange rates.

The Company manages currency exposure related to the net assets of the Company's Latin American subsidiaries primarily through foreign-currency-denominated debt agreements that the Company (the "parent company") enters

(continued)

into. Gains and losses in the parent company's net investments in its subsidiaries are economically offset by losses and gains in the parent company's foreign-currency-denominated debt obligations.

The Company also enters into foreign-currency forward-exchange contracts to hedge the foreign-currency exposure of its investments in European and Asian subsidiaries. These agreements are in place for each subsidiary and have contract terms of nine months to one year.

For the year ended December 31, 20X0, \$XXX of net losses related to (1) the foreign-currency-denominated debt agreements and (2) the forward-exchange contracts were included in the Company's cumulative translation adjustment. For the same period, \$XXX of net losses was recorded in earnings representing the amount of the hedges' ineffectiveness. The amounts discussed above are also referenced in Footnote X.

Other

As previously discussed, the Company has entered into fixed-price contracts for the purchase of copper and aluminum. While these contracts meet the definition of a derivative under ASC 815, the Company has determined that the normal purchases/normal sales exception included in ASC 815-10-15 applies to such contracts. Accordingly, such contracts are not accounted for as derivatives pursuant to ASC 815.

Exhibit 10-4: Footnote Disclosure of the Accounting Policy for Assessing Impairment of Hedged Assets and Liabilities

Assets and liabilities designated as hedged items are assessed for impairment or for the need to recognize an increased obligation, respectively, according to generally accepted accounting principles that apply to those assets or liabilities. Such assessments are made after hedge accounting has been applied to the asset or liability and exclude a consideration of (1) any anticipated effects of hedge accounting and (2) the fair value of any related hedging instrument that is recognized as a separate asset or liability. The assessment for an impairment of an asset, however, includes a consideration of the losses that have been deferred in other comprehensive income as a result of a cash flow hedge of that asset. Those losses are reclassified in earnings if at any time the impairment analysis indicates that the 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 item in the future. If an impairment loss is recognized on an asset to which a hedged forecasted transaction relates, any offsetting gain or loss related to that hedged item in accumulated other comprehensive income is reclassified to earnings.

10.5 Questions and Interpretive Responses

Disclosures by Type of Risk

Question No. 10-1: Under ASC 815, must an entity disclose derivative contracts by the type of risk that is being hedged (which would be similar to how the entity would disclose market risks under the provisions of SEC Financial Reporting Release No. 48)?

PwC Interpretive Response: Yes. This type of disclosure is required based on the derivative disclosure guidance effective for both interim and annual periods beginning after November 15, 2008.

Disclosure—Interim Reporting

Question No. 10-2: Must publicly traded entities include the qualitative and quantitative disclosures required the standards, in the interim-period information that they issue for external reporting purposes for interim periods?

PwC Interpretive Response: Yes. The disclosure requirements explicitly require information regarding derivative instruments to be disclosed for every annual and interim reporting period for which a balance sheet and income statement are prepared. Given the amendments to the derivative disclosure requirements in 2008 and the explicit requirement to provide the required information for every reporting annual and interim reporting period when a balance sheet and income statement are presented, we believe the disclosures should be included in the interim periods.

Reporting Derivative Transactions in the Statement of Cash Flows

Question No. 10-3: An entity has hedged the forecasted purchase of inventory. Consistent with cash flow hedge accounting under ASC 815, the effective portion of gains and losses on the hedging instrument are accumulated in other comprehensive income. The forecasted purchase has occurred but the inventory is not yet sold at the reporting date. The hedging instrument has expired and the gains and losses on it are realized. How should the entity present the cash flows from the realized gains and losses on the hedging instrument in the statement of cash flows?

PwC Interpretive Response: The presentation of hedging activities in the statement of cash flows depends on the entity's accounting policy. ASC 230-10-45-27 states as follows:

“Generally, each cash receipt or payment is to be classified according to its nature without regard to whether it stems from an item intended as a hedge of another item. For example, the proceeds of a borrowing are a financing cash inflow even though the debt is intended as a hedge of an investment, and the purchase or sale of a futures contract is an investing activity even though the contract is intended as a hedge of a firm commitment to purchase inventory. However, cash flows from derivative instruments that are accounted for as fair value hedges or cash flow hedges [under ASC 815] may be classified in the same category as the cash flows from the items being hedged provided the derivative instrument does not include an other-than-insignificant financing element at inception, other than a financing element inherently included in an at-the-market derivative instrument with no prepayments (e.g., the forward points in an at-the-money forward contract) and that accounting policy is disclosed. If the derivative instrument includes an other-than-insignificant financing element at inception, all cash inflows and outflows of the derivative instrument shall be considered cash flows from financing activities by the borrower. If for any reason hedge accounting for an instrument that hedges an asset, liability, firm commitment, or forecasted transaction is discontinued, then any cash flows subsequent to the date of discontinuance shall be classified consistent with the nature of the instrument.”

(continued)

Accordingly, depending on its elected accounting policy, the entity may present the cash flows from the hedging instrument as either an investing activity or an operating activity (as a change in working capital components because the hedged item in this example is the forecasted purchase of inventory). However, if the entity's accounting policy is to present the cash flows from the hedging instruments in the same category in the statement of cash flows as the category for the cash flows from the hedged items, it must disclose such a policy in the financial statements. Any change in the policy for classifying designated hedging activities in the statement of cash flows would be considered a change in accounting principle.

Question No. 10-4: Company A hedges its fixed rate debt in a fair value hedging relationship using an interest rate swap that is off-market at inception by \$5 million due to the receipt of an upfront cash payment from the swap counterparty. Due to the off-market nature of the interest rate swap, it might be deemed to contain a financing element.

In accordance with ASC 815-10-45, should Company A reflect the financing element in the financing activities section of its statement of cash flows?

PwC Interpretive Response: ASC 815-10-45-12 states “If an other-than-insignificant financing element is present at inception—other than a financing element inherently included in an at-the-market derivative instrument with no prepayments (that is, the forward points in an at-the-money forward contract)—then the borrower shall report *all* cash inflows and outflows associated with that derivative instrument in a manner consistent with financing activities as described in paragraphs 230-10-45-14 through 45-15.”

ASC 815-10-45 did not establish any bright lines for determining if an upfront fee or any other off-market feature is other-than-insignificant. We have interpreted the term “insignificant” as denoting an amount that is less than 10 percent of the present value of an at-the-market derivative's fully prepaid amount.

Therefore, Company A should first determine the present value of the cash flows associated with the fixed leg of an at-the-market interest rate swap (e.g., zero fair value at inception) purchased from the same counterparty on the same date, and compare it with the upfront payment received of \$5 million. If the upfront payment is greater than 10 percent of the present value of the cash flows associated with the fixed leg of the at-the-market interest rate swap, the financing element caused by the upfront payment is determined to be other-than-insignificant.

In instances when the financing element is considered to be other-than-insignificant at inception, *all* of the cash flows associated with the swap (i.e. not just the cash flows associated with the portion that represents the financing element) should be included in financing activities as stated in ASC 815-10-45. However, if the financing element was *not* considered to be other-than-insignificant at inception (in other words, the upfront payment was less than 10 percent of the present value of the cash flows associated with the fixed leg of the at-the-market interest rate swap) *no* element of the cash flows would be classified as financing. Instead, the cash flows would be classified consistent with the nature of the derivative instrument, or classified in the same category as the cash flows from the items being hedged provided that accounting policy is disclosed.

Question No. 10-5: How should the cash flows from Company A's economic hedges be presented in the statement of cash flows?

PwC Interpretive Response: Economic hedges are derivative instruments that do not qualify or have not been designated in accounting hedges. There are two alternatives for the presentation of cash flows from economic hedges. In accordance with ASC 230-10, the cash receipts or payments from Company A's economic hedges would generally be classified according to their nature without regard to whether the cash flows stemmed from an item intended as a hedge of another item. For example, the purchase or sale of a futures contract is an investing activity even though the contract is intended as an economic hedge of a firm commitment to purchase inventory. Alternatively, we believe an entity may elect as an accounting policy to classify the cash flows from its economic hedges in the same category as the cash flows from the items subject to the economic hedging relationships provided that the Company's accounting policy supporting such classification is reasonable, disclosed and applied consistently. Regardless of the approach selected, as previously discussed, the cash flows from any of Company A's derivatives that contain an other-than-insignificant financing element, as defined by ASC 815-10-45, must be presented by the company (the borrower) in the financing section of its statement of cash flows.

Company A should consider *all* relevant facts and circumstances in determining the nature of its derivative instruments and their presentation in the statement of cash flows. Cash flow considerations for economic derivatives can also be viewed similar to that of trading securities. As described in ASC 230-10-45-19, securities classified as trading securities should be classified in the statement of cash flows based on the nature and purpose for which the securities were acquired. For instance, if Company A were a broker or dealer, active in the trading of derivative instruments, the cash flows from such derivatives would appropriately be presented in the operating section of its statement of cash flows, provided that they do not include an other-than-insignificant financing element at inception. If Company A was not engaged in trading the derivatives, the derivatives would be classified in the investing section of the statement of cash flows.

Question No. 10-6: How should the termination payments/receipts related to a forward-starting swap hedging the forecasted issuance of fixed rate debt be classified in the statement of cash flows?

For example, companies planning to issue debt at a future date and seeking to hedge the interest rate risk in the anticipated debt issuance sometimes use a forward-starting swap as a hedging instrument. Hedges of forecasted issuances of debt with forward-starting swaps require the cash flow hedge relationship to be terminated when the risk of variability ceases. If market rates have increased, the company will be entitled to a cash receipt upon settlement from the counterparty. If market rates have decreased, the company must make a cash payment to the swap counterparty upon settlement.

PwC Interpretive Response: We believe the choice between an investing or an operating activity for the termination payment or receipt is an accounting policy decision. ASC 230-10-45-27 states, " ... cash flows from a derivative instrument that is accounted for as a fair value hedge or cash flow hedge may be classified in the same category as the cash flows from the items being hedged ..."

(continued)

We believe that when the hedged item is the forecasted interest payments, and the hedging derivative does not include an other-than-insignificant financing element at inception, the company may classify the termination payment or receipt as an investing or as an operating cash flow. If the company decided to classify the termination payment/fee in the same category on the statement of cash flows as the forecasted interest payments that were originally being hedged, it would be considered an operating cash flow. ASC 230-10-45-17 states “cash payments to lenders and other creditors for interest” are operating activities.

Although less common in practice, the company may alternatively designate a cash flow hedge of the variability of the proceeds that will be received when the debt is issued. We believe that, in this case, the company may classify the termination payment or receipt when the debt is issued as an investing or as a financing cash flow because the use of a forward-starting swap could be analogized to the company creating synthetic discount debt or synthetic premium debt. Under this view both the terminated payment/receipt and the debt issuance proceeds could be collectively classified as financing activities. Choosing between the alternative approaches is an accounting policy decision and therefore should be consistently applied in all periods for similar transactions and disclosed.

Classifying Derivatives as Held for Trading

Question No. 10-7: ASC Master Glossary notes that the determination of what constitutes trading purposes is based on the intent of the issuer, consistent with ASC 320-10. While ASC 815-10-45-9 indicates that when derivatives are classified as held for trading, transfers into and out of trading should be rare. When may derivatives that are held for trading purposes be transferred in and out of that category?

PwC Interpretive Response: We believe that there are some instances in which transfers of derivatives into and out of the trading category are appropriate.

They involve the use of hedge accounting under ASC 815. At the March, 2003 EITF meeting, the EITF approved a revision to the abstract of pre-codification EITF 02-3 which clarified that derivatives held for trading purposes under that standard may be used as hedging instruments under ASC 815, prospectively, if all of the applicable criteria of ASC 815 are met. As a result, companies may have to (1) designate hedging relationships with derivatives that had been previously classified as held for trading purposes (i.e., a transfer out of trading) or (2) dedesignate hedging relationships with derivatives that should then be classified as held for trading purposes (i.e., a transfer into trading).

We believe there are other instances in which transfers of derivatives out of the trading category may not be appropriate because it would alter the net presentation in the income statement of derivative gains and losses. These instances involve the transfers of derivatives out of trading in order to designate the contract as (1) a normal purchase or normal sale or (2) an all-in-one hedge. In either of those cases, the company could record gross revenue for the contract when it is physically settled.

Income Statement Classification of Derivative Gains and Losses

Question No. 10-8: Companies may issue warrants that are classified as liabilities and measured at fair value pursuant to ASC 480, *Distinguishing Liabilities from Equity*, ASC 815, or ASC 815-40, *Contracts in Entity's Own Equity*. The terms of

these warrants may entitle the holder to dividend payments when dividends are paid to common shareholders. How should the issuer classify the dividend payments to the warrant holder in its income statement?

PwC Interpretive Response: We believe the warrant's rights to dividend distributions impact the fair value of the warrant and should be accounted for as a change in fair value of the warrant through the income statement. The payment in cash for the actual dividend would then reduce the fair value basis of the warrant on the balance sheet. As a result, the issuer would recognize a gain or loss on the fair value change of the warrant rather than recognize a warrant expense only when a dividend is declared.

At the 2003 AICPA National Conference on Current SEC Developments, the staff discussed the topic of income statement presentation but only for derivatives used in economic hedges. However, the model expressed by the SEC staff would still apply in this fact pattern. Therefore, all gains or losses on the warrant should be shown on one line item of the income statement. Once the line item is identified, this accounting policy decision must be applied consistently by the company for all similar instruments.

Question No. 10-9: Company X is a public company with a calendar year-end. During the course of the year, Company X entered into two derivatives.

The first derivative, an interest rate swap contract, economically hedged Company X's exposure to the variability in cash flows of a specific floating-rate asset. The swap provided for Company X to receive a fixed rate of interest and pay a floating rate of interest based on a notional amount that matched the principal amount of the floating rate asset.

The second derivative, an interest rate cap contract, economically hedged Company X's exposure to the variability in cash flows on a specific floating-rate liability should interest rates rise above a certain level. The cap provided for Company X to receive cash payments when interest rates exceeded the strike (specified level of interest rate in the cap) based on a notional amount that matched the principal amount of the floating-rate liability.

Company X did not apply hedge accounting under ASC 815 for the two derivatives because either: (1) the hedging relationship did not meet the criteria specified in ASC 815 (e.g., the documentation criteria was not met) or (2) Company X did not elect to apply hedge accounting under ASC 815. Because Company X did not apply hedge accounting, these derivatives, often referred to as *economic hedges*, have been recorded at fair value on the balance sheet with changes in fair value recorded in current-period earnings.

How should the gains and losses on the two derivatives be presented in Company X's income statement?

PwC Interpretive Response: ASC 815 does not provide guidance on income statement classification for the gains or losses on derivatives.

For a derivative designated in a hedging relationship under ASC 815, practice generally recognizes the effective portion of the derivative's gain or loss on the same income statement line item as the hedged item's loss or gain. However,

(continued)

practice is mixed with respect to the recognition of the ineffective portion of the derivative's gain or loss (and any portions of the derivative's gain or loss that are excluded from the assessment of hedge effectiveness). Some companies include such amounts on the same income statement line item as the hedged item's loss or gain, while other companies will recognize them in a separate caption, such as "other income/expense."

With respect to the classification of the gain or loss for a derivative that is not designated in a hedging relationship under ASC 815, but is economically hedging an asset or liability, practice is also mixed similar to the treatment of hedge ineffectiveness noted above. We believe either approach (i.e., either on the same income statement line item as the economically hedged item or on a separate line item, such as "other income/expense") is acceptable provided it is applied consistently for each reporting period. In our example, Company X could elect to classify all the gains or losses on the swap and cap in the same income statement line item as their hedged items which would result in the gains or losses on the derivatives being reported in different line items of the income statement. All the gains or losses on Company X's swap would be recognized in the "interest income" line item of the income statement, while all the gains or losses on Company X's cap would be recognized in the "interest expense" line item of the income statement. Alternatively, Company X may elect to recognize all the gains or losses on the two derivatives in the "other income/expense" line item of the income statement.

ASC 815 specifies its derivative disclosure requirements, with further clarification provided in implementation guidance, including ASC 815-20-45-1 for income statement classification. The Board's intent for these disclosures is to assist investors and creditors in understanding a company's objectives for all its derivatives. When derivatives are used as economic hedges of assets or liabilities, preparers are required to disclose the purpose of the derivative activity. Further, we believe preparers should disclose their accounting policy with respect to economic hedges, including where the gains or losses are presented on the income statement and the amounts for each period.

Question No. 10-10: Company A enters into a swap designated to pay euro LIBOR floating/receive U.S. dollar LIBOR floating in a net investment hedge of its euro-denominated operations as permitted by ASC 815-20-25-67. The Company is accounting for the swap's ineffectiveness (both settlement payments and changes in fair value) through the use of the spot method in accordance with ASC 815-35-35-5 through 35-15. Under ASC 815-35-35, the interest accrual/periodic cash settlement components of such a swap are excluded from the measurement of ineffectiveness and should be reported in earnings; however, there is no guidance as to the geographic presentation in earnings.

Where on the income statement should these components be recorded?

PwC Interpretive Response: In practice, we observe that financial statement preparers often record such components in either an expense line within income from operations, or as a component of interest expense. We believe that the preferred income statement location for the recognition of interest accrual/periodic cash settlement payments for this swap should be as a component within income from operations since the component does not represent a charge for the use

(continued)

of money. However, the recognition of these components in Interest Expense is acceptable if adequate disclosure is presented in the footnotes to the financial statements.

Since the swap qualifies for hedge accounting under the provisions of ASC 815, recognition in separate line items of the income statement of settlement payments and changes in fair value is permitted.

Net Investment Hedge Settlement Cash Flow Classification

Question No. 10-11: XYZ Company, a U.S. parent company, entered into a foreign currency forward exchange contract to sell British Pounds and receive U.S. Dollars and designated it as a net investment hedge of its British subsidiary whose functional currency is the British Pound. The effective portion of the changes in the fair value of the forward exchange contract are recorded in the cumulative translation adjustment (CTA) account, which is a component of other comprehensive income and will remain there until the investment in the subsidiary is sold or substantially liquidated in accordance with ASC 830, *Foreign Currency Matters*. At the expiration of the forward exchange contract, the Company received \$2 million from the counterparty.

How should the cash received, or paid, from the settlement of a derivative accounted for as a net investment hedge be classified on the statement of cash flows?

PwC Interpretive Response: Typically the cash received, or paid, from settlement of a net investment hedge will be classified as an investing activity in the statement of cash flows. Investing classification would be appropriate as the hedged item is the investment in a foreign subsidiary and the cash paid or received from acquiring or selling the subsidiary would typically be classified as investing under ASC 230-10-45. Additionally, the original basis for conclusions of ASC 230-10-45 further supports an investing classification as the Board believed that the purchase or sale of a forward contract is an investing activity. Therefore, the \$2 million received from the settlement of a net investment hedge would be classified as an investing inflow.

If the foreign currency forward contract contains an other-than-insignificant financing element at inception (such as a significant receipt of cash by XYZ Company on, or immediately after, the trade date resulting in a liability position to XYZ Company), all cash flows for that contract shall be reported as financing activities in the statement of cash flows. Also if the hedging instrument in a net investment hedge is a non-derivative financial instrument, such as foreign denominated debt, the cash flows related to the net investment hedge would be classified according to the nature of the non-derivative instrument. In the case of debt instruments, interest payments are operating activities and the principal repayments are financing activities.

Margin Deposits

Question No. 10-12: Futures exchanges require an initial margin deposit and maintenance of the margin, as long as the contract is open. Should the futures margin deposit be classified as part of the carrying amount of an item that is being hedged?

PwC Interpretive Response: No. The margin deposit represents a current receivable from the broker and should not be included as part of the carrying amount of the hedged item. The margin deposit also does not constitute an initial net investment, since it is a separate contractual requirement imposed by the futures exchange (i.e., as collateral for the futures contract) and is not a part of the futures contract itself.

ASC 815-10-45 provides a company with the opportunity to net margin deposits with matching counterparty balances if its derivative positions are subject to master netting agreements. A margin deposit may be netted with the net fair value position of a derivative instrument if the requirements of ASC 210-20-45-1 and ASC 815-10-45-5, (without regard to the condition in paragraph 210-20-45-1(c)), are met and the company elects to do so as an accounting policy. The election must be disclosed and consistently applied.

10.6 Examples

Example 10-1: Display of Cash Flow Hedges in Other Comprehensive Income

As of December 31, 20X6, ABC Company (the “Company”), a U.S. based commodity manufacturer and exporter, has entered into the following cash-flow hedge transactions. All figures presented on the following pages are in thousands.

1. In 20X4, the Company entered into a forward exchange contract to hedge the foreign-currency risk associated with the anticipated purchase of equipment from a vendor in the UK¹ (i.e., a cash-flow hedge of a forecasted foreign-currency-denominated transaction). The purchase occurred as planned at the end of 20X4, and the loss recognized on the forward exchange contract was deferred in other comprehensive income and is being reclassified into earnings consistent with the depreciation of the equipment.
2. In 20X4, the Company entered into a 10-year interest-rate swap concurrent with its issuance of 10-year variable-rate debt (i.e., a cash-flow hedge of future variable-rate interest payments).
3. Throughout the period spanning 20X3 to 20X6, the Company continuously purchased corn futures contracts to hedge its anticipated purchases of corn inventory (i.e., a cash-flow hedge of future variable corn-price payments). The Company applies the first-in first-out method (“FIFO”) method to value its inventory.
4. In January 20X6, the Company entered into a two-year forward exchange contract to hedge a forecasted export sale of corn cereal to a large customer in Japan. The sale is to be denominated in Japanese yen and is expected to occur in December 20X8. In June 20X6, the Company closed out the forward contract, but it does not expect the forecasted transaction not to occur (i.e., a cash-flow hedge of a forecasted foreign-currency-denominated transaction).

The following tables present a before-tax and after-tax reconciliation of beginning and ending accumulated-other-comprehensive-income amounts for 20X6 and are

(continued)

¹ In this transaction, the Company had a selection of vendors in the U.K. from which to purchase the equipment. The Company determined at the beginning of 20X4 that it was best to hedge the foreign currency exposure on the expected equipment price (through a forward exchange contract) and continue to search for a vendor of choice rather than to negotiate a firm commitment with a specific vendor.

used by the Company as supporting documentation for the comprehensive-income display and disclosures that are required in the financial statements by ASC 220, *Comprehensive Income*, as amended by ASC 815. The required ASC 220 financial-statement disclosures follow the supporting documentation tables.

**Before-Tax Rollforward of Accumulated Other Comprehensive
Income (AOCI) in Equity**

	Year Adjustments Originated in AOCI	Beginning Balance in AOCI 1/1/X6 DR (CR)	Derivative (Gains) Losses Recognized in OCI in 20X6	Amount Amortized or Reclassified out of OCI to Earnings	Ending Balance in AOCI 12/31/X6 DR (CR)
Equipment ²	20X4	\$ 240	N/A	\$ (60)	\$180
Interest-rate swap hedging variability of future cash flows ³	20X4–20X5	(80)	(20)	10	(90)
Futures hedging forecasted purchase of inventory ⁴	20X3–20X5	(350)	(170)	300	(220)
Forward hedging future export sale ⁵	20X6	—	100	—	100
Totals		<u>\$(190)</u>	<u>\$ (90)</u>	<u>\$250</u>	<u>\$ (30)</u>

**After-Tax Rollforward of Accumulated Other Comprehensive
Income (AOCI) in Equity⁶**

	Year Adjustments Originated in AOCI	Beginning Balance in AOCI 1/1/X6 DR (CR)	Derivative (Gains) Losses Recognized in OCI in 20X6	Amount Amortized or Reclassified out of OCI to Earnings	Ending Balance in AOCI 12/31/X6 DR (CR)
Equipment ²	20X4	\$ 144	N/A	\$ (36)	\$108
Interest-rate swap hedging variability of future cash flows ³	20X4–20X5	(48)	(12)	6	(54)
Futures hedging forecasted purchase of inventory ⁴	20X5	(210)	(102)	180	(132)
Forward hedging future export sale ⁵	20X6	—	60	—	60
Totals		<u>\$(114)</u>	<u>\$ (54)</u>	<u>\$150</u>	<u>\$ (18)</u>

² The initial loss deferred in OCI was \$300. The life of the equipment is five years, resulting in a removal from OCI of \$60 per year of the previously deferred loss. The timing and percentage of the removal matches the timing and percentage of the equipment's annual depreciation. For purposes of this example, it is presumed that the equipment has no salvage value.

³ Amounts deferred in OCI are recognized in earnings as the variable rate changes.

⁴ Amount reflected in OCI represents the effects of netting the results from the purchase of several futures contracts each year along with reclassifications to earnings pursuant to inventory sales. Amounts removed from OCI and recognized in earnings vary depending on the company's inventory cost flow assumption (FIFO, for purposes of this example).

⁵ The amount will be removed from OCI at the time that the forecasted sale occurs.

⁶ The analysis assumes that there is a 40 percent effective tax rate.

(continued)

Financial Statement Disclosures

The following table displays the activity in OCI in a combined statement of earnings and comprehensive income.

ABC Company Statement of Earnings and Comprehensive Income⁸ for the Year Ended December 31, 20X6 DR(CR) (in 000s)

Earnings before taxes:		
Gross profit	\$(300)	
Depreciation expense	60	
Interest income	(10)	
Total before-tax earnings	(250)	
Income tax expense (at 40 percent)	100	
Earnings after taxes		(150)
Other comprehensive (income) loss (net of tax):		
Cash-flow hedges:		
Net derivatives gains arising during the period	(54)	
Reclassification adjustments ⁷	150	
Subtotal		96
Comprehensive income		\$ (54)

⁷ The income-statement line item for each reclassification adjustment is not presented in this analysis. Note: Alternatively, in this illustrative example, the components of other comprehensive income could be displayed before tax, with one amount shown for the aggregate income-tax expense.

⁸ This statement reflects only those elements of OCI related to hedge accounting.

The disclosures of the related tax effects allocated to each component of the balances accumulated in other comprehensive income would be presented as follows:

ABC Company Notes to Financial Statements Disclosure of Related Tax Effects Allocated to Each Component of Other Comprehensive Income December 31, 20X6 (in 000s)

	Before-Tax Amount DR (CR)	Tax Expense (Benefit) DR (CR)	Net-of-Tax Amount DR (CR)
Effects of cash flow hedges included in OCI:			
Derivative gains	\$ (90)	\$ 36	\$ (54)
Reclassification adjustments	250	(100)	150
Total	\$160	\$ (64)	\$ 96

Note: Alternatively, in this illustrative example, the tax amounts for each component can be displayed parenthetically on the face of the financial statement in which OCI is reported.

(continued)

The disclosure of the components accumulated in OCI would be as follows:

ABC Company
Notes to Financial Statements
Disclosure of Accumulated Other Comprehensive Income,
Before Tax December 31, 20X6

	Forward Exchange Contracts** DR (CR)	Interest-Rate Swaps DR (CR)	Futures Contracts DR (CR)	Accumulated Other Comprehensive Income DR (CR)
Beginning balance*	\$240	\$(80)	\$(350)	\$(190)
Current-period change	40	(10)	130	160
Ending balance	\$280	\$(90)	\$(220)	\$ (30)

* All amounts shown before tax. Note: Although this table displays the change in OCI for each type of derivative contract, ASC 815-30 require disclosures of only the changes in the aggregate cash-flow hedge amounts in OCI. Alternatively, in this illustrative example, the balances of each classification within accumulated other comprehensive income can be displayed in a statement of changes in equity or in a statement of financial position.

** Amounts represent the combined activity for the anticipated equipment purchase and the forward exchange contract for the forecasted sale of corn cereal.

Chapter 11:

Effective Date and Transition

Executive Takeaway

- ASC 815, Derivatives and Hedging (formerly FAS 133), as amended, became effective for calendar-year entities on January 1, 2001. Still entities will continue to face transition issues related to the implementation guidance released by the FASB.
- Numerous updates, amendments and DIG Issues (interpretations of and modifications to ASC 815), have been issued since 2000. This guidance has been incorporated into various sections of ASC 815. To effectively apply ASC 815, companies must possess an understanding of the updates, amendments and issues that are applicable to their transactions.
- There are several unique transition rules specific to the application of ASC 815's amendments and implementation issues. On July 1, 2009, the FASB Codification became the single source of authoritative nongovernmental U.S. GAAP. The codified guidance in ASC 815 does not include transition guidance for amendments and implementation issues that are fully effective as of December 31, 2008. Having a clear understanding of the transition guidance and its challenges will provide companies with a road map to successful implementation.

11.1 Impact of Codification on Effective Date and Transition

The *FASB Accounting Standards Codification*TM (the “Codification”) is the single source of authoritative nongovernmental U.S. GAAP effective July 1, 2009. The Codification is effective for financial statements that cover interim and annual periods ending after September 15, 2009. All guidance included in the Codification is considered authoritative effective July 1, 2009.

As the standard setters amend existing codified guidance in ASC 815 or other topics affecting derivative instruments and hedging activities, both the current paragraph and the updated paragraph addressing the guidance will reside in the codified standard until such time that the new guidance is completely effective.

During any transition period, entities are provided with the following guidance:

- The current paragraph will remain and be supplemented by the newly amended paragraph as “Pending Content.” In addition, both the transition date and a link to the related transition guidance will be included within the “Pending Content.”
- The transition and effective date guidance specific to an amended paragraph will generally be codified within the Topic and Sub-Topic under Section 65, Transition and Open Effective Date Information.
- When the newly amended paragraph is fully effective, the outdated transition and effective date guidance will be removed from the amended paragraph and Section 65. However, such guidance will remain available elsewhere in the FASB codification.

The codified guidance as of July 1, 2009 does not include the transition guidance for amendments and implementation issues that are fully effective as of December 31, 2008. The *FASB Accounting Standards Codification*TM *Notice to Constituents* (v1.05) stated that “...entities that need to apply GAAP for the first time may need to access the original standards to determine the relevant transition guidance.”

PwC Observation: Entities that are adopting ASC 815 for the first time (e.g., new subsidiaries or equity method investees) or restating historical financial information face significant challenges related to the implementation of historical transition rules and effective dates. The transition rules and effective dates for amended guidance prior to December 31, 2008 have not been codified by the FASB in the ASC. Entities are required to access the original authoritative literature to individually determine and apply the relevant transition guidance and effective dates impacting the information and time period for which the financial statements are prepared.

We understand it was not the FASB’s intention to allow entities to make an accounting policy election that it will either, 1) implement the fully effective codified guidance, as if it always existed in its amended form (at the time the entity is adopting ASC 815), or 2) access the original standards and implementation guidance to individually determine the relevant transition guidance and timeframe for each amendment. While not codified, the original guidance remains applicable to historical financial information.

Any prospective amendments made to ASC 815 (including implementation issues) are expected to contain relevant transition guidance. An entity that is applying those amendments, subsequent to their initial adoption of ASC 815, would be required to apply those specific transition provisions included in that transition guidance.

The remainder of this chapter will provide a summary of the historical guidance, effective dates, transition provisions and other information that will be useful in applying ASC 815, as amended.

11.2 Original Effective Dates and Transition Guidance

The guidance in ASC 815, Derivatives and Hedging, as originally established (by FASB Statement No. 133, *Accounting for Derivative Instruments and Hedging Activities*) became effective for all fiscal quarters of fiscal years beginning after June 15, 2000 (January 1, 2001, for calendar-year entities).

Early application of ASC 815 was permitted as of the beginning of any fiscal quarter subsequent to June 15, 1998 (the issuance date of the Standard). The Board included the early-adoption provision to allow entities to immediately obtain the perceived benefits of the Standard. However, retroactive application of ASC 815 to financial statements of prior periods was not permitted. The FASB's prohibition on retroactive application reflected its concerns about the complexity and subjectivity that might be involved in the retroactive designation of hedges. For example, an entity that chose to adopt this guidance as of the beginning of the fourth quarter of 2000 would not have restated its financial statements for the first three quarters of 2000.

Similarly, any subsequently issued implementation guidance, which provides interpretations and modifications of ASC 815, is also applied on a prospective basis. Retroactive application is generally not permitted, consistent with the provisions of the non-codified DIG Issue K5, *Miscellaneous: Transition Provisions for Applying the Guidance in Statement 133 Implementation Issues* (DIG Issue K5). However, various DIG Issues contain information on implementation of the specific guidance within their contents. Although DIG Issue K5 and the transition guidance described in each DIG Issue were not codified by the FASB, the transition provisions remain applicable.

11.2.1 Background

Most entities adopted ASC 815 effective January 1, 2001. Although the Standard has been effective for many years, it is important to note that companies will continue to face transition questions related to amendments and implementation guidance issued by the FASB to address certain complexities within the Standard. An understanding of the background and principles upon which the historical transition guidance is based will provide a backdrop for successfully implementing this guidance for the first time as well as transitioning through subsequent amendments or implementation issues.

Hedge accounting is based on an entity's intent *at the time* a hedging relationship is executed. Thus, upon the initial application of ASC 815, all existing hedging relationships had to be designated and documented in accordance with the provisions of ASC 815. Application of ASC 815's transition provisions can be complex, and they begin with an evaluation of the nature of the hedging relationship (if any) that existed *before* the initial application of ASC 815. The transition provisions vary depending on the nature of the hedging relationship and the type of hedging instrument utilized. If no hedging relationship existed prior to an entity's adoption of ASC 815, the entity's transition adjustment generally would be reflected as a cumulative-effect-type adjustment of net income.

To prevent entities from selectively affecting the transition adjustments by changing previously designated hedging relationships, retroactive application of ASC 815, as

discussed above, was not permitted. The transition rules for subsequently issued implementation guidance, such as DIG Issues, generally follow this same principle and require prospective implementation for all implementation guidance *posted* to the FASB's Web site *after* an entity's initial adoption of ASC 815.

ASC 250, *Accounting Changes and Error Corrections*, and specifically ASC 250-10-45-3, indicates that updates to Codified standards normally will provide specific transition requirements. However, in the unusual instance that there are not transition requirements specified to a particular update, a change in accounting principle effected to adopt the requirements of that update shall be reported in accordance with ASC 250-10-45-5 through 45-8. We expect that transition guidance will be provided with any future updates to ASC 815 affecting derivative instruments and hedging activities.

Refer also to DH 11.3, Question Nos. 11-1, 11-2 and 11-3.

11.2.2 Classification of Transition Adjustments and Disclosures

Transition adjustments and the related income tax effects (current or deferred) resulting from the adoption of implementation guidance must be reported on a net-of-tax basis in net income (earnings) or other comprehensive income (where appropriate) as the effect of a change in accounting principle. The provisions of ASC 815 and the related implementation guidance specifically require prospective application only. The provisions of ASC 250-10, which require retrospective application as the method for reporting a change in accounting principle, would not apply.

For example, in the accounting for a contract as a freestanding derivative financial instrument, compliance with new implementation guidance would result in reporting a cumulative-effect-type adjustment in that period. Any transition adjustment reported as a cumulative-effect-type adjustment of accumulated other comprehensive income would be subsequently reclassified into earnings applying the approach described in ASC 815-30-35-38 through 35-41. Furthermore, as discussed in DH 10, the amounts of gains and losses reported in accumulated other comprehensive income and associated with the transition adjustment that are being reclassified into earnings during the 12 months following the initial application date must be disclosed in accordance with ASC 815-30-50 or 815-35-50.

In accordance with ASC 250-10-50, an entity is required to make specific disclosures in the fiscal period in which a change in accounting principle is made. Those disclosures include the nature and reason for the change, the effect of the change on income from continuing operations, the cumulative effect on retained earnings, etc. In the fiscal year in which a new accounting principle is adopted, financial information reported for interim periods after the date of adoption should disclose the effect of the change on income from continuing operations, net income and related per-share amounts, if applicable, for those post-change interim periods. For a complete listing of the disclosure requirements, refer to ASC 250-10-50-1 through 50-3.

11.2.3 Transition Guidance for Bifurcation of Embedded Derivative Instruments

ASC 815-15-25 requires entities to separate embedded derivatives from hybrid instruments when specified criteria have been met. Upon the initial adoption of ASC 815, an entity must choose to either (1) recognize as an asset or liability in the statement of financial position all embedded derivative instruments that are required

to be separated from their host contracts or (2) select either January 1, 1998, or January 1, 1999, as the transition date for embedded derivatives.

If an entity chooses (2) above (i.e., selects a transition date for embedded derivatives), it must recognize as separate assets and liabilities those derivatives that are embedded in hybrid instruments issued, acquired, or substantively modified by the entity on or after the selected transition date. An entity is not permitted to apply this provision to only some of its hybrid instruments; it must apply the provision on an all-or-nothing basis.

ASU 2010-11, *Scope Exception Related to Embedded Credit Derivatives*

The amended guidance in ASU 2010-11 is effective the first day of an entity's first fiscal quarter beginning after June 15, 2010. Early adoption is permitted as of the first day of an entity's first fiscal quarter beginning after issuance of the ASU (March 5, 2010). Upon adoption of the ASU, entities may elect the fair value option for any investment in a beneficial interest in securitized financial assets. Such an election should be made on an instrument by instrument basis and supported by documentation completed at the beginning of the fiscal quarter of initial adoption. Regardless of whether the investment is reported at amortized cost (held to maturity) or at fair value with changes included in other comprehensive income (available for sale), if the fair value option is elected at adoption, the cumulative unrealized gains and losses at that date should be included in a cumulative-effect adjustment to beginning retained earnings for the period of adoption.

PwC Observation: Given the complexities of defining and valuing embedded derivative features, we expect that many investors will elect the fair value option for instruments that would otherwise require bifurcation. Entities are also allowed to elect the fair value option for other beneficial interests in securitized financial assets. It is important to note that entities must complete the election and documentation as of the date of adoption (i.e., the beginning of the quarter of adoption). Additionally, entities should ensure that they have performed an impairment analysis of the investment before they initially adopt the amendments in the ASU.

At the date of adoption, an entity should reassess all pre-existing beneficial interests for embedded credit derivatives. However, the FASB retained the contract grandfathering of FAS 155 in ASC 815-10-65-5 (which was superseded at the end of the transition period). FAS 155 was effective for all financial instruments acquired, issued, or subject to a remeasurement (new basis) event occurring after the beginning of an entity's first fiscal year that begins after September 15, 2006. If bifurcation is required under the ASU, the carrying amount of the host contract at adoption should be based on a pro forma bifurcation as of the inception of the hybrid instrument and the host contract's subsequent accounting to the date of adoption. At adoption, any difference between the total carrying amount of the individual components of the newly bifurcated hybrid instrument and the carrying value of the hybrid instrument before bifurcation is recognized as a cumulative effect adjustment to beginning retained earnings for the period of adoption. Two different cumulative-effect adjustments could result from the adoption of this ASU—the first from the election of the fair value option and the second from the need to bifurcate a hybrid instrument that was previously not bifurcated. Separate disclosure of these amounts is not required, but it might be helpful to users. However, an entity is required to disclose the gross gains and losses that make up the cumulative effect adjustment, determined on an instrument-by-instrument basis. The disclosure requirements

for sellers of credit derivatives in ASC 815-10-50-4K apply to all credit derivative features embedded in beneficial interests in securitized financial assets, with the exception of those created by the subordination of one tranche to another, as described in ASC 815-15-15-9.

Refer also to DH 11.3, Question No. 11-5.

11.2.4 Transition Provisions Related to Implementation Issues

Original transition guidance that was issued with DIG Issue K5, *Transition Provisions for Applying the Guidance in Statement 133 Implementation Issues*, (which is not codified) addressed when and how an entity that has already adopted ASC 815 should account for the effects of complying with new implementation guidance from the FASB's Derivative Implementation Group. Although DIG Issue K5 has not been codified, the transition guidance provided by its contents remains relevant.

An entity that has adopted ASC 815 prior to the issuance of new implementation guidance from the FASB's Derivatives Implementation Group should account for the effects of initially complying with the new implementation guidance as of the first day of its first fiscal quarter following the date that the new guidance is posted to the FASB Web site unless the Board directs otherwise. The date the new guidance is posted follows a 35-day public comment period and formal clearance by the Board after a public meeting. The specific transition provisions for new implementation guidance are rooted in the transition provisions described in the original transition section of ASC 815 when it was issued. That guidance varies depending on the subject matter. DIG Issue K5 classified new implementation guidance into the following categories:

1. Definition of a derivative, Scope Exceptions, and Recognition and Measurement of Derivatives.
2. Determining whether or not an embedded derivative must be accounted for separately.
3. Different mechanics for separating an embedded derivative from a host instrument.
4. Not qualifying for hedge accounting.
5. Different mechanics of hedge accounting.
6. Other aspects of ASC 815.

As described in DH 11.1 above, entities that are adopting ASC 815, its amendments or the implementation guidance for the first time will have to assess the original standards and implementation guidance to individually determine the relevant transition guidance and timeframe for each amendment or change. A summary of DIG Issue K5's transition provisions has been retained in this monograph and for this purpose is presented in exhibit 11-1.

Refer also to DH 11.3, Question Nos. 11-1, 11-2 and 11-3.

11.2.5 Spotlight on Specific Transition Provisions

This section is intended to provide a spotlight on some of the more significant guidance, recently issued, impacting the transition or application of hedging activities and accounting for derivative instruments.

FAS 161

In March 2008, the issuance of FAS 161, *Disclosures about Derivative Instruments and Hedging Activities, an amendment of FASB Statement No. 133* enhanced the required disclosures to provide sufficient information about the impact derivative instruments and hedging activities have on an entity's financial position, results of operations, and cash flows.

The new disclosures are required in financial statements issued for fiscal years and interim periods after November 15, 2008, with early application encouraged. FAS 161 amends ASC 270-10-50-1 (Disclosure of Summarized Interim Financial Data by Publicly Traded Companies) to also require the information on an interim basis. For example, a calendar year-end company that reports quarterly must provide the disclosures in its March 31, 2009 interim financial statements. Similarly, a company with a fiscal year-end of March 31 will provide the disclosures for the period from January 1, 2009 through March 31, 2009 in its annual financial statements for the year ending March 31, 2009.

Entities are encouraged, but not required to provide comparative disclosures for earlier periods at initial adoption. Although entities are not required to prepare disclosures for periods prior to initial adoption, they are required to provide comparative information for periods presented after initial adoption. For example, an entity with a calendar year-end, should present annual comparative disclosures, beginning with its financial statements for December 31, 2010. If the entity's income statement presents three years of data, financial statements must include comparative disclosures for 2010 and 2009, but the entity would not be required to present the new disclosures for 2008.

Refer also to DH 11.3, Question No. 11-4.

EITF 07-5

In June 2008, the FASB ratified EITF Issue 07-5, *Determining Whether an Instrument (or Embedded Feature) Is Indexed to an Entity's Own Stock*. The primary objective of EITF 07-5 is to provide guidance for determining whether an equity-linked financial instrument or embedded feature is indexed to an entity's own stock, which is an important consideration in determining the instrument's accounting classification. EITF 07-5 has been codified in ASC 815-10 and 815-40.

This guidance is effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those fiscal years. Earlier application by an entity that has previously adopted an alternative accounting policy is not permitted.

Entities must apply this guidance to all instruments outstanding as of the beginning of the fiscal year in which the guidance is initially applied (i.e., January 1, 2009 for calendar year-end entities) by recognizing a cumulative effect adjustment to the opening balance of retained earnings.

The cumulative effect adjustment is the difference between the amounts recognized in the balance sheet before and after initial application of this guidance. The amounts recognized in the balance sheet should be determined based on the amounts that would have been recognized if the guidance had been applied from the original issuance date of the instrument. However, if a previously bifurcated conversion option no longer meets the requirements for bifurcation on the date of adoption, then

the carrying amount of the conversion option (its fair value on the date of adoption) should be reclassified to equity. Any remaining debt discount that was initially recognized (as a result of the separation of the conversion option) should continue to be amortized.

The guidance related to contingent exercise provisions should not result in a transition adjustment at the effective date because the previous guidance “Evaluating Whether an Instrument Involving a Contingency Is Considered Indexed to an Entity’s Own Stock” codified in ASC 815-40-15-5 through 15-8 and the related examples in ASC 815-40-55-26 through 55-48 were retained in EITF 07-5 (i.e., EITF 07-5 did not change previous practice).

Entities should provide the disclosures associated with changes in accounting principles established by ASC 250-10-50-1 through 50-3.

FSP FAS 133-1 and FIN 45-4

In September 2008, the FASB issued FSP FAS 133-1 and FIN 45-4, *Disclosures about Credit Derivatives and Certain Guarantees: An Amendment of FASB Statement No. 133 and FASB Interpretation No. 45; and Clarification of the Effective Date of FASB Statement No. 161*, to amend ASC 815-10-50-4J through 50-4L to introduce new disclosure requirements for credit derivatives, including those embedded in hybrid instruments, and financial guarantees. The amendments apply to sellers of credit derivatives and providers of financial guarantees.

The disclosures required under these amendments are effective for fiscal years and interim periods ending after November 15, 2008. For example, an entity with a calendar year-end that reports on a quarterly basis should provide the new disclosures in its financial statements for the year ending December 31, 2008 (assuming no interim financial statements are issued for the quarter ending December 31, 2008). An entity with a fiscal year-end of March 31 that reports on a quarterly basis will first provide the new disclosures in its financial statements for the quarter ending December 31, 2008, and must also provide them in its annual financial statements for the year ending March 31, 2009.

ASU 2010-11, Scope Exception Related to Embedded Credit Derivatives

In March 2010, the FASB issued ASU 2010-11 that amends and clarifies the guidance on how entities should evaluate credit derivatives embedded in beneficial interests in securitized financial assets. More financial instruments will now be accounted for at fair value through earnings, including some unfunded securities instruments, synthetic collateralized debt obligations and other similar securitization structures. The updated guidance eliminates the scope exception for bifurcation of embedded credit derivatives in interests in securitized financial assets that was previously in ASC 815-15-15-8 unless they are created solely for the subordination of one financial instrument to another. The application of the bifurcation criteria will become more prevalent, though little guidance has been provided regarding how interests in securitized financial assets should be bifurcated. Entities must adopt the new guidance by the first day of the fiscal quarter beginning after June 15, 2010 with early adoption permitted. The update allows entities to elect the fair value option for any beneficial interest in securitized financial assets upon adoption.

Refer also to DH 11.2.3 and DH 11.3, Question No. 11-5.

To facilitate comparability at the time of adoption, entities are encouraged, but not required, to provide disclosures for earlier periods. In periods after initial adoption, comparative disclosures are required for periods ending subsequent to the adoption.

ASU 2011-11, *Disclosures About Offsetting Assets and Liabilities*

In December 2011, the FASB issued ASU 2011-11 which requires additional disclosures relating to recognized financial instruments and derivative assets and liabilities. This guidance was subsequently clarified in January 2013 with the issuance of ASU 2013-01, which limits the disclosure requirements to derivatives, repurchase agreements and securities lending transactions that are either offset in accordance with ASC 210-20-45 or ASC 815-10-45 or are subject to an enforceable master netting arrangement or similar agreement.

The new disclosures are required in financial statements issued for fiscal years beginning on or after January 1, 2013 and interim periods within those annual periods. In addition, comparative disclosures are required for all periods presented. For example, a calendar year-end company will be required to provide disclosures as of March 31, 2013 and as of December 31, 2012 in its March 31, 2013 interim financial statements. However, a company with a June 30 year end would provide disclosures beginning in its September 30, 2013 interim financial statements and will be required to provide disclosures as of September 30, 2013 and June 30, 2013.

An entity will be required to disclose the following quantitative information for assets and liabilities within the scope of the standard:

- a. The gross amounts of those recognized assets and those recognized liabilities.
- b. The amounts offset to determine the net amounts presented in the statement of financial position.
- c. The net amounts presented in the statement of financial position.
- d. The amounts subject to an enforceable master netting agreement or similar agreement not otherwise included in (b), including amounts related to financial collateral (including cash collateral).
- e. The net amount after deducting the amounts in (d) from the amounts in (c).

See DH 10.3.2.9 for further discussion of the new disclosure requirements.

Exhibit 11-1: Overview of Transition Provisions Related to ASC 815 Implementation Issues

Nature of Guidance	Covered Situations	Transition Provisions
1. Definition of a derivative, Scope Exceptions, and Recognition and Measurement	This guidance encompasses situations in which (1) an entity did not account for a contract as a freestanding derivative instrument under ASC 815 but is required to do so under the new implementation guidance and (2) an entity accounted for a contract as a freestanding derivative instrument under ASC 815 but is not required to do so under the new implementation guidance.	<ul style="list-style-type: none"> Consistent with the transition provisions of ASC 815, the effects of initially complying with the implementation guidance should be applied prospectively for all existing contracts and future transactions, as of the effective date of the new guidance as a cumulative-effect-type adjustment. If an entity had been accounting for a contract as a derivative under ASC 815 but will not do so under the newly issued implementation guidance, the contract's fair value at the effective date shall become its net carrying amount at that date. Because no retroactive designation of hedging relationships and no retroactive application are permitted, no pro forma disclosures of the effects of retroactive application are required or permitted.
2. Determining whether or not an embedded derivative must be accounted for separately	<p>This guidance encompasses situations in which (1) an entity did not separately account for an embedded derivative but is required to do so under the new implementation guidance, (2) an entity accounted separately for an embedded derivative but is not permitted to do so under the new implementation guidance, and</p> <p>(3) an entity accounted for the entire hybrid instrument at fair value based on a determination that it could not reliably identify and measure the embedded derivative, but the embedded derivative may not be accounted for separately under the new transition guidance.</p>	<ul style="list-style-type: none"> Consistent with the transition provisions of ASC 815, the effects of initially complying with the implementation guidance should be applied prospectively for all existing contracts and future transactions, as of the effective date of the guidance as a cumulative-effect-type adjustment. Because no retroactive designation of hedging relationships and no retroactive application are permitted, no pro forma disclosures of the effects of retroactive application are required or permitted.

(continued)

Nature of Guidance	Covered Situations	Transition Provisions
		<ul style="list-style-type: none"> If under the new implementation guidance an entity may not account separately for an embedded derivative that has been separately accounted for under the entity's initial application of ASC 815, the carrying value of the hybrid instrument at the guidance's effective date should be the carrying value of the host contract and the fair value of the embedded derivative.
3. Different mechanics for separating an embedded derivative from a host instrument	<p>This guidance encompasses situations in which the new guidance mandates different mechanics for separating an embedded derivative from a host.</p> <p>Examples of guidance that relates to the mechanics of separating an embedded derivative from a host instrument can be found in:</p> <ul style="list-style-type: none"> AASC 815-15-25-24 through 25-25 ASC 815-15-55-160 through 55-164 ASC 815-15-30-4 through 30-6 	<ul style="list-style-type: none"> The guidance should be applied prospectively—that is, only to future hybrid contracts entered into on or after the effective date of the guidance.
4. Not qualifying for hedge accounting	<p>This guidance relates to situations where an entity had designated a qualifying hedging relationship that no longer qualifies for hedge accounting based on newly issued implementation guidance.</p>	<ul style="list-style-type: none"> The hedging relationship must be designated at the effective date of the new guidance. If the hedging relationship had been a fair value hedge, the recognition in earnings of the adjustment of the carrying amount of the hedged asset or liability under ASC 815-25-35-1 through 35-6 for the period prior to the effective date should not be reversed. Rather, the adjustment of the carrying amount of the hedged item under ASC 815-25-35-1 through 35-6 should be accounted for under ASC 815-25-35-8 through 35-9.

(continued)

Nature of Guidance	Covered Situations	Transition Provisions
		<ul style="list-style-type: none"> • If the hedging relationship had been a cash flow hedge or a net-investment hedge, the derivative's gain or loss for the period prior to the effective date shall remain in accumulated other comprehensive income and be reclassified into earnings consistent with the provisions of ASC 815-30-40-4 through 40-5.
5. Different mechanics of hedge accounting	This guidance relates to situations where an entity had applied the mechanics of hedge accounting (for example, the measurement of hedge effectiveness or the application of the shortcut method) differently than is required by new implementation guidance.	<ul style="list-style-type: none"> • The new implementation guidance must be applied prospectively to existing and future hedging relationships. • For example, an entity that had designated a qualifying hedging relationship utilizing the shortcut method that does not qualify for the shortcut method based on new implementation guidance must designate that hedging relationship prospectively (that is, the hedging relationship must be designated at the effective date). If the hedging relationship had been a fair value hedge, the recognition in earnings due to adjustment of the carrying amount of the hedged asset or liability for the period prior to the effective date shall not be reversed. If the hedging relationship had been a cash flow hedge, the derivative's gain or loss for the period prior to the effective date shall remain in accumulated other comprehensive income and be reclassified into earnings when the hedged transaction affects earnings in accordance with ASC 815-30-40-4 through 40-5.

(continued)

Nature of Guidance	Covered Situations	Transition Provisions
6. Other aspects of ASC 815	<p>This guidance relates to other areas of ASC 815 not addressed in (1) to (5) above.</p> <p>Relevant implementation guidance related to other areas is related to disclosures, financial statement presentation and miscellaneous implementation guidance such as transferable options and combination of options.</p>	<ul style="list-style-type: none"> The new implementation guidance must be applied prospectively to future events, transactions, and designated hedging relationships. New disclosure requirements generally encourage, or require, that disclosures be for comparable periods.

Refer also to DH 11.3, Question Nos. 11-1, 11-2 and 11-3.

11.3 Questions and Interpretive Responses

Most entities adopted ASC 815 effective January 1, 2001, and applied the Standard's transition provisions at that time. The following questions and interpretative responses focus on circumstances related to the initial application of ASC 815 and any subsequently issued implementation guidance, which continue to be relevant.

Application of ASC 815 Upon Initial Adoption of U.S. GAAP

Question No. 11-1: Can an entity (for example, a foreign entity that is a new SEC registrant in the U.S.) that is applying U.S. GAAP for the first time apply hedge accounting for hedges that, at the inception of the hedging relationship, were not documented and designated in accordance with the specific requirements of ASC 815?

PwC Interpretive Response: No. An entity that is applying U.S. GAAP for the first time can apply hedge accounting only for hedges that, at the inception of the hedging relationship, were documented and designated in accordance with the specific requirements of ASC 815. Unless the entity's hedging relationships were formally documented in compliance with the Standard's requirements, concurrent with the inception of those relationships, the entity should not apply ASC 815's hedge accounting when applying U.S. GAAP. To receive hedge accounting under U.S. GAAP, the entity must have prepared formal documentation, designated hedging relationships, and monitored hedge effectiveness during the periods prior to its initial application of U.S. GAAP. The entity is prohibited from making retroactive decisions after hedge results are known. The SEC staff has indicated that entities filing U.S. GAAP financial statements (or financial statements that are reconciled with U.S. GAAP) for the first time must comply with (or reconcile their financial statement with) U.S. GAAP for all periods presented as if the entity had always prepared financial statements in accordance with (or financial statements that are reconciled with) U.S. GAAP.

Application of the Shortcut Method Upon Initial Adoption of U.S. GAAP

Question No. 11-2: Can an entity (for example, a foreign entity that is a new SEC registrant in the U.S.) that is applying U.S. GAAP for the first time apply the short-cut method to a pre-existing cash flow hedge? In making this decision, should the requirements of ASC 815-20-25-104 (that the derivative has zero fair value) be based on the cash flow hedge's fair value at inception rather than at its initial application of ASC 815?

PwC Interpretive Response: Yes, presuming all of the applicable criteria in ASC 815-20-25-102 through 25-117 are met at the inception of the hedging relationship, the short cut method may be applied. In order for the cash flow hedge to qualify for the shortcut method and hedge accounting, it must also, at inception, meet all applicable requirements in ASC 815-20-25. In deciding whether the shortcut method can be applied at the time of the entity's initial adoption of ASC 815 to a pre-existing designated hedging relationship, the requirement of ASC 815-20-25-104(b) that the derivative have a fair value of zero at inception of the hedging relationship should be based on the fair value at the inception of the pre-existing hedging relationship rather than at the entity's initial application of U.S. GAAP (i.e., ASC 815). However, if the hedging relationship that is designated upon the initial application of ASC 815 is not the continuation of a pre-existing hedging relationship (that is, not the same hedging instrument and same hedged item or transaction), then the decision regarding whether the shortcut method can be applied prospectively from the initial adoption of ASC 815 should be based on the fair value of the cash flow hedge at the date of the initial application of U.S. GAAP. If the fair value of the derivative is not zero on that date (or if any of the other specified criteria in ASC 815-20-25 are not met), it would not be appropriate to apply the short-cut method.

Application of the Implementation Guidance Related to Hedging Relationships

Question No. 11-3: In accordance with new implementation guidance issued by the FASB, XYZ Corporation may no longer account for a certain derivative as a hedge instrument under ASC 815. How should XYZ Corporation account for the designation of the hedging relationship? In contrast, if the FASB issues new implementation guidance that permits hedge accounting for a certain relationship where it had not been previously designated, how should XYZ Corporation account for the designation of the hedging relationship?

PwC Interpretive Response: XYZ Corporation must dedesignate the hedging relationship on the effective date of the new implementation guidance. As discussed in the original transition guidance, retroactive application of the new implementation guidance would not be permitted, and the hedging relationship would be discontinued prospectively. If the hedging relationship had been a fair value hedge, the amounts previously recognized in earnings to adjust the carrying value of the hedged asset or liability would not be reversed. If the hedging relationship related to a cash flow hedge, amounts previously recognized in other comprehensive income would not be reversed, but would instead be amortized into earnings consistent with the provisions in ASC 815-30-40, ASC 815-20-25 and ASC 815-35-35. In contrast, if the FASB issues new implementation guidance that permits hedge accounting for a certain relationship where it had not been previously designated, XYZ Corporation may apply hedge accounting only on a prospective basis from the date the hedging relationship was designated and documented. XYZ Corporation would *not* be permitted to retroactively apply the hedging relationship.

Question No. 11-4: Is an entity required to show comparative disclosures upon the adoption of the amendments made to ASC 815-10-50 (with the issuance of FASB Statement No. 161, *Disclosures about Derivative Instruments and Hedging Activities*, an amendment of FASB Statement No. 133)?

PwC Interpretive Response: No, this statement encourages, but does not require, comparative disclosures for earlier periods at initial adoption. Although entities are not required to prepare disclosures for periods prior to initial adoption, they are required to provide comparative information for periods presented after initial adoption. For example, an entity with a calendar year-end, should present annual comparative disclosures, beginning with its financial statements for December 31, 2010. If the entity's income statement presents three years of data, financial statements must include comparative disclosures for 2010 and 2009, but the entity would not be required to present the new disclosures for 2008.

Application of Implementation Guidance Related to ASU 2010-11

Question No. 11-5: Is an entity required to show comparative disclosures upon the adoption of ASU 2010-11 or restate previously reported amounts?

PwC Interpretive Response: No. As discussed in the ASU 2010-11, entities are not required to provide comparative disclosures or restate previously reported amounts related to the adoption of the ASU. However, two different types of cumulative-effect adjustments could result from the adoption of the ASU. The first results from the election of the fair value option and the second from the need to bifurcate a hybrid instrument that was previously not bifurcated. Separate disclosures of these amounts is not required, but might be useful to users. An entity is required to disclose the cumulative gross gains and losses that make up the cumulative effect adjustment determined on an instrument-by-instrument basis.

Appendix A:

Glossary and Technical References

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.

While not included in the FASB codification glossary, we believe that in the United States, currently only the interest rates on direct Treasury obligations of the U.S. government and, for practical reasons, the LIBOR swap rate are considered to be benchmark interest rates.

In each financial market, only the one or two most widely used and quoted rates that meet the above criteria may be considered benchmark interest rates.

(Note: In January 2013, the EITF reached a consensus-for-exposure to amend ASC 815 in order to consider the Fed Funds Effective Swap Rate as a benchmark interest rate. However, the current description of a benchmark rate in ASC 815 will be applicable until this amendment is adopted).

Capacity Contract

An agreement by an owner of capacity to sell the right to that capacity to another party so that it can satisfy its obligations. For example, in the electric industry, capacity (sometimes referred to as installed capacity) is the capability to deliver electric power to the electric transmission system of an operating control area.

Clean Value

The price of an asset or liability that includes all contractual amounts due exclusive of any accrued interest receivable or payable on the instrument.

Control Area

A control area requires entities that serve load within the control area to demonstrate ownership or contractual rights to capacity sufficient to serve that load at time of peak demand to provide a reserve margin to protect the integrity of the system against potential generating unit outages in the control area. A control area is a portion of the electric grid that schedules, dispatches, and controls generating resources to serve area load (ultimate users of electricity) and coordinates scheduling of the flow of electric power over the transmission system to neighboring control areas.

Comprehensive Income

The change in equity (net assets) of a business entity during a period from (ASC 220, Comprehensive Income) transactions and other events and circumstances from non-owner sources. It includes all changes in equity during a period except those resulting from investments by owners and distributions to owners.

Credit Support Annex (CSA)

An non-compulsory legal agreement included or sometimes added to an ISDA Master Agreement that governs the terms under which collateral amounts shall be provided by the party in a net loss position to the party in a net gain position when summarizing and offsetting various derivative contracts between the two parties subject to the particular ISDA Master Agreement.

Dirty Value

The price of an asset or liability that includes all contractual amounts due including any accrued interest receivable or payable on the instrument.

Financial Instrument

Cash, evidence of an ownership interest in an entity, or a contract that both:

- a. Imposes on one entity a contractual obligation either: (1) to deliver cash or another financial instrument to a second entity or (2) to exchange other financial instruments on potentially unfavorable terms with the second entity
- b. Conveys to that second entity a contractual right either: (1) to receive cash or another financial instrument from the first entity or (2) to exchange other financial instruments on potentially favorable terms with the first entity.

The use of the term financial instrument in this definition is recursive (because the term financial instrument is included in it), though it is not circular. The definition requires a chain of contractual obligations that ends with the delivery of cash or an ownership interest in an entity. Any number of obligations to deliver financial instruments can be links in a chain that qualifies a particular contract as a financial instrument.

Contractual rights and contractual obligations encompass both those that are conditioned on the occurrence of a specified event and those that are not. All contractual rights (contractual obligations) that are financial instruments meet the definition of asset (liability) set forth in FASB Concepts Statement No. 6, Elements of Financial Statements (CON 6), although some may not be recognized as assets (liabilities) in financial statements—that is, they may be off-balance-sheet—because they fail to meet some other criterion for recognition. For some financial instruments, the right is held by or the obligation is due from (or the obligation is owed to or by) a group of entities rather than a single entity.

Firm Commitment

An agreement with an unrelated party, binding on both parties and usually legally enforceable, with the following characteristics:

- a. The agreement specifies all significant terms, including the quantity to be exchanged, the fixed price, and the timing of the transaction. The fixed price may be expressed as a specified amount of an entity's functional currency or of a foreign currency. It may also be expressed as a specified interest rate or specified effective yield. The binding provisions of an agreement are regarded to include those legal rights and obligations codified in the laws to which such an agreement is subject. A price that varies with the market price of the item that is the subject of the firm commitment cannot qualify as a fixed price. For example, a price that is specified in terms of ounces of gold would not be a fixed price if the market price of the item to be purchased or sold under the firm commitment varied with the price of gold.

- b. The agreement includes a disincentive for nonperformance that is sufficiently large to make performance probable. In the legal jurisdiction that governs the agreement, the existence of statutory rights to pursue remedies for default equivalent to the damages suffered by the nondefaulting party, in and of itself, represents a sufficiently large disincentive for nonperformance to make performance probable for purposes of applying the definition of a firm commitment.

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.

ISDA Master Agreement

An agreement between two parties that define the standardized terms of derivatives transactions and govern the conduct between the parties related to the individual derivative trade contracts annexed to the agreement. The International Derivatives and Swaps Association (ISDA) is a trade organization for over-the-counter derivative participants. The ISDA has defined a standardized contract that is frequently required to be executed prior to any derivatives transactions between the parties.

London Interbank Offered Swap Rate

The fixed rate on a single-currency, constant-notional interest rate swap that has its variable-rate leg referenced to the London Interbank Offered Rate (LIBOR) with no additional spread over LIBOR on that floating-rate leg. That fixed rate is the derived rate that would result in the swap having a zero fair value at inception because the present value of fixed cash flows, based on that rate, equate to the present value of the floating cash flows. It is presumed that all cash flows would be discounted at the applicable LIBOR rate or possibly the OIS rate, if the swap is subject to collateral posting requirements.

Notional Amount

A number of currency units, shares, bushels, pounds, or other units specified in a derivative instrument. Sometimes other names are used. For example, the notional amount is called a face amount in some contracts.

OIS or Overnight Index Swap Rate

Overnight index swaps are contracts to periodically receive a daily rate in exchange for paying a fixed rate. Observable trades for these swaps of various tenors provide the data upon which the OIS rates are developed.

In a Proposed Accounting Standard Update (still in proposal stage) the Fed Funds Effective Swap Rate (or Overnight Index Swap Rate) is defined as:

“The fixed rate on a U.S. dollar, constant-notional interest rate swap that has its variable-rate leg referenced to the Fed Funds effective rate with no additional spread over the Fed Funds effective rate on that variable-rate leg. That fixed rate is the derived rate that would result in the swap having a zero

fair value at inception because the present value of fixed cash flows, based on that rate, equate to the present value of the variable cash flows.”

Recently, certain market participants, including dealers and clearing houses, have moved to value collateralized derivatives using a discount curve that reflects the funding required to be paid on posted collateral amounts. Said differently, certain collateralized derivatives may be valued by taking projected cash flows based on contractual terms and discounting them at a rate reflective of the cost of collateral. For derivative instruments collateralized with, for example, USD cash collateral, this rate may be equivalent to the OIS rate.

Swaplet(s)

The amount of the net derivative instrument gain or loss related to [a]... specific... forecasted transaction(s) ASC 815-30-55-130, such amount should be equivalent to the present value of the derivative instrument’s cash flows intended to offset the changes in the original forecasted transaction(s)...i.e. the predicted derivative swap settlement or option premium assessed for a specific settlement period. Related terms putlets, calllets, caplets, floorlets and collarets.

Underlying

A specified interest rate, security price, commodity price, foreign exchange rate, index of prices or rates, or other variable (including the occurrence or nonoccurrence of a specified event such as a scheduled payment under a contract). An underlying may be a price or rate of an asset or liability but is not the asset or liability itself. An underlying is a variable that, along with either a notional amount or a payment provision, determines the settlement of a derivative instrument.

The following table should be used as a reference for the technical abbreviations utilized throughout this guide:

Technical References	
ASC 210	Accounting Standards Codification 210, <i>Balance Sheet</i>
ASC 215	Accounting Standards Codification 215, <i>Statement of Shareholder Equity</i>
ASC 220	Accounting Standards Codification 220, <i>Comprehensive Income</i>
ASC 225	Accounting Standards Codification 225, <i>Income Statement</i>
ASC 230	Accounting Standards Codification 230, <i>Statement of Cash Flows</i>
ASC 235	Accounting Standards Codification 235, <i>Notes to Financial Statements</i>
ASC 250	Accounting Standards Codification 250, <i>Accounting Changes and Error Corrections</i>
ASC 255	Accounting Standards Codification 255, <i>Changing Prices</i>
ASC 260	Accounting Standards Codification 260, <i>Earnings Per Share</i>
ASC 270	Accounting Standards Codification 270, <i>Interim Reporting</i>
ASC 272	Accounting Standards Codification 272, <i>Limited Liability Entities</i>
ASC 274	Accounting Standards Codification 274, <i>Personal Financial Statements</i>
ASC 275	Accounting Standards Codification 275, <i>Risks and Uncertainties</i>
ASC 280	Accounting Standards Codification 280, <i>Segment Reporting</i>
ASC 305	Accounting Standards Codification 305, <i>Cash and Cash Equivalents</i>

Technical References

ASC 310	Accounting Standards Codification 310, <i>Receivables</i>
ASC 320	Accounting Standards Codification 320, <i>Investments—Debt and Equity Securities</i>
ASC 323	Accounting Standards Codification 323, <i>Investments—Equity Method and Joint Ventures</i>
ASC 325	Accounting Standards Codification 325, <i>Investments—Other</i>
ASC 330	Accounting Standards Codification 330, <i>Inventory</i>
ASC 340	Accounting Standards Codification 340, <i>Other Assets and Deferred Costs</i>
ASC 350	Accounting Standards Codification 350, <i>Intangibles—Goodwill and Other</i>
ASC 360	Accounting Standards Codification 360, <i>Property, Plant, and Equipment</i>
ASC 405	Accounting Standards Codification 405, <i>Liabilities</i>
ASC 410	Accounting Standards Codification 410, <i>Asset Retirement and Environmental Obligations</i>
ASC 420	Accounting Standards Codification 420, <i>Exit or Disposal Cost Obligations</i>
ASC 430	Accounting Standards Codification 430, <i>Deferred Revenue</i>
ASC 440	Accounting Standards Codification 440, <i>Commitments</i>
ASC 450	Accounting Standards Codification 450, <i>Contingencies</i>
ASC 460	Accounting Standards Codification 460, <i>Guarantees</i>
ASC 470	Accounting Standards Codification 470, <i>Debt</i>
ASC 480	Accounting Standards Codification 480, <i>Distinguishing Liabilities from Equity</i>
ASC 505	Accounting Standards Codification 505, <i>Equity</i>
ASC 605	Accounting Standards Codification 605, <i>Revenue Recognition</i>
ASC 705	Accounting Standards Codification 705, <i>Cost of Sales and Services</i>
ASC 710	Accounting Standards Codification 710, <i>Compensation—General</i>
ASC 712	Accounting Standards Codification 712, <i>Compensation—Nonretirement Postemployment Benefits</i>
ASC 715	Accounting Standards Codification 715, <i>Compensation—Retirement Benefits</i>
ASC 718	Accounting Standards Codification 718, <i>Compensation—Stock Compensation</i>
ASC 720	Accounting Standards Codification 720, <i>Other Expenses</i>
ASC 730	Accounting Standards Codification 730, <i>Research and Development</i>
ASC 740	Accounting Standards Codification 740, <i>Income Taxes</i>
ASC 805	Accounting Standards Codification 805, <i>Business Combinations</i>
ASC 808	Accounting Standards Codification 808, <i>Collaborative Arrangements</i>
ASC 810	Accounting Standards Codification 810, <i>Consolidation</i>
ASC 815	Accounting Standards Codification 815, <i>Derivatives and Hedging</i>
ASC 820	Accounting Standards Codification 820, <i>Fair Value Measurements and Disclosures</i>
ASC 825	Accounting Standards Codification 825, <i>Financial Instruments</i>
ASC 830	Accounting Standards Codification 830, <i>Foreign Currency Matters</i>
ASC 835	Accounting Standards Codification 835, <i>Interest</i>

Technical References

ASC 840	Accounting Standards Codification 840, <i>Leases</i>
ASC 845	Accounting Standards Codification 845, <i>Nonmonetary Transactions</i>
ASC 850	Accounting Standards Codification 850, <i>Related Party Disclosures</i>
ASC 852	Accounting Standards Codification 852, <i>Reorganizations</i>
ASC 855	Accounting Standards Codification 855, <i>Subsequent Events</i>
ASC 860	Accounting Standards Codification 860, <i>Transfers and Servicing</i>
ASC 942	Accounting Standards Codification 942, <i>Financial Services—Depository and Lending</i>
ASC 944	Accounting Standards Codification 944, <i>Financial Services—Insurance</i>
ASC 948	Accounting Standards Codification 948, <i>Mortgage Banking</i>
ASC 954	Accounting Standards Codification 954, <i>Health Care Entities</i>
ASC 960	Accounting Standards Codification 960, <i>Plan Accounting—Defined Benefit Pension Plans</i>
ASU 2010-08	Accounting Standards Update 2010-08, <i>Technical Corrections to Various Topics</i>
ASU 2010-11	Accounting Standards Update 2010-11, <i>Scope Exception Related to Embedded Credit Derivatives</i>
ASU 2011-11	Accounting Standards Update 2011-11, <i>Disclosures about Offsetting Assets and Liabilities</i>
CON 5	FASB Concepts Statement No. 5, <i>Recognition and Measurement in Financial Statements of Business Enterprises</i>
FRR 48	Financial Reporting Release No. 48, <i>Disclosure of Accounting Policies for Derivative Financial Instruments and Derivative Commodity Instruments, and Disclosure of Quantitative and Qualitative Information about Market Risk Inherent in Derivative Financial Instruments, Other Financial Instruments and Derivative Commodity Instruments</i>
FRR 61	Financial Reporting Release No. 61, <i>Commission Statement About Management's Discussion and Analysis of Financial Condition and Results of Operations</i>
GTB 03-1	GASB Technical Bulletin 03-1, <i>Disclosure Requirements for Derivatives Not Reported At Fair Value on the Statement of Net Assets</i>
SAB 74	Staff Accounting Bulletin No. 74, <i>Disclosure of the impact that recently issued accounting standards will have on the financial statements of the registrant when adopted in a future period</i>
SAB 99	Staff Accounting Bulletin No. 99, <i>Materiality</i>
GASB Statement No. 20	GASB Statement No. 20, <i>Accounting and Financial Reporting for Proprietary Funds and Other Governmental Entities That Use Proprietary Fund Accounting</i>
GASB Statement No. 34	GASB Statement No. 34, <i>Basic Financial Statements—and Management's Discussion and Analysis—for State and Local Governments</i>
GASB Statement No. 53	GASB Statement No. 53, <i>Accounting and Financial Reporting for Derivative Instruments</i>

Appendix B:

Summary of Changes from 2012 Edition

Appendix B: Summary of Changes from 2012 Edition

The 2013 edition of PricewaterhouseCoopers' *Guide to Accounting for Derivative Instruments and Hedging Activities* has been updated as of March 31, 2013 to reflect new and updated authoritative and interpretive guidance since the issuance of the 2012 edition. This appendix includes a summary of noteworthy revisions to this guide.

Chapter 2: Scope

- Section 2.2.1—updated language for technical corrections in ASU 2012-04.

Chapter 3: Embedded Derivative Instruments

- Added Chapter Outline Section to provide a high-level summary of the chapter.
- Section 3.4.2—removed a PwC observation relating to viewing a put as a series of individual puts as this infrequently arises given changes to the “double double test” provided in a technical correction.
- Section 3.4.2—added clarification to the identification of significant premiums and discounts when considering contingent puts and calls in debt hosts.
- Section 3.4.5.3—corrected missing line from flowchart.
- Question 3-6—clarified embedded derivative in example provided for net settlement.
- 3.10 Examples—made small changes to fact pattern illustrating journal entries for a bifurcated derivative to clarify effective yield calculation.

Chapter 5: Fair Value Hedges

- Section 5.5.2.4—added discussion to clarify the example of measuring ineffectiveness under the Example 11 method for a fair value hedge of interest rates where the fair value of the hedged item is not equal to its par value at hedge inception. Corrected alignment in table.
- Example 5-3—clarified journal entries.

Chapter 6: Cash Flow Hedges

- Section 6.8—added Question No. 6-19 discussing a hedging of a forecasted issuance of fixed-rate debt with a treasury rate lock.
- Example 6-1a—simplified journal entries.

Chapter 8: Effectiveness Assessments

- Section 8.2.3—added a reference to EITF consensus-for-exposure to amend the existing definition of benchmark interest rate risk to include the Fed Funds Effective Swap Rate.
- Section 8.6—updated discussion on the impact of credit risk on hedge effectiveness and other hedge accounting requirements.

Chapter 9: Discontinuance and Other Aspects of Hedge Accounting

- Section 9.1—added a discussion on the effect of a modification to a critical term in the hedging instrument or hedged item.
- Section 9.1.4—added a new section describing the SEC position on the impact of central clearing counterparties on hedge discontinuance.
- Example 9-3—simplified journal entries.

Chapter 10: Presentation and Disclosure

- Section 10.1—added discussion of ASU 2013-01.
- Section 10.3.2.9.1—added discussion of ASU 2013-01.

Chapter 11: Effective Date and Transition

- Section 11.2—added discussion of ASU 2013-01.
- Section 11.2.5—added discussion of ASU 2013-01.

Appendix A: Glossary and Technical References

- Definition of benchmark interest rate—added a reference to EITF consensus-for-exposure to amend the existing definition of benchmark interest rate risk to include the Fed Funds Effective Swap Rate.

OIS or Overnight Index Swap Rate

- Added a reference to EITF consensus-for-exposure to amend the existing definition of benchmark interest rate risk to include the Fed Funds Effective Swap Rate. Clarified brief discussion of valuation of certain derivative instruments.

Appendix C: Summary of Differences Between U.S. GAAP and IFRS

- Updated current status of the IASB Hedging project.

Appendix C:

Summary of Differences Between U.S. GAAP and IFRS

This appendix provides a high-level comparison of selected differences between International Financial Reporting Standards (IFRS) and U.S. Generally Accepted Accounting Principles (GAAP) related to derivatives and hedge accounting. These differences may have widespread ramifications in practice. Entities that report financial results under both IFRS and U.S. GAAP should carefully consider evaluating the two frameworks for the purpose of comprehensively identifying the differences that are relevant to their financial statements and transactions.

The key standards governing the accounting for derivatives and hedging activities under each framework are:

IFRS	IAS 39, Financial Instruments: Recognition and Measurement* Guidance on Implementing IAS 39 (IAS 39 IG) IFRIC 9, Reassessment of Embedded Derivatives IFRIC 16, Hedges of a Net Investment in a Foreign Operation
U.S. GAAP	ASC 815, Derivatives and Hedging

IAS 39 was developed, in part, from the guidance in FAS 133, now codified in ASC 815. While certain aspects of IAS 39 were later amended to converge with U.S. GAAP, many detailed application differences exist between IFRS and U.S. GAAP. Application of IAS 39 and ASC 815 could therefore lead to significant reporting differences.

Both the IASB and the FASB are working on improving their existing hedge accounting guidance.

The FASB issued hedge accounting proposals in May 2010, as part of its exposure draft on financial instruments.

The IASB released for public comment an exposure draft of proposed changes to the accounting for hedging activities, resulting from the third phase of the IASB's project to revise financial instruments accounting in December 2010.

In September 2012, the IASB posted to its website a draft of the forthcoming general hedge accounting requirements that will be added to IFRS 9 Financial Instruments. The draft proposes changes to the general hedge accounting model and is expected to be finalized in 2013. The macro hedge accounting principles (i.e., hedges of open portfolios comprised by items that may change frequently) will be addressed as a separate project. In May 2012, the IASB tentatively decided to move toward a discussion paper (instead of an exposure draft) as the next due process step relating to macro hedge accounting, which is expected to be released by the end of 2013.

The proposed IFRS model is more principle-based than the current IASB and U.S. GAAP models and the U.S. GAAP proposal, and aims to simplify hedge accounting. It would also align hedge accounting more closely with the risk management activities undertaken by companies and provide decision-useful information regarding an entity's risk management strategies.

(*): This appendix does not address IFRS 9, Financial Instruments that amended the classification and measurement of financial instruments under IAS 39. Key

selected differences between U.S. GAAP and IFRS regarding derivatives and hedge accounting may be aggregated under the below topics and are summarized as follows:

- Definition of a derivative
- Scope exception
- Embedded derivatives
- Day one gains and losses
- Hedge accounting—qualifying criteria
- Hedge accounting—qualifying hedging instruments
- Hedge accounting—qualifying hedged items and risks
- Hedge accounting—hedge effectiveness
- Financial statement presentation

Topic	U.S. GAAP	IFRS
Definition of a derivative	<p>To meet the definition of a derivative under U.S. GAAP, a financial instrument or other contract must require or permit net settlement.</p> <p>U.S. GAAP generally excludes from the scope of ASC 815 instruments settled in financial instruments that are not readily convertible to cash (i.e., unlisted equity securities when such instruments fail the net settlement requirement and are, therefore, not accounted for as derivatives).</p> <p>An option contract between an acquirer and a seller to buy or sell stock of an acquiree at a future date that results in a business combination may not meet the definition of a derivative as it may fail the net settlement requirement (e.g., the acquiree's shares are not listed so the shares may not be readily convertible to cash).</p>	<p>IFRS does not include such a requirement; rather, the definition of a derivative specifies only that the contract be settled at a future date. As a result, more contracts will meet the definition of a derivative under IFRS.</p> <p>In addition, under IFRS, a contract does not meet the definition of a derivative if the underlying is a nonfinancial variable specific to one of the parties to the contract. Although U.S. GAAP does not include this specific exception in the definition of a derivative, the U.S. GAAP scope exception for certain contracts that are not exchange traded could lead to comparable results with IFRS.</p> <p>An option contract between an acquirer and a seller to buy or sell stock of an acquiree at a future date that results in a business combination would be considered a derivative under IAS 39 for the acquirer; however, the option may be classified as equity from the seller's perspective.</p>

(continued)

Topic	U.S. GAAP	IFRS
Scope of applying derivative accounting: Loan commitments	<p>Although both frameworks scope out certain types of loan commitments, the scope exception from derivative accounting under U.S. GAAP is broader than that under IFRS.</p> <p>U.S. GAAP excludes from the scope of derivative accounting all loan commitments for the holder and the following types of loan commitments for the issuer:</p> <p>Commitments to originate mortgage loans that will be held for investment purposes.</p> <p>Commitments to originate other types of loans (that is, other than mortgage loans).</p> <p>However, note that loan commitments oftentimes require physical settlement by delivery of a loan. Such loan commitments are not derivatives under U.S. GAAP.</p>	<p>Loan commitments are excluded from the scope of IAS 39 for both the holder and the issuer of those loan commitments, except for loan commitments:</p> <ol style="list-style-type: none"> Which can be settled net in cash or by delivering or issuing another financial instrument. Which are designated at fair value through profit or loss. Where the entity has a past practice of selling assets resulting from its loan commitments shortly after origination. Which are commitments to provide a loan at a below-market interest rate. <p>Under IFRS, for loan commitments to issue a loan at a below-market interest rate, the issuer is required to subsequently account for the loan commitment at the higher of the amount initially recognized and the amount determined under the guidance for provisions (IAS 37). U.S. GAAP does not have the same requirement for below-market-rate loan commitments.</p>
Scope of applying derivative accounting: Financial guarantees	U.S. GAAP excludes most financial guarantee contracts from the scope of derivative accounting.	IFRS similarly excludes financial guarantees from the scope of derivative accounting; however, IFRS permits contracts that guarantee the performance of a derivative to be considered a financial guarantee, whereas U.S. GAAP does not.
Weather derivatives	Only exchange-traded weather derivatives are accounted for as derivatives under U.S. GAAP. Non-exchange-traded weather derivatives are not accounted for as derivatives.	Under IFRS, weather derivatives are accounted for as derivatives regardless of whether they are exchange traded or not.

(continued)

Topic	U.S. GAAP	IFRS
Own use versus normal purchase normal sale (NPNS)	<p>There are many factors to consider in determining whether a contract related to nonfinancial items can qualify for the NPNS exception.</p> <p>If a contract meets the requirement of the NPNS exception, then the reporting entity must document that it qualifies in order to apply the NPNS exception—otherwise, it will be considered a derivative.</p>	<p>Similar to U.S. GAAP, there are many factors to consider in determining whether a contract related to nonfinancial items qualifies for the “own use” exception.</p> <p>While U.S. GAAP requires documentation to apply the NPNS exception (i.e., it is elective), IFRS requires a contract to be accounted for as own use (i.e., not accounted for as a derivative) if the own use criteria are satisfied.</p>
Fair value option for hybrid instruments	<p>U.S. GAAP provides for an unrestricted fair value option for financial instruments.</p>	<p>Under IFRS, the fair value option may be applied to hybrid instruments except when the embedded derivative is not “substantive” (i.e., the embedded derivative does not significantly modify the cash flows of the instrument) or if it is clear with little or no analysis that bifurcation is prohibited.</p>
	<p>The fair value option cannot be applied to nonfinancial instruments.</p>	<p>Under IFRS, the fair value option can be applied to nonfinancial contracts that contain an embedded derivative.</p>
Reassessment of embedded derivatives	<p>Under U.S. GAAP, the analysis of whether an embedded derivative is clearly and closely related to its host contract must be performed when an entity first becomes a party to a contract. The analysis of the clearly and closely related criterion is a one-time assessment. However, for derivatives that are not clearly and closely related, the criterion whether a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative instrument, requires an ongoing assessment, each reporting period.</p>	<p>IFRS precludes reassessment of embedded derivatives after an entity first becomes a party to a contract. However, IFRS requires a reassessment when (1) a change in the terms of the hybrid contract significantly modifies the cash flows that would otherwise be required under the contract, or (2) on reclassification of a financial asset out of the held-for-trading category as permitted under the revised IAS 39 issued in October 2008.</p>
Allocation of value to embedded derivatives	<p>Under U.S. GAAP, if an entity is unable to reliably measure the fair value of an embedded derivative, it must measure the entire hybrid contract at fair value, recognizing changes in fair value in earnings. The entity cannot use the residual-value method to measure the embedded derivative.</p>	<p>Under IFRS, when the fair value of an embedded derivative cannot be reliably measured, it can be calculated using the residual-value method (i.e., measured as the difference between the fair value of the hybrid instrument and the host contract). In the rare event that an entity is unable to measure the embedded derivative using residual value, the entire contract should be measured at fair value.</p>

(continued)

Topic	U.S. GAAP	IFRS
Debt host contracts: Embedded floor or cap on the interest rate in a debt instrument	Under U.S. GAAP, bifurcation is determined by the application of the broader rules for determining whether interest rate provisions are considered clearly and closely related to a debt instrument. Caps, floors, or collars that are in the money when the debt host is purchased or issued would not necessarily be bifurcated under U.S. GAAP but would be bifurcated under IFRS.	Under IAS 39, bifurcation of an embedded cap or floor on interest rates in a debt instrument is determined by assessing whether (1) the cap is at or above market interest rates when the contract is issued, (2) the floor is at or below market interest rates when the contract is issued, and (3) the cap or floor is not leveraged in relation to the host contract.
Calls, puts, and prepayment options on debt instruments	<p>U.S. GAAP requires bifurcation if an unconditional put or call would permit the holder of the debt instrument to double his or her initial rate of return on the host contract while simultaneously doubling the then current market rate, but does not require bifurcation if it is within the issuer control to choose to double the holder's return. Likewise U.S. GAAP requires bifurcation if an issuer is contractually permitted to settle a debt obligation in a manner where the holder would not recover substantially all of his or her initial recorded investment.</p> <p>U.S. GAAP requires assessing an embedded contingent put or call through a specific four-step process. For contingently exercisable calls or puts to be considered clearly and closely related, they can be indexed only to interest rates or credit risk, not some extraneous event or factor.</p>	IFRS does not require bifurcation if the exercise price of calls or puts approximately equals the amortized cost of the host debt instrument on each exercise date or the exercise price of the option reimburses the lender for the present value of lost interest for the remaining term of the host contract.

(continued)

Topic	U.S. GAAP	IFRS
Accounting for other embedded derivatives when a conversion option is required to be bifurcated from a host debt instrument	<p>Under U.S. GAAP, a hybrid instrument that contains more than one embedded derivative that individually would warrant separate accounting must be bifurcated as a single, compound embedded derivative. However, when some of the embedded derivative's features are clearly and closely related to the economic characteristics and risks of the host contract, those features should not be included in the compound embedded derivative instrument.</p> <p>For example, when an issuer issues a convertible debt instrument that contains an embedded conversion option requiring bifurcation and an embedded call option that does not require bifurcation under U.S. GAAP, if the conversion feature is required to be bifurcated, the call on the debt host is evaluated with reference to the host instrument prior to separating the conversion option. Therefore, the call may not be required to be bifurcated along with the conversion option.</p>	<p>Under IFRS, when it is determined that an embedded derivative is required to be bifurcated, other embedded derivatives which are interdependent will be bifurcated as well, even if they separately meet the closely related criteria in IAS 39.</p> <p>Under IFRS, using the same example, both options are bifurcated from the host debt instrument as one compound embedded derivative because the conversion option and the call option are interdependent. This is the case even though the call option may not require bifurcation if assessed individually.</p>
Nonfinancial host contracts: Currencies commonly used	<p>U.S. GAAP requires bifurcation of a foreign currency embedded derivative from a nonfinancial host unless the payment is (1) denominated in the local currency or functional currency of a substantial party to the contract, (2) the price that is routinely denominated in that foreign currency in international commerce (e.g., US dollar for crude oil transactions), or (3) a foreign currency used because a party operates in a hyperinflationary environment.</p>	<p>Criteria (1) for payments denominated in the functional currency and (2) cited for U.S. GAAP also apply under IFRS. However, bifurcation of a foreign currency embedded derivative from a nonfinancial host is not required if payments are denominated in a currency that is commonly used to purchase or sell such items in the economic environment in which the transaction takes place.</p>

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Topic	U.S. GAAP	IFRS
Day one gains and losses	<p>In some circumstances, the transaction price is not equal to fair value, usually when the market in which the transaction occurs differs from the market where the reporting entity could transact. For example, banks can access wholesale and retail markets; the wholesale price may result in a day one gain compared to the transaction price in the retail market.</p> <p>In these cases, entities must recognize day one gains and losses even if some inputs to the measurement model are not observable.</p>	Day one gains and losses are recognized only when the fair value is evidenced by comparison with other observable current market transactions in the same instrument or is based on a valuation technique whose variables include only data from observable markets.
Hedge qualifying criteria: Definition of highly probable versus probable in a forecast transaction	U.S. GAAP uses the term probable for assessing whether the forecasted transaction qualifies as a hedged item.	Under IFRS, a forecast transaction must be highly probable to qualify as a hedged item in a cash flow hedge. Although the wording differs in U.S. GAAP and IFRS, we believe that it would not result in reporting differences in qualifying for cash flow hedge accounting under the two accounting frameworks.
Hedge qualifying criteria: When to assess hedge effectiveness	Under U.S. GAAP, a company tests for hedge effectiveness at least every quarter.	IFRS requires that hedges be assessed for effectiveness on an ongoing basis and that effectiveness be measured, at a minimum, at the time an entity prepares its annual or interim financial reports. Under IFRS if a company reports results only on annual basis, effectiveness testing is only required once a year, although a company may choose to test more frequently.

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Topic	U.S. GAAP	IFRS
Cash flow hedge accounting: Basis adjustment on the acquisition of a nonfinancial asset or a nonfinancial liability	<p>The term basis adjustment refers to different concepts under IFRS versus U.S. GAAP. Under U.S. GAAP, the term basis adjustment refers to the cumulative changes in fair value of a hedged item attributable to the hedged risk in a qualifying fair value hedge relationship.</p> <p>For cash flow hedges, gains or losses on a hedging instrument deferred in equity during the hedge period (i.e., the effective portion) remain in equity and are released to earnings as the hedged item affects earnings. The “basis adjustments” to the carrying amount of a nonfinancial asset or liability for cash flow hedges under IFRS are not permitted under U.S. GAAP.</p>	Under IFRS, a basis adjustment commonly refers to an adjustment of the carrying amount of a nonfinancial asset or nonfinancial liability that results from a forecasted transaction subject to a cash flow hedge. That is, the initial carrying amount of the nonfinancial asset or nonfinancial liability recognized on the balance sheet (i.e., the basis of the hedged item) is adjusted by the cumulative amount of the hedging instrument’s fair value changes that were recorded in equity. IFRS gives entities a choice to either “basis adjust” the hedged item or release amounts to profit or loss out of equity as the hedged item affects earnings.
Qualifying hedging instruments: A separate written option	A separate written option may qualify as a hedging instrument under U.S. GAAP, provided specific criteria are met, generally supported by a quantitative analysis of different scenarios.	The qualifying criteria under IFRS require that the written option be designated as an offset to a purchased option, including one that is embedded in another financial instrument.
Qualifying hedging instruments: A written option in a separate contract (entered into contemporaneously with the same counterparty)	U.S. GAAP does not require contracts to be entered into contemporaneously with the same counterparty for separate contracts to be combined and viewed as a single qualifying hedging instrument. To qualify as a hedging instrument under U.S. GAAP, however, the quantitative tests must be met if a net premium is received on the option.	Under IFRS, two or more instruments may be designated as hedging instruments only if none of them is a written option or a net written option. Therefore, in order for a written option and a purchased option to be combined and viewed as one contract, the separate contracts must be entered into contemporaneously and have the same counterparty.
Qualifying hedging instruments: Foreign currency risk and combination of derivatives and nonderivatives	U.S. GAAP permits nonderivatives to qualify as hedging instruments in a net investment hedge of foreign currency risk; however, U.S. GAAP prohibits designating a combination of a derivative and a nonderivative as a single hedging instrument.	Under IFRS, for foreign currency risk, two or more nonderivatives or proportions of them, or a combination of derivatives and nonderivatives or proportions of them, can be viewed in combination and jointly designated as the hedging instrument.
Qualifying hedging instruments: Foreign currency risk and internal derivatives	U.S. GAAP permits hedge accounting for foreign currency risk with internal derivatives in the group’s consolidated financial statements, provided specified criteria are met. Thus U.S. GAAP accommodates many foreign currency risk management strategies commonly used by treasury centers.	Under IFRS, internal derivatives do not qualify for hedge accounting in the consolidated financial statements because they are eliminated in consolidation. However, a treasury center’s net position that is laid off to an external party may still be designated as a hedge of a gross position in the consolidated financial statements.

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Topic	U.S. GAAP	IFRS
Qualifying hedging instruments: Foreign currency risk and location of hedging instruments	U.S. GAAP precludes an intervening subsidiary with a different functional currency than the entity exposed to foreign currency risk from being a party to the hedging instrument when hedging foreign currency exposure in a cash flow hedge (e.g., a forecasted transaction in a foreign currency or a recognized foreign currency asset or liability).	To qualify for hedge accounting in the consolidated financials, IFRS does not require the operating unit exposed to the hedged risk to be a party to the hedging instrument. For foreign currency hedges of forecasted transactions, IFRS does not require the entity with the hedging instrument to have the same functional currency as the entity with the hedged item. As such, IFRS allows a parent company with a functional currency different from that of a subsidiary to hedge the subsidiary's transactional foreign currency exposure. The same flexibility regarding location of the hedging instrument applies to net investment hedges.
Qualifying hedging instruments: Hedging more than one type of risk	U.S. GAAP does not permit hedges of different risks with a single derivative (other than for basis swaps).	IFRS permits designating a single hedging instrument to hedge more than one type of risk, provided that (a) the risks hedged can be identified clearly; (b) the effectiveness of the hedge can be demonstrated; and (c) it is possible to ensure that there is specific designation of the hedging instrument and different risk positions. This is generally achieved with the creation of equal and offsetting hypothetical legs in a hedging instrument.
Qualifying hedging instruments: Cash flow hedge with a pay-floating/receive-floating cross currency swap	U.S. GAAP precludes a pay-floating/receive-floating cross-currency swap from being designated as a hedging instrument in a cash flow hedge of a foreign-currency-denominated, floating-rate asset or liability because the hedging instrument does not eliminate all of the variability in the entity's functional currency cash flows arising from the hedged item.	IFRS does not have a similar restriction. For financial items designated as hedged items, the risk associated with a portion of the financial items' cash flows or fair value may be hedged provided effectiveness can be measured. This criterion is met if the foreign currency risk can be separately measured in a foreign currency floating-rate asset or liability; therefore, a pay-floating/receive-floating cross-currency swap qualifies as a hedging instrument in a cash flow hedge of a foreign currency floating-rate asset or liability.

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Topic	U.S. GAAP	IFRS
Hedging instruments prohibited: Nonderivative financial instruments and foreign currency risk	U.S. GAAP allows nonderivative financial instruments to be used as hedging instruments only for net investment hedges and fair value hedges of unrecognized firm commitments for foreign currency risk.	IFRS permits broader use of nonderivatives as hedging instruments for foreign currency risk than U.S. GAAP. Under IFRS, nonderivative financial assets or liabilities can be designated as hedging instruments in any hedge relationship for foreign currency risk.
Qualifying hedged items and risks: Definition of a firm commitment	<p>U.S. GAAP defines a firm commitment as an agreement with an unrelated party, binding on both parties and usually legally enforceable, with the following characteristics:</p> <ol style="list-style-type: none"> The agreement specifies all significant terms, including the quantity to be exchanged, the fixed price, and the timing of the transaction. The fixed price may be expressed as a specified amount of an entity's functional currency or of a foreign currency. It may also be expressed as a specified interest rate or specified effective yield. The agreement includes a disincentive for nonperformance that is sufficiently large to make performance probable. 	<p>IFRS provides less guidance in its definition of a firm commitment: "a binding agreement for the exchange of a specified quantity of resources at a specified price on a specified future date or dates."</p> <p>While we believe that more items could qualify as a firm commitment under IFRS than under U.S. GAAP, we generally would not expect many reporting differences to arise in practice.</p>
Qualifying hedged items and risks: Firm commitment to acquire a business	U.S. GAAP specifically prohibit a firm commitment to enter into a business combination or acquire or dispose of a subsidiary, minority interest, or equity method investee from qualifying as a hedged item for hedge-accounting purposes—even with respect to foreign currency risk.	IFRS permits entities to hedge a firm commitment to acquire a business in a business combination only with respect to foreign exchange risk.
Qualifying hedged items and risks: Servicing rights	<p>U.S. GAAP allows servicing rights to be hedged for the benchmark interest rate or for overall changes in fair value in a fair value hedge.</p> <p>An entity may, however, avoid the need to apply hedge accounting by electing to measure servicing rights at fair value through profit or loss as both the hedging instrument and the hedged item would be measured at fair value through profit or loss.</p>	<p>Under IFRS, servicing rights are considered nonfinancial assets, so they may be hedged only for foreign currency risk or for the entire change in fair value.</p> <p>Furthermore, IFRS precludes measurement of servicing rights at fair value through profit or loss because the fair value option is applicable only to financial items and therefore cannot be applied to servicing rights.</p>

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Topic	U.S. GAAP	IFRS
Qualifying hedged items and risks: Designated risks for financial assets or financial liabilities	U.S. GAAP does not allow a portion of a specific risk to qualify as a hedged risk in a hedge of financial assets or liabilities. U.S. GAAP specifies that the designated risk must be the changes in one of the following: (1) overall fair value or cash flows, (2) benchmark interest rates, (3) foreign currency exchange rates, or (4) creditworthiness and credit risk. The interest rate risk that can be hedged is explicitly limited to specified benchmark interest rates.	IFRS allows for financial assets and liabilities a portion of a specific risk to qualify as a hedged risk, as long as effectiveness can be reliably measured. Designating a portion of a specific risk may reduce the amount of ineffectiveness that needs to be recorded in the income statement under IFRS.
Qualifying hedged items and risks: Hedges of a portion of the time period to maturity	U.S. GAAP allows for partial-term fair value hedges of one or more selected contractual cash flows. However, U.S. GAAP clarifies that an interest rate swap with a three-year term and a notional amount equal to the principal amount of a 10-year debt instrument would not be highly effective at offsetting the changes in fair value of the individual coupon payments during the first three years of that 10-year debt instrument.	IFRS is more permissive than U.S. GAAP with respect to a partial-term fair value hedging relationship (i.e., hedge of a portion of the time to maturity of a hedged item) when the hedged risk is appropriately documented. IFRS provides a solution for a 10-year, fixed-rate bond and a five-year pay-fixed/receive-floating swap to be effective, by imputing a five-year bond in the actual 10-year bond.
Qualifying hedged items and risks: Fair value hedge of interest rate risk in a portfolio of dissimilar items	U.S. GAAP permits portfolio hedging when it is demonstrated that the items are similar. The strategy for dissimilar items permitted under IFRS would not be permitted under U.S. GAAP.	IFRS permits designating a portfolio of dissimilar items in a fair value hedge of interest rate risk. IFRS provides explicit guidance on how the hedged items may be designated (as an amount of a currency rather than individual assets or liabilities) and how changes in prepayment risk may be incorporated (by using a simplified method). The accounting for the changes in fair value of the hedged items is also simplified (presented in a separate line in the balance sheet and not allocated to individual assets or liabilities).
Effectiveness testing: Summary	IFRS and U.S. GAAP do not specify a single method for assessing hedge effectiveness. The method an entity adopts depends on its risk management strategy and should be included in the documentation prepared at the hedge's inception. The effectiveness assessment methods described for IFRS are generally acceptable under U.S. GAAP.	However, certain methods permitted under U.S. GAAP may not be used for IFRS; these include the shortcut method, the critical-terms-match method (IFRS does not permit for retrospective effectiveness testing), and the variable-cash-flow method—as described below. There also are differences related to the inclusion of credit risk in the assessment of hedge effectiveness.

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Topic	U.S. GAAP	IFRS
Effectiveness testing: Short-cut method	When certain explicit and stringent criteria are met, U.S. GAAP provides an exception from the requirement to assess hedge effectiveness and measure hedge ineffectiveness for hedges of interest rate risk of existing financial assets and financial liabilities using interest rate swaps (the “short-cut method”).	IAS 39 does not provide such an exception, but permits portions of risk to be designated as the hedged risk in a hedging relationship. In practice, a careful designation of a hedge relationship using portions of risk under IFRS may result in minimal ineffectiveness (except for changes in credit risk or liquidity of the hedging instrument). Nevertheless, entities will need to test effectiveness and measure the amount of any ineffectiveness under IFRS.
Effectiveness testing: Critical terms match	U.S. GAAP provides a simplified method for performing assessments of hedge effectiveness (i.e., verifying and documenting whether the critical terms of the hedging instrument and the forecasted transaction have changed during the review period). Under this method, often called critical terms match, no ineffectiveness is reported. If known sources of ineffectiveness are present, entities may still use this method and assume no ineffectiveness, but they must identify, be able to assert through analysis that the amount of ineffectiveness possible remains de minimis and the differences do not refute a reasonable expectation of high effectiveness.	IFRS does not specifically discuss the methodology of applying a critical-terms-match approach in the level of detail included within U.S. GAAP. Under IFRS, for prospective effectiveness tests, the critical-terms-match method may be acceptable; however, for retrospective effectiveness assessments, ineffectiveness must be quantified.
Effectiveness testing: Variable cash flow method	U.S. GAAP specifically allows the variable-cash-flows method to measure hedge ineffectiveness for cash flow hedges.	IFRS permits the variable-cash-flows method when performing a prospective hedge effectiveness test, but not when performing a retrospective test.
Effectiveness testing: Counterparty/own credit risk and the hypothetical derivative method	Under U.S. GAAP, the hypothetical derivative will reflect the adjustment for counterparty (or own) credit risk in the actual derivative; as such, no ineffectiveness will arise due to counterparty (or own) credit risk because the same credit risk is reflected in both the actual and hypothetical derivative—unless the likelihood that either counterparty will not default ceases to be probable.	Under IFRS, a hypothetical derivative perfectly matches the hedged risk of the hedged item. Because the hedged item would not contain the derivative counterparty’s (or an entity’s own) credit risk, the hypothetical derivative would not reflect that credit risk. The actual derivative, however, would reflect credit risk. The resulting mismatch between changes in the fair value of the hypothetical derivative and the hedging instrument would result in ineffectiveness.

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Topic	U.S. GAAP	IFRS
Qualifying hedged items and risks: Cash flow hedges with purchased options	<p>U.S. GAAP permits an entity to assess effectiveness 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). Using this method, the hedged item and risk reflected in the hypothetical derivative may include time value. As such, the changes in time value may be deferred in other comprehensive income based on the level of effectiveness.</p> <p>Alternatively for U.S. GAAP, the hedge relationship can exclude time value, in which case a difference can be avoided.</p>	IFRS states that only the intrinsic value of a purchased option reflects the one-sided risk hedged in a forecasted transaction. Therefore, to achieve hedge accounting with purchased options, an entity will be required to use only the hedging instrument's intrinsic value. The changes in time value will be recorded in the income statement.
Net investment hedge: Location of hedging instruments	U.S. GAAP requires that either, (1) the operating unit with the foreign currency exposure be a party to the hedge instrument, or (2) another member of the consolidated group that has the same functional currency as that operating unit be party to the hedging instrument and that there be no intervening subsidiary with a different functional currency.	IFRS provides with some flexibility in the location of the hedging instrument, as it may be held by any entity or entities, regardless of the functional currencies of the intervening subsidiaries within the group. This provision applies as long as the hedging instrument is effective in offsetting the risk arising from the exposure to the functional currency of the foreign operation and of the parent entity applying hedge accounting.
Hedge discontinuance: When a forecast transaction is no longer expected to occur	U.S. GAAP states that if it is probable that the forecasted transaction will not occur within two months after the originally specified time period, the gain or loss related to the discontinued cash flow hedge is removed from equity and recognized in income immediately. Note that the two-month rule applies to the reclassification of gain or loss deferred in equity, not to the determination of when hedge accounting should be discontinued.	A difference could arise in practice due to the less prescriptive guidance in IFRS that does not contain any equivalent two-month rule.

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Topic	U.S. GAAP	IFRS
Hedge discontinuance: Retrospective effectiveness failure	Under U.S. GAAP, as long as an entity demonstrates that the hedging relationship is still expected to be highly effective prospectively, it can continue to apply hedge accounting under the original designation even though the retrospective test failed. However, hedge accounting cannot be applied in the period that the retrospective test failed.	Under IFRS, to continue hedge accounting without interruption, an entity must demonstrate that the hedge relationship has been effective on both a prospective and retrospective basis. If an entity fails the retrospective assessment in the prior period but can demonstrate that the hedge would be effective prospectively, hedge accounting based on the previous designation cannot be continued. The derivative instrument must be redesignated as a hedging instrument in a new hedging relationship.
Presentation: Derivatives and hedging activities in the statement of cash flows	<p>Because IFRS and U.S. GAAP provide a certain degree of flexibility in determining the classification of hedging derivative cash flows (as a result of accounting policy elections and the determination of the appropriate classification in accordance with an entity's business), reporting differences may exist but can be avoided in practice.</p> <p>However, a reporting difference may arise for cash flows associated with a derivative that contains an other-than-insignificant financing element. Under U.S. GAAP, such cash flows need to be reported in the financing section of the statement of cash flows.</p>	IFRS does not contain such a specific provision; as a result, a difference may arise when an entity reports such cash flows in the operating section of the statement of cash flows.

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Topic	U.S. GAAP	IFRS
Presentation: Derivative gains and losses in the income statement	<p>U.S. GAAP does not provide specific guidance on income statement classification for the gains or losses on derivatives.</p> <p>The SEC staff believes that multiple line items in the income statement are only allowed for the effective and ineffective portions of gains and losses related to qualifying hedging derivatives. Otherwise, all changes in the fair value of a derivative must be shown in a single line item in the income statement. For example, presenting unrealized gains and losses in one income statement line with reclassification of realized gains and losses to another line upon realization of the derivative is deemed inappropriate.</p>	<p>IFRS requires that entities account for changes in derivatives' fair value through the income statement, except for derivatives that qualify as effective hedging instruments in a cash flow or a net investment hedge. IFRS provides limited guidance on the income statement geography of derivative gains and losses. Entities, therefore, have some flexibility in how these items are presented. The line item in which such fair value changes are included will depend on the derivative's nature and purpose and on the entity's presentation policy. The presentation policy should be described clearly, based on the entity's risk management policy and applied consistently.</p>
Presentation: Derivatives in the balance sheet	<p>Because U.S. GAAP offers no specific guidance on how derivatives should be classified in the balance sheet, the existing definition of current assets and current liabilities under U.S. GAAP, should be considered.</p>	<p>IFRS does not specifically address the classification of derivatives in the balance sheet as current or noncurrent, as a result the general guidance for classified balance sheets will apply.</p> <p>In practice, companies reporting under both IFRS and U.S. GAAP may be able to avoid reporting differences.</p>

How PricewaterhouseCoopers Can Help

PricewaterhouseCoopers is uniquely qualified to address the broad spectrum of business, accounting, valuation, tax, and other financial reporting or operating issues related to derivative instruments and hedging activities. PwC has the necessary expertise and extensive experience in advising on these issues.

PwC has helped numerous companies assess the impact and implement ASC 815, *Derivatives and Hedging*. This experience places us at the forefront of understanding the complex issues that are involved with this accounting topic. Our professionals frequently advise companies regarding derivative transactions, hedging activities and related matters, including (1) risk management strategies, (2) financial-risk exposures, (3) fair-value and hedge effectiveness analyses, (4) tax structuring and of course (5) interpreting and applying the accounting rules under ASC 815. Additionally, our information-technology consultants can assist you in assessing your system requirements for implementing ASC 815, including design and coding, implementation, and testing of systems. Our professionals bring value to businesses by understanding and resolving complex business issues.

If you have any questions or comments, please contact your PricewaterhouseCoopers partner.

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Acknowledgments

This guide represents the efforts and ideas of many individuals within PricewaterhouseCoopers LLP, including members of PwC's Global National Professional Services Group and various subject matter experts. The following PricewaterhouseCoopers personnel contributed to the contents or served as technical reviewers of the 2013 edition of this guide: Donald Doran, Frederick Currie, Marie Kling, Steven Halterman, Kristin Derington-Ruiz, Sudipta Yancy, and José Arostegui.