

A GUIDE TO HEDGE ACCOUNTING UPON THE ADOPTION OF ASU 2017–12

Third Edition



A GUIDE TO HEDGE ACCOUNTING UPON THE ADOPTION OF ASU 2017–12

THIRD EDITION January 2021

A GUIDE TO HEDGE ACCOUNTING UPON THE ADOPTION OF ASU 2017–12

Prepared by:

Faye Miller, National Accounting Policy Leader, RSM US LLP faye.miller@rsmus.com, +1 410 246 9194

Monique Cole, Principal, National Professional Standards Group, RSM US LLP monique.cole@rsmus.com, +1617 2411461

Michael Gaiso, Senior Director, National Professional Standards Group, RSM US LLP <u>michael.gaiso@rsmus.com</u>, +1 212 372 1709

Ginger Buechler, Senior Director, National Professional Standards Group, RSM US LLP ginger.buechler@rsmus.com, +1 612 455 9411

January 2021

The FASB material is copyrighted by the Financial Accounting Foundation, 401 Merritt 7, Norwalk, CT 06856, and is used with permission.

TABLE OF CONTENTS

	vord	
	ter 1: Overview of hedge accounting and the requirements to apply it	
1.	1 Overview	
	1.1.1 Accounting for cash flow hedges	
	1.1.2 Accounting for fair value hedges	
	1.1.3 Accounting for net investment hedges	
1.	2 Requirements to qualify for hedge accounting	4
	1.2.1 Formal designation and documentation	6
	1.2.2 Eligibility of hedged items and transactions	11
	1.2.3 Eligible hedging instruments	
	1.2.4 Hedge effectiveness	
1.	3 Reference rate reform	50
Chap	ter 2: Commodities hedging	51
2.	1 Overview	51
2.	2 Cash flow hedge of a contractually specified component	
	2.2.1 Criteria for hedging a contractually specified component	
	2.2.2 Ongoing monitoring associated with hedges of contractually specified components.	
	2.2.3 Changes in the designated contractually specified component	
	3 Cash flow hedge of all changes in cash flows associated with commodities hedge	
	4 Fair value commodities hedge	
	5 Commodity hedge examples	
	ter 3: Hedges related to interest rate risk	
	1 Overview	
3.	2 Hedges of interest rate risk	
	3.2.1 Cash flow hedges of interest rate risk (contractually specified interest rate)	
	3.2.2 Fair value hedges of interest rate risk	
	3 Examples of cash flow and fair value hedges related to interest rate risk	
	ter 4: Foreign currency hedges	
	1 Overview	
4.	2 Incremental requirements relevant to hedges of foreign currency exposure	
	4.2.1 Additional requirements for cash flow hedge of foreign exchange risk	110
4.	3 Hedging foreign currency exposure associated with receivables or payables	
	resulting from hedged forecasted sales or purchases	
	4 Accounting for net investment hedges	
	5 Foreign currency hedge examples	
	ter 5: Fair value hedge accounting	
	1 Overview	138
5.	2 Additional accounting considerations relevant to the hedged item in a fair value	400
	hedge	
	5.2.1 Amortizing adjustments to the carrying amount of a debt instrument	
	5.2.2 Capitalized interest ramifications for assets under construction	
_	5.2.3 Impairment considerations	
5.	3 Discontinuing fair value hedge accounting	
	5.3.1 Termination of fair value hedge of firm commitment	142



Chapte	r 6: Casl	h flow hedge accounting	143
6.1	Overvi	ew	.143
6.2	Reclas	sification of amounts in other comprehensive income to earnings	.143
	6.2.1	Derivative with nonzero fair value at hedge inception	.144
	6.2.2	Gains or losses from cash flow hedges of debt that is extinguished	.144
6.3	Impairr	ment considerations associated with hedged items or transactions	.145
6.4	Discon	tinuing cash flow hedge accounting	.145
		Designating a new hedge	
Append	lix A: Hi	gh level overview of ASU 2017-12, as amended by ASU 2019-04	.149
A.1)17-12	
		Risk component hedging	
		Accounting for the hedged item in fair value hedges of interest rate risk	
		Recognition and presentation of the effects of hedging instruments	
		Amounts excluded from the assessment of hedge effectiveness	
		Other simplifications of hedge accounting guidance	
		Effective date	
		ransition	
		Advantageous transition elections	
A.2		19-04	
		verview	
		ffective date and transition considerationssronyms, definitions and literature references	
INDEX	(OF E)	CAMPLES	
Example	e 1.2.1:	Documentation when the critical terms of the hedging instrument and hedged forecasted transaction match (from ASC 815-20-55-80A)	10
Example	o 1 2 2·	Purchased option used in a cash flow hedge (from ASC 815-20-55-208 to 55-211).	
Example		Sample hedge election documentation	
Example		Change in facts and circumstances in qualitative effectiveness assessments (from	23
Lxampi	C 1.2.4.	ASC 815-20-55-79P to 55-79V)	37
Example	e 1 2 5·	Frequency of designation of hedged net investment (from ASC 815-35-55-1)	
Example		Contractually specified component in a not-yet-existing contract (from ASC 815-	47
·		20-55-26B to 55-26E)	55
Example	e 2.5.2:	Option time value excluded from the assessment of effectiveness in a cash flow hedge and recorded in earnings under an amortization approach (from ASC 815-	
		20-55-235 to 55-238)	56
Example	e 2.5.3:	Effectiveness of cash flow hedge of a forecasted purchase of inventory with a forward contract (from ASC 815-30-55-1A to 55-8)	58
Example	e 2.5.4:	Cash flow hedge of the forecasted sale of a commodity when the critical terms match (from ASC 815-30-55-20 to 55-23)	
Example	e 2.5.5:	Designation and discontinuance of a cash flow hedge of the forecasted purchase of inventory (from ASC 815-30-55-40 to 51)	
Example	e 2.5.6:	Accounting for a derivative instrument's gain or loss in a cash flow hedge— effectiveness based on changes in intrinsic value (from ASC 815-30-55-63 to	62

Example 2.5.7:	Assessing effectiveness of a cash flow hedge of a forecasted purchase of inventory with a forward contract (contractually specified component) (from ASC 815-30-55-134 to 55-141)	64
Example 2.5.8:	Designation of a cash flow hedge of a forecasted purchase of inventory for which commodity exposure is managed centrally (from ASC 815-30-55-142 to 55-148)	66
Example 2.5.9:	Firm commitment as hedged item in relation to long-term supply contracts with embedded price caps or floors (from ASC 815-20-55-84 to 55-87)	
Example 2.5.10:	Fair value hedge of natural gas inventory with futures contracts (from ASC 815-25-55-1 to 55-7)	68
Example 2.5.11:	Fair value hedge of tire inventory with a forward contract (from ASC 815-25-55-8 to 55-12)	69
Example 2.5.12:	Fair value hedge of growing wheat with futures contracts (from ASC 815-25-55-13 to 55-17)	70
Example 2.5.13:	Fair value hedge of a commodity inventory (from ASC 815-25-55-30 to 55-39)	71
Example 3.2.1:	Designating the hedged risk associated with the forecasted issuance of debt	77
Example 3.2.2:	Illustration of last-of-layer method	81
Example 3.3.1:	Variable interest payments on a group of variable-rate, interest-bearing loans as the hedged item (from ASC 815-20-55-88 to 55-99)	83
Example 3.3.2:	Application of the net written option test to collar-based hedging relationships (from ASC 815-20-55-230 to 55-234)	84
Example 3.3.3:	Cash flow hedge of variable-rate interest-bearing asset (from ASC 815-30-55-24 to 55-33)	
Example 3.3.4:	Changes in a cash flow hedge of forecasted interest payments with an interest rate swap (from ASC 815-30-55-52 to 55-61)	
Example 3.3.5:	Impact on accumulated other comprehensive income of issuing debt with a term that is shorter than originally forecasted (from ASC 815-30-55-94 to 55-99)	
Example 3.3.6:	Effect on accumulated other comprehensive income from issuing debt at a date that is not the same as originally forecasted (from ASC 815-30-55-128 to 55-133)	92
Example 3.3.7:	Hedging a portfolio of fixed-rate financial assets (from ASC 815-20-55-173 to 55-178)	94
Example 3.3.8:	Fair value hedge of U.S. Treasury bond with put options (from ASC 815-25-55-23 to 55-26)	95
Example 3.3.9:	Fair value hedge of an embedded purchased option with a written option (from ASC 815-25-55-27 to 55-29)	96
Example 3.3.10:	Fair value hedge of fixed-rate interest-bearing debt (from ASC 815-25-55-40 to 55-52)	96
Example 3.3.11:	Fair value hedge of the LIBOR swap rate in a \$100,000 BBB-quality 5-year fixed-rate noncallable note (from ASC 815-25-55-53 to 55-61C)	. 100
Example 3.3.12:	Interaction with loan impairment (before adoption of ASU 2016-13) and interaction with measurement of credit losses (after adoption of ASU 2016-13) (from ASC 815-25-55-85 to 55-93)	. 103
Example 3.3.13:	Fair value hedge of interest rate risk using the partial-term approach (from ASC 815-25-55-94 to 55-99)	. 105
Example 3.3.14:	Fair value hedge of the LIBOR swap rate in a \$100 million A1-quality 5-year fixed-rate noncallable debt (from ASC 815-25-55-100 to 55-108)	. 106
Example 4.5.1:	Foreign-currency-denominated debt instrument as both hedging instrument and hedged item (from ASC 815-20-55-127 to 55-129)	
Example 4.5.2	Eliminating all variability in cash flows (from ASC 815-20-55-132 to 55-135)	114

Example 4.5.3:	Hedging a firm commitment or fixed-price agreement denominated in a foreign currency (from ASC 815-20-55-136 to 55-140)	115
Example 4.5.4:	Portions of a foreign-currency-denominated financial asset or liability as a hedged item (from ASC 815-20-55-141 to 55-155)	115
Example 4.5.5:	Designation of an intra-entity loan or other payable as the hedging instrument in a fair value hedge of an unrecognized firm commitment (from ASC 815-20-55-167 to 55-170)	121
Example 4.5.6:	Fair value hedge of a firm commitment denominated in a foreign currency with a forward to purchase a different foreign currency (from ASC 815-25-55-62 to 55-71)	122
Example 4.5.7:	Effectiveness of cash flow hedge of forecasted sale with a forward contract (from ASC 815-30-55-13 to 55-16)	125
Example 4.5.8:	Cash flow hedge of the foreign currency exposure in a royalty arrangement (from ASC 815-30-55-67 to 55-76)	125
Example 4.5.9:	Cash flow hedge of a fixed-rate foreign-currency-denominated loan eliminating variability in the functional-currency-equivalent cash flows (fixed-to-fixed scenario) (from ASC 815-30-55-81 to 55- 85)	128
Example 4.5.10:	Reclassifying amounts from a cash flow hedge of a forecasted foreign-currency-denominated intra-entity sale (from ASC 815-30-55-86 to 55-90)	130
Example 4.5.11:	Cash flow hedge of forecasted sale or purchase on credit (from ASC 815-30-55-106 to 55-112)	131
Example 4.5.12:	Hedge accounting in the consolidated financial statements applied to internal derivatives that are offset on a net basis by third-party contracts (from ASC 815-30-55-113 to 55-125)	133
Example 6.4.1:	Discontinuation of a cash flow hedge (from ASC 815-30-55-100 to 55-105)	146

Foreword

This guide is intended to provide a high-level overview of hedge accounting and is based on the content within ASC 815-20 to ASC 815-35, as amended by ASU 2017-12. The guide contains illustrations and examples for some of the more common types of hedging strategies. Reference should be made to the appropriate subtopics within ASC 815 for a comprehensive understanding. This guide does not address the disclosure requirements for derivatives and hedging activities, which are primarily outlined at ASC 815-10-50 and illustrated through examples in ASC 815-10-55. Additionally, incremental disclosure requirements for cash flow hedges are contained in ASC 815-30-50.

This guide applies to all entities; however, certain entities, such as not-for-profit entities and benefit plans that do not report earnings, are not permitted to use cash flow hedge accounting, which is the focus of Chapter 6, or to elect the amortization approach for amounts excluded from the assessment of effectiveness under fair value hedge accounting. Not-for-profit, business-oriented health care entities that report a performance indicator are permitted to use cash flow hedge accounting, even though they are not required to report a separate component of equity in the balance sheet for other comprehensive income.

Spotlight on hedges involving LIBOR or another rate expected to be discontinued

As discussed in more detail in Section 1.3, reference rate reform will result in the elimination of LIBOR, and may result in the elimination of other interbank offered rates as well. For hedging relationships that reference LIBOR (or another reference rate expected to be eliminated), temporary optional expedients and exceptions are provided in ASC 848 related to the accounting for that hedging relationship. This guide highlights those aspects of hedge accounting for which ASC 848 provides temporary optional expedients and exceptions. For additional information about these temporary optional expedients and exceptions refer to our white paper, Optional accounting expedients can make LIBOR transition easier.

Content overview

Chapter 1: Overview of hedge accounting and the requirements to apply it

This chapter provides a high level overview of hedge accounting, including the three major types of hedges. It also summarizes the requirements that need to be met to apply hedge accounting, including: (a) formal designation and documentation, (b) eligible hedged items and transactions, (c) eligible hedging instruments and (d) the requirement to assess the effectiveness of hedges.

Chapter 2: Commodities hedging

This chapter provides an overview of commodities hedging by discussing the types of hedges that are commonly employed in practice and provides suggestions for structuring hedges in a manner that will promote high effectiveness. It also discusses the benefits of, and requirements to, hedge a contractually specified component and concludes with several examples of commodities hedges.

Chapter 3: Hedges related to interest rate risk

This chapter provides an overview of hedges related to interest rate risk, including a discussion of the types of cash flow and fair value hedges that are commonly employed and a discussion on the benefits of hedging interest rate risk rather than total changes in cash flows or fair value. It concludes with several examples of hedges of interest rate risk.

¹ FASB clarified this with the issuance of ASU 2019-04.

Chapter 4: Foreign currency hedges

This chapter provides an overview of foreign currency hedges and the incremental requirements associated therewith to qualify for hedge accounting. It also provides an overview of the accounting for net investment hedges and concludes with several examples of foreign currency hedging.

Chapter 5: Fair value hedge accounting

This chapter is focused on the mechanics of fair value hedge accounting, including the adjustments to the hedged item, and discontinuing hedge accounting.

Chapter 6: Cash flow hedge accounting

This chapter is focused on the mechanics of cash flow hedge accounting, including the reclassification of amounts in other comprehensive income to earnings, and discontinuing hedge accounting.

Appendix A: High level overview of ASU 2017-12

On August 28, 2017, the FASB issued ASU 2017-12, which brought forth some long-awaited improvements to hedge accounting. A high-level overview of its most significant improvements, as well as effective date and transition considerations, are included in Appendix A.

Appendix B: Acronyms, definitions and literature references

Several acronyms are used throughout this guide, and references are made to specific topics and subtopics in the ASC. This appendix includes an acronym legend, which lists the acronyms and their corresponding definitions, definitions of some key terms and a literature listing of ASUs and ASC topics and subtopics referred to throughout this guide with their corresponding titles.

Chapter 1: Overview of hedge accounting and the requirements to apply it

1.1 Overview

Many entities who enter into derivative transactions to economically hedge their exposure to various risks have the desire to elect hedge accounting. ASC 815 requires derivatives within its scope to be recognized on the balance sheet, generally at fair value.² Absent an election to apply hedge accounting, changes in the fair value of derivatives are recognized through the income statement and can therefore cause significant income statement volatility from one period to the next. Generally, income statement volatility can be minimized if an entity elects and qualifies for hedge accounting, in the form of either a cash flow hedge, fair value hedge or hedge of a net investment in a foreign operation. An election to apply hedge accounting is transaction based, and an entity may elect to use hedge accounting for some qualifying derivative transactions, and not use hedge accounting for other transactions. There are stringent requirements that must be met in accordance with prescribed timeframes to elect and qualify for hedge accounting, including designating and documenting the hedge in a very prescriptive manner, as well as demonstrating at the inception of a hedge, and on an ongoing basis, that the hedge is highly effective.

Electing and qualifying for hedge accounting can be a frustrating and time-consuming process due to these complex and stringent requirements. As a result, many entities rely on external specialists to help them navigate through and comply with, the complex requirements. Some entities decide they would rather live with the period-to-period income statement volatility rather than put forth the time and effort necessary to comply with the stringent and complex requirements. In making such a decision, the chief financial officer (CFO) or treasurer may want to give consideration to various factors, including the expectations of the users of the financial statements, the duration of the derivatives and their potential significance, as well as the specific facts and circumstances of the proposed hedging relationship and resultant degree of complexity to qualify for hedge accounting.

There are three major types of hedges, namely cash flow hedges, fair value hedges and net investment hedges.

Understanding the terminology

A cash flow hedge is defined as 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. Exposure to variability in cash flows typically results from an interest rate that is not fixed (i.e., variable-rate debt), forecasted purchases or sales of commodities at prices that are not fixed or locked in, and forecasted purchases or sales transactions that will be settled in a nonfunctional currency.

A fair value hedge is defined as 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. Exposure to changes in fair value typically results from holding or issuing a debt instrument that has a fixed interest rate or that is denominated in a nonfunctional currency, holding an asset that is exposed to fluctuations in fair value as market prices change, and commitments to buy or sell an asset at a fixed price. Unlike a cash flow hedge where variability in an interest rate, exchange rate or price causes variability in cash flows, commodities inventory, fixed-rate debt instruments and firm commitments are examples of items that can present exposure to changes in fair value.

A net investment hedge is a hedge of the foreign currency exposure of a net investment in a foreign operation.

² As discussed at Section 1.2.4.1.3, private companies that elect and qualify for the simplified hedge accounting approach for an interest rate swap can elect to account for the swap at settlement value rather than fair value.

1.1.1 Accounting for cash flow hedges

The accounting for cash flow hedges is significantly different than the accounting for fair value hedges. The application of cash flow hedge accounting, which is the subject of Chapter 6, minimizes earnings volatility because changes in the fair value of the derivative are recognized through other comprehensive income and generally do not impact the income statement until the hedged transaction impacts earnings. In other words, changes in the fair value of a derivative are accumulated in other comprehensive income and subsequently reclassified into earnings in the same period or periods in which the hedged forecasted transaction affects earnings.

1.1.2 Accounting for fair value hedges

Fair value hedge accounting minimizes earnings volatility because both changes in the fair value of the derivative, and changes in the fair value of the hedged item that are attributable to the hedged risk, are recognized in the income statement and offset one another, as is elaborated on in Chapter 5.

1.1.3 Accounting for net investment hedges

The accounting for net investment hedges, which is addressed at Section 4.4, minimizes earnings volatility because changes in the fair value of the derivative or other hedging instrument are recognized through other comprehensive income as part of the cumulative translation adjustment.

1.2 Requirements to qualify for hedge accounting

Spotlight on hedges involving LIBOR or another rate expected to be discontinued

As discussed in more detail in Section 1.3, reference rate reform will result in the elimination of LIBOR, and may result in the elimination of other interbank offered rates as well. For hedging relationships that reference LIBOR (or another reference rate expected to be eliminated), temporary optional expedients and exceptions are provided in ASC 848 related to the accounting for that hedging relationship. One or more of these temporary optional expedients and exceptions relates to the guidance in this section. For additional information about these temporary optional expedients and exceptions refer to our white paper, Optional accounting expedients can make LIBOR transition easier.

ASC 815-20-25 outlines the general requirements that must be met to qualify for hedge accounting. In short, hedge accounting must be elected through formal designation and documentation of the hedge relationship. Additionally, an eligible hedging instrument needs to be highly effective at addressing a permissible hedged risk associated with an eligible hedged item or transaction. These requirements are discussed in the following Sections:

- Formal designation and documentation (Section 1.2.1)
- Eligibility of hedged items and transactions (Section 1.2.2)
- Eligibility of hedging instruments (Section 1.2.3)
- Hedge effectiveness (Section 1.2.4)

Careful attention should be given to these requirements to ensure that hedge accounting can be applied. There are key dates that vary by type of entity by which the designation and documentation requirements need to be met, as well as by which hedge effectiveness needs to be assessed and documented. As the chart that follows demonstrates, some of these requirements need to be met as early as the inception of the hedge, which is generally when the derivative instrument is executed.

Summary of key requirements and timing			
Type of entity	Designation and documentation (Section 1.2.1)	Effectiveness assessment (Section 1.2.4)	
Public business entities, financial institutions (as described in ASC 942-320-50-1), and not-for-profit entities that have issued, or are a conduit bond obligor for, securities that are traded, listed, or quoted on an exchange or an over-the-counter market	The documentation requirements in ASC 815-20-25-3 must be met at the inception of the hedge.	The initial prospective quantitative hedge effectiveness assessment (using information applicable as of the date of hedge inception) is required to be performed by the earliest of the following: The first quarterly hedge effectiveness assessment date The date that financial statements that include the hedged transaction are available to be issued The date that any criterion to apply hedge accounting is no longer met The date of expiration, sale, termination or exercise of the hedging instrument The date of dedesignation of the hedging relationship For a cash flow hedge of a forecasted transaction, the date that the forecasted transaction, the date that the forecasted transaction occurs ³ Subsequent assessments of effectiveness are required to be performed and documented whenever financial statements or earnings are reported and at least every three months.	
Private company (excluding financial institutions) applying the simplified hedge accounting	The documentation requirements in ASC 815-20-25-3 must be met by the date the	There is no requirement to assess the effectiveness of the hedge, and hedge accounting	

³ As part of the meeting materials for its September 5, 2018 meeting, the FASB staff indicated that when hedging a group of forecasted transactions, the initial prospective quantitative assessment of hedge effectiveness should be completed before the first forecasted transaction occurs. As noted at ASC 815-20-25-14, forecasted transactions include not only forecasted sales or purchases, but also cash flows related to a recognized asset or liability (e.g., interest payments).

Summary of key requirements and timing		
Type of entity	Designation and documentation (Section 1.2.1)	Effectiveness assessment (Section 1.2.4)
approach for qualifying interest rate swaps in accordance with ASC 815-20-25-135	first annual financial statements are available to be issued after hedge inception.	can continue as long as the requirements to apply this method continue to be met. Ongoing consideration needs to be given to the possibility of default by the counterparty to the swap. If the likelihood that the counterparty will not default ceases to be probable, hedge accounting should be discontinued.
Other entities	The documentation requirements in ASC 815-20-25-139 must be met at the inception of the hedge. The method of assessing hedge effectiveness must be documented by the date on which the next interim (if applicable) or annual financial statements (including footnotes) are available to be issued.	The hedge effectiveness must be assessed by the date on which the next interim (if applicable) or annual financial statements (including footnotes) are available to be issued, using information applicable as of hedge inception and each subsequent quarterly assessment date.

1.2.1 Formal designation and documentation

Spotlight on hedges involving LIBOR or another rate expected to be discontinued

As discussed in more detail in Section 1.3, reference rate reform will result in the elimination of LIBOR, and may result in the elimination of other interbank offered rates as well. For hedging relationships that reference LIBOR (or another reference rate expected to be eliminated), temporary optional expedients and exceptions are provided in ASC 848 related to the accounting for that hedging relationship. One or more of these temporary optional expedients and exceptions relates to the guidance in this section. For additional information about these temporary optional expedients and exceptions refer to our white paper, Optional accounting expedients can make LIBOR transition easier.

There are stringent documentation requirements that must be met in accordance with the preceding time frames to apply hedge accounting. These requirements were designed to prevent an entity from basing a decision on whether or not to elect hedge accounting on the derivative gain or loss that occurred during the period. Careful attention should be given to these requirements as it is important that all required documentation is in place within the required time frame and that each requirement is fully and clearly addressed. Management may want to seek external assistance with the documentation and other requirements associated with hedge accounting to not only ensure that all requirements are met, but also to benefit from the expertise of others in designing and documenting the hedge in a manner that will result in high effectiveness and minimize the ongoing compliance burden. For example, the effectiveness of a hedge is often impacted by how the hedged item or transaction and the nature of the risk being hedged are defined, as well as the method(s) the entity selects to assess the effectiveness of the hedging relationship.

The formal documentation requirements are outlined in ASC 815-20-25-3 and summarized in the following table with comments that may be useful in understanding the requirements.

Documentation requirements	Comments
Applicable to all hedges	
Hedging relationship	
Risk management objective and strategy, including identification of:	
Hedging instrument (e.g., derivative)	Refer to Section 1.2.3 for a discussion of eligible and ineligible hedging instruments.
Hedged item or transaction	Refer to Section 1.2.2 for a discussion of eligible hedged items and transactions.
Nature of risk being hedged	Refer to the chart in Section 1.2.2.
The method(s) that will be used to retrospectively and prospectively measure effectiveness (e.g., dollar-offset test, regression analysis, qualitative approach) retrospectively and prospectively measure effectiveness (e.g., dollar-offset test, regression analysis, qualitative approach)	Refer to Section 1.2.4 for additional guidance on assessing effectiveness. In those circumstances outlined in Section 1.2.4.1, for which no quantitative analysis is necessary, the documentation should demonstrate how the relevant criteria are met. We believe it is also prudent in these circumstances to document the method that will be used to assess the effectiveness if the criteria to assume perfect effectiveness are no longer met. In other words, the entity should indicate whether it intends to assess the ongoing effectiveness qualitatively (as discussed in Section 1.2.4.1.5.2, after performing an initial quantitative assessment), and if so, how it intends to carry out that qualitative assessment, and the quantitative method it will use in the event facts and circumstances change such that the entity can no longer assert qualitatively that the hedging relationship was and continues to be highly effective. (Refer to the RSM commentary that follows Example 1.2.1.) The quantitative method that is selected (either as the ongoing method that will be used to assess the effectiveness of the hedge, or as the method used if the entity can no longer assert qualitatively that the hedging relationship was and continues to
	be highly effective) should be described with sufficient specificity that an uninvolved person could perform the analysis and get the same results. The parameters that will be deemed to be highly effective should also be defined. The quantitative method used for any initial

Documentation requirements	Comments
	assessment of effectiveness should be used for prospective quantitative assessments. The documentation should also indicate if all of the gain or loss on the hedging instrument will be included in the assessment of effectiveness, and if not, how the excluded component will be recognized in earnings.
The statement that the entity is hedging foreign currency risk on an after-tax basis rather than on a pretax basis, if applicable	
Applicable to fair value hedges	
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	
For a hedging relationship designated under the last-of-layer method, an analysis to support the entity's expectation that the hedged item is anticipated to be outstanding as of the hedged item's assumed maturity date	Refer to Section 3.2.2.1.1 for additional guidance.
Applicable to cash flow hedges	
For a cash flow hedge of a forecasted transaction:	
The date on or period within which the forecasted transaction is expected to occur	Refer to relevant discussion at Section 1.2.2.2.1.1 for guidance.
The specific nature of asset or liability involved (if any)	
Either of the following: The exact amount of foreign currency being hedged for hedges of foreign currency exchange risk The number of items or unit of measure encompassed by the hedged forecasted transaction for hedges of other risks	
If a forecasted sale or purchase is being hedged for price risk, the hedged transaction should not be specified solely in terms of expected currency amounts or as a percentage of sales or purchases during a period	

Do	ocumentation requirements	Comments
•	The current price of a forecasted transaction (to satisfy the criterion in ASC 815-20-25-75(b) for offsetting cash flows)	This amount is used to determine the offsetting cash flows during the term of the hedge to determine if the hedge is highly effective.
•	The hedged forecasted transaction, described with sufficient specificity so that when a transaction occurs, it is clear whether the transaction is or is not the hedged transaction	Careful consideration should be given to defining the hedged forecasted transaction in a manner that meets this requirement without being overly specific. Examples include the following: • For a commodities hedge of a contractually specified component: The hedged transaction is the first previously undesignated sales (or purchases) of a stated product with prices based on the contractually specified component occurring in the month the derivative matures, equal to the derivative's notional amount.
		For a foreign currency hedge: The hedged transaction is the first previously undesignated sales (or purchases) in the hedged currency occurring in the month the derivative matures, equal to the derivative's notional amount.
		These examples are included for illustrative purposes and need to be tailored for the specific facts and circumstances. For example, when there are multiple derivatives hedging the same pool of forecasted transactions that are designated on the same date, it is important to further differentiate the transactions that are being hedged with each derivative.
		Assume, for example, that an entity has two interest rate swaps, each with a \$25 million notional amount, that are intended to hedge the forecasted interest payments on \$50 million of the entity's variable-rate borrowings. The entity may want to indicate that swap 1 is hedging the first interest payments made each month on an amount of variable-rate borrowings indexed to the contractually stated interest rate equal to its notional amount (\$25 million), through its maturity date, and that swap 2 is hedging the first previously undesignated interest payments made each month on an amount of variable-rate borrowings indexed to the contractually stated interest rate equal to its notional amount (\$25 million), through its maturity date.
		By defining hedged forecasted transactions generically rather than associating them with a

Documentation requirements	Comments
	specific customer (in the case of hedged sales), vendor (in the case of hedged purchases) or debt instrument (in the case of hedged interest payments), the documentation will allow for any transactions that occur in the designated time frame and share the same risk exposure to serve as the hedged transactions, making it less likely that a shortfall will occur. Example 3.3.1 further illustrates this concept. Additionally, Examples 2.5.1 and 3.3.4 demonstrate the benefit of not describing the hedged forecasted transactions in a manner that limits them to one specific contractually specified index.
Identification of the contractually specified component if hedging this risk in a forecasted purchase or sale of a nonfinancial asset	Refer to Section 2.2 for additional information.
Identification of the contractually specified interest rate if hedging this risk for forecasted interest receipts or payments on a variable-rate financial asset or liability	Refer to Section 3.2 for additional information.

1.2.1.1 Illustrative documentation example

Example 1.2.1: Documentation when the critical terms of the hedging instrument and hedged forecasted transaction match (from ASC 815-20-55-80A)

This Example illustrates the documentation requirements in paragraph 815-20-25-3 when the critical terms of the hedging instrument and hedged forecasted transaction match in accordance with paragraphs 815-20-25-84 to 25-85. On January 1, 20X1, Entity A, a U.S. dollar (USD) functional currency entity, executes a forward contract to hedge a portion of its exposure to Canadian Dollar-(CAD-) denominated forecasted sales expected to occur in December 20X1. Entity A determines that all the critical terms of the hedging instrument and hedged forecasted transaction match. It documents the hedging relationship concurrently with the execution of the forward contract in accordance with paragraph 815-20-25-3 as follows:

- a. Risk management objective: To hedge against movements in the USD/CAD exchange rate that will affect the USD value of future CAD sales.
- b. Hedged forecasted transaction: The first CAD 500,000 sales in December 20X1.
- c. Hedging instrument: Foreign exchange forward contract to sell CAD 500,000 and receive USD 400,000 on December 31, 20X1. The fair value of the forward contract at hedge inception is zero.
- d. Method of assessing hedge effectiveness: Entity A will assess the effectiveness on a qualitative basis at hedge inception. The critical terms of the hedging instrument and hedged forecasted transaction can be considered to match because the notional amounts and underlyings of the hedging instrument and hedged forecasted transaction are the same and the forecasted sales are expected to occur in the same fiscal month as the maturity date of the hedging instrument. Therefore, the hedge is expected to be perfectly effective. Subsequent assessments of effectiveness will be performed by verifying and documenting whether the critical terms of the hedging instrument and hedged forecasted transaction have changed during the period in

review and whether it remains probable that the counterparty to the hedged item and hedged forecasted transactions will not default. If there are no such changes in critical terms or counterparty credit risk, Entity A will continue to conclude that the hedging relationship is perfectly effective.

RSM commentary: It should be noted that this example illustrates one of the circumstances outlined at ASC 815-20-25-3(b)(2)(iv)(01) for which no quantitative assessment of effectiveness is required. When a quantitative assessment is required or desired, the method that will be used to assess the effectiveness prospectively, as well as the method that will be used to assess the effectiveness retrospectively (which may or may not be the same method), should be described in sufficient detail that an uninvolved third party could perform the effectiveness assessment and get the same results. Even in those circumstances, such as this example in which no quantitative assessment of effectiveness is required, we believe it is prudent to document the method that will be used to assess effectiveness on an ongoing basis. To illustrate using this example, Entity A could expand paragraph (d) to indicate that in the event they can no longer conclude the hedging relationship is perfectly effective, effectiveness will be assessed using the hypothetical-derivative method⁴, which, while it is outlined in the context of an interest rate swap beginning at ASC 815-30-35-25 (and included herein at Section 1.2.4.3.3.2), it is commonly applied to other hedges. If a quantitative method for assessing effectiveness is not documented and the critical terms no longer match, hedge accounting may need to be discontinued. Conversely, if a quantitative method is documented, and upon the terms no longer matching that method demonstrates the hedge remains highly effective, hedge accounting could continue uninterrupted. We believe it would also be possible for Entity A to further indicate that in accordance with ASC 815-20-35-2A, if the quantitative analysis demonstrates high effectiveness, Entity A will revert back to assessing the effectiveness qualitatively for those periods for which it can reasonably support an expectation of high effectiveness with consideration given to the factors in ASC 815-20-35-2C and ASC 815-20-55-79G.

1.2.2 Eligibility of hedged items and transactions

Spotlight on hedges involving LIBOR or another rate expected to be discontinued

As discussed in more detail in Section 1.3, reference rate reform will result in the elimination of LIBOR, and may result in the elimination of other interbank offered rates as well. For hedging relationships that reference LIBOR (or another reference rate expected to be eliminated), temporary optional expedients and exceptions are provided in ASC 848 related to the accounting for that hedging relationship. One or more of these temporary optional expedients and exceptions relates to the guidance in this section. For additional information about these temporary optional expedients and exceptions refer to our white paper, Optional accounting expedients can make LIBOR transition easier.

ASC 815-20-25-4 to 25-44 outline the criteria that need to be met for hedged items and transactions to be designated in a hedge. The following chart summarizes the risks that are eligible for hedging, with references to the section in this guide to refer to for additional information for some of the more commonly observed hedges.

⁴ Entity A should describe specifically how the computation required by ASC 815-30-35-25 will be performed (e.g., a cumulative dollar-offset approach as described in section 1.2.4.3.1, or through a regression analysis that compares the change in fair value of the actual derivative to the change in fair value of the hypothetical derivative for the 30 most recent monthly observations).

Type of hedge	Eligible risks to hedge	Guide section
Fair value hedge of nonfinancial asset (e.g., commodity) or liability (excluding loan servicing rights and nonfinancial firm commitments with financial components) (ASC 815-20-25-12)	The risk of changes in the fair value of the entire hedged asset or liability (reflecting its actual location if a physical asset). In other words, the price risk of a similar asset in a different location or of a major ingredient cannot be the hedged risk.	2.4
Cash flow hedge of a forecasted purchase or sale of a nonfinancial asset (ASC 815-20-25-13)	The risk of changes in the functional-currency- equivalent cash flows attributable to changes in the related foreign currency exchange rates.	4.2.1.1
	The risk of changes in the cash flows relating to all changes in the purchase price or sales price of the asset reflecting its actual location if a physical asset (regardless of whether that price and the related cash flows are stated in the entity's functional currency or a foreign currency). In other words, the risk of changes in the cash flows relating to the purchase or sale of a similar asset in a different location cannot be the hedged risk.	2.3
	The risk of variability in cash flows attributable to changes in a contractually specified component.	2.2
Fair value hedge of all or a portion of a held-to-maturity debt security	Risk of changes in its fair value attributable to credit risk, foreign exchange risk, or both.	
(ASC 815-20-25-12)	Risk of changes in the entire fair value of an option component that permits its prepayment.	
Cash flow hedge of variable cash flows related to a held-to-maturity	Risk of changes in its cash flows attributable to credit risk.	
debt security (ASC 815-20-25-13)	Risk of changes in its cash flows attributable to foreign exchange risk.	
Fair value hedge of a financial asset or liability, a recognized loan	The risk of changes in the overall fair value of the entire hedged item.	3.1
servicing right or a nonfinancial firm commitment with financial components (ASC 815-20-25-12)	The risk of changes in the entire fair value of an option component in a prepayable financial instrument.	3.3.9
	The risk of changes in its fair value attributable to changes in the designated benchmark interest rate (i.e., interest rate risk).	3.2.2
	The risk of changes in its fair value attributable to changes in the related foreign currency exchange rates (i.e., foreign exchange risk).	

Type of hedge	Eligible risks to hedge	Guide section
	The risk of changes in its fair value attributable to both of the following (referred to as credit risk): a. Changes in the obligor's creditworthiness b. 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 of changes in the overall fair value, two or more of the	
	other risks (interest rate risk, foreign currency exchange risk and credit risk) may simultaneously be designated as being hedged.	
Cash flow hedge of forecasted purchase, issuance 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 (ASC 815-20-25-13)	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).	3.1
	For forecasted interest receipts or payments on an existing variable-rate financial instrument, risk of changes in its cash flows attributable to changes in the contractually specified interest rate (i.e., interest rate risk).	3.2.1
	For a forecasted issuance or purchase of a debt instrument (or the forecasted interest payments), the risk of changes in cash flows attributable to changes in the benchmark interest rate (if the instrument is expected to have a fixed-rate of interest) or the expected contractually specified interest rate (if the instrument is expected to have a variable-rate of interest). If uncertain, the hedged risk should be designated as the variability in cash flows attributable to changes in a rate that would both qualify as a benchmark interest rate (e.g., LIBOR) and as a contractually specified interest rate.	3.2.1.1
	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).	4.2.1.2
	The risk of changes in its cash flows attributable to all of the following (referred to as credit risk): Default Changes in the obligor's creditworthiness	

Type of hedge	Eligible risks to hedge	Guide section
	Changes in the spread over the contractually specified interest rate or benchmark interest rate with respect to the related financial asset's or liability's credit sector at inception of the hedge.	
	If the risk designated as being hedged is not the risk of overall changes in the hedged cash flows related to the asset or liability, two or more of the other risks (interest rate risk, foreign exchange risk and credit risk) simultaneously may be designated as being hedged.	
Fair value hedge of foreign exchange risk (ASC 815-20-25- 37)	Changes in the fair value of a recognized asset or liability (or a specific portion thereof) for which a foreign currency transaction gain or loss is recognized in earnings attributable to changes in foreign currency exchange rates	
	Changes in the fair value of an available-for-sale debt security (or a specific portion thereof) attributable to changes in foreign currency exchange rates	
	Changes in the fair value of an unrecognized firm commitment (or a specific portion thereof) attributable to foreign currency exchange rates	4.5.5, 4.5.6
Cash flow hedge of foreign exchange risk (ASC 815-20-25-38 and 25-34)	Changes in the functional-currency-equivalent cash flows associated with a forecasted transaction, including an intra-entity transaction	4.2.1.1
	Changes in the functional-currency-equivalent cash flows associated with a recognized asset or liability	4.2.1.2
	Changes in the functional-currency-equivalent cash flows associated with an unrecognized firm commitment	4.2.1.3
	Changes in the functional-currency-equivalent cash flows related to the settlement of the foreign-currency-denominated receivable or payable that results from a forecasted purchase or sale on credit	4.3
Hedge of a net investment in a foreign operation	Exposure to changes in foreign currency exchange rates	4.4

As noted at ASC 815-30-35-37A and illustrated through Examples 2.5.1 and 3.3.4, it is permissible for the hedged risk to change during the life of the hedging relationship.

1.2.2.1 Hedged item criteria relevant to fair value hedges

Spotlight on hedges involving LIBOR or another rate expected to be discontinued

As discussed in more detail in Section 1.3, reference rate reform will result in the elimination of LIBOR, and may result in the elimination of other interbank offered rates as well. For hedging relationships that reference LIBOR (or another reference rate expected to be eliminated), temporary optional expedients and exceptions are provided in ASC 848 related to the accounting for that hedging relationship. One or more of these temporary optional expedients and exceptions relates to the guidance in this section. For additional information about these temporary optional expedients and exceptions refer to our white paper, Optional accounting expedients can make LIBOR transition easier.

ASC 815-20-25-11 and 25-12 outline the primary hedged item criteria that are applicable only to fair value hedges. Additionally, ASC 815-20-25-43 contains a list of items (summarized at Section 1.2.2.3) that are specifically ineligible for designation as a hedged item. Assuming all relevant criteria are met, the following items are all eligible to be designated as the hedged item in a fair value hedge:

- A recognized asset or liability in its entirety (e.g., loan)
- A specific portion of a recognized asset or liability (e.g., 50 percent of a loan)
- All or a specific portion of an unrecognized firm commitment, such as a commitment to purchase an asset at a pre-established price (refer to glossary definition of firm commitment)
- All or a specific portion of a portfolio of similar assets or similar liabilities that share the same risk exposure (e.g., a portfolio of loans or pool of inventory)

The hedged item in a fair value hedge needs to present an exposure to changes in fair value attributable to the hedged risk that could affect reported earnings.⁵ For example, assets, such as inventory and a fixed-rate loan, as well as a firm commitment to buy something at a stated price, all present such exposure given that the fair value of inventory and the firm commitment would be expected to change as market prices associated with the inventory or firm commitment change and the fair value of a fixed-rate loan would be expected to change as market interest rates fluctuate.

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), it is required to be one of the following in accordance with ASC 815-20-25-12(b)(2):

- A percentage of the entire asset or liability (or of the entire portfolio)
- 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
- A put option or call option (including an interest rate cap or price cap or an interest rate floor or price floor) embedded in an existing asset or liability that is not separately recognized as a derivative (Examples 2.5.9 and 3.3.9 illustrate this concept.)
- The residual value in a lessor's net investment in a direct financing or sales-type lease

Upon the adoption of ASU 2017-12, the hedged item can be a closed portfolio of prepayable financial assets or one or more beneficial interests secured by a portfolio of prepayable financial instruments under a *last-of-layer method* discussed at Section 3.2.2.1.1. As previously mentioned, one of the requirements that must be met when hedging a portfolio of assets or liabilities is that the individual assets or liabilities need to share the same risk exposure for which they are designated as being hedged. ASC 815-20-55-14

⁵ This requirement does not apply to entities that do not report earnings, such as not-for-profit entities.

sheds additional light on this concept by indicating that 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 value of each individual item within the portfolio attributable to the hedged risk should be expected to be within a fairly narrow range (e.g., 9 percent to 11 percent), for shared risk exposure to exist. Conversely, a range of 7 percent to 13 percent is noted as inconsistent with the requirement to share the same risk exposure. Loans are the type of assets that are most commonly hedged as a portfolio in practice. As noted at ASC 815-20-55-15, relevant characteristics to consider when aggregating loans in a portfolio to be hedged include (in part) loan, collateral and interest rate characteristics, as well as maturity and prepayment data.

If appropriate elections are made to hedge interest rate risk for a partial term and measure the change in fair value of the hedged item on the basis of the benchmark rate component of the contractual coupon cash flows under a last-of-layer approach (discussed more fully in Section 3.2.2.1.1), the analysis to determine if the risk exposure is shared can be performed qualitatively and only needs to be performed at hedge inception, given that the portfolio is closed. (The inference here is that in any other circumstance, this analysis is ongoing and typically needs to be quantitative.) For the purpose of this test and hedge accounting, all assets in the portfolio are considered to be nonamortizing and nonprepayable with the same maturity and coupon rate as elaborated on in paragraph BC112 of ASU 2017-12.

1.2.2.2 Hedged transaction criteria applicable to cash flow hedges only

Spotlight on hedges involving LIBOR or another rate expected to be discontinued

As discussed in more detail in Section 1.3, reference rate reform will result in the elimination of LIBOR, and may result in the elimination of other interbank offered rates as well. For hedging relationships that reference LIBOR (or another reference rate expected to be eliminated), temporary optional expedients and exceptions are provided in ASC 848 related to the accounting for that hedging relationship. One or more of these temporary optional expedients and exceptions relates to the guidance in this section. For additional information about these temporary optional expedients and exceptions refer to our white paper, Optional accounting expedients can make LIBOR transition easier.

ASC 815-20-25-13 permits hedging exposure to variability in expected future cash flows attributable to either: (a) existing recognized assets or liabilities, such as interest payments on variable-rate debt, or (b) a forecasted transaction, such as a forecasted purchase or sale that will occur at the market price at the time of the transaction. Both the cash flows related to a recognized asset or liability and the cash flows related to a forecasted transaction are referred to as a forecasted transaction or hedged transaction.

1.2.2.2.1 Hedging forecasted transactions. ASC 815-20-25-15 outlines certain criteria that must all be met for a forecasted transaction to be eligible for designation as a hedged transaction in a cash flow hedge, including the following (criteria pertaining to risks that are eligible to be hedged are included in the table at Section 1.2.2 and omitted from here):

- a. The forecasted transaction is specifically identified as either of the following:
 - 1. A single transaction
 - 2. A group of individual transactions that share the same risk exposure for which they are designated as being hedged. A forecasted purchase and a forecasted sale shall not both be included in the same group of individual transactions that constitute the hedged transaction.
- b. The occurrence of the forecasted transaction is probable.
- c. The forecasted transaction meets both of the following conditions:
 - 1. It is a transaction with a party external to the reporting entity (except as permitted by paragraphs 815-20-25-30 and 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.
- d. 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. [RSM commentary: As noted at ASC 815-20-25-29, the recognition of foreign currency transaction gains or losses based on changes in the spot rate is not considered to constitute this form of remeasurement.]
- e. 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.
- f. [Omitted]
- g. The forecasted transaction does not involve a business combination subject to the provisions of Topic 805 or a combination accounted for by an NFP that is subject to the provisions of Subtopic 958-805.
- h. 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.
- i. [Omitted]
- j. [Omitted]
- k. The item is not otherwise specifically ineligible for designation (see paragraph 815-20-25-43) [RSM commentary: This criterion is summarized in Section 1.2.2.3.]

As noted in criterion (a)(2) of this list, the shared risk exposure requirement relevant to fair value portfolio hedges is also relevant when hedging a group of forecasted transactions in a cash flow hedge. Example 2.5.8, as well as the following, demonstrate how shared risk exposure may exist in various circumstances associated with a cash flow hedge:

- Forecasted sales of the same product to various customers for a commodities hedge
- Forecasted purchases of the same product from various vendors for a commodities hedge
- Forecasted sales or purchases denominated in the same currency for a foreign currency hedge
- Forecasted interest payments on a pool of variable-rate debt that varies with the same index (e.g., LIBOR) for a hedge of interest rate risk

As noted at ASC 815-20-25-22, forecasted purchases or sales can be designated as the hedged item through an *all-in-one hedge* that is further illustrated beginning at ASC 815-20-55-111, using a fixed-price contract associated with the forecasted purchases or sales that meets the definition of a derivative as the hedging instrument.

1.2.2.2.1.1 Probability of the hedged forecasted transaction. An important criterion that must be met to designate a forecasted transaction or group of transactions as the hedged item in a cash flow hedge is that the designated transaction or group of transactions must be probable of occurring. In part, this entails assessing the creditworthiness of the counterparty to a hedged forecasted transaction, particularly in those circumstances where the hedged transaction involves payments from the counterparty, which would be the case, for example, for hedges of forecasted sales, as well as interest to be received on a financial asset.

Spotlight on hedges involving LIBOR or another rate expected to be discontinued

As discussed in more detail in Section 1.3, reference rate reform will result in the elimination of LIBOR, and may result in the elimination of other interbank offered rates as well. For hedging relationships that reference LIBOR (or another reference rate expected to be eliminated), temporary optional expedients and exceptions are provided in ASC 848 related to the accounting for that hedging relationship. One or more of these temporary optional expedients and exceptions relates to the guidance in this section. For additional information about these temporary optional expedients and exceptions refer to our white paper, Optional accounting expedients can make LIBOR transition easier.

ASC 815-20-55-24 specifically states that the assessment of whether transactions are probable should be supported by observable facts, with consideration given to 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).

Consideration should be given to quantities of hedged forecasted transactions and the length of time until a forecasted transaction is projected to occur when determining the extent of evidence necessary to support an assertion that the transactions are probable.

One of the requirements in ASC 815-20-25-3 (included at Section 1.2.1), is to document the timing of the hedged forecasted transaction. In many cases, a range is used when documenting the timing particularly when hedging forecasted purchases or sales, given the difficulty in knowing the precise day a transaction will occur. Care should be taken when establishing this date or range because if it becomes probable that a hedged forecasted transaction will not occur by the end of the originally specified time period documented at the inception of the hedge, hedge accounting should be discontinued. Additionally, if the hedged transactions are no longer probable of occurring within the originally specified period or within an additional two-month period of time, the gain or loss in accumulated other comprehensive income associated with the hedge needs to be immediately recognized in earnings in accordance with ASC 815-30-40-5 unless there are rare, extenuating circumstances related to the nature of the forecasted transaction that are outside the control or influence of the reporting entity. A pattern of hedged forecasted transactions not occurring within a two-month period of the originally specified time period calls into question the entity's ability to accurately predict forecasted transactions and the propriety of using hedge accounting in the future for similar forecasted transactions. For this reason, it is generally beneficial to be conservative in estimating the timing of the hedged forecasted transactions. ASC 815-20-35 and ASC 815-20-25-75(b) require that the best estimate of the forecasted transaction's timing be both documented and used in assessing hedge effectiveness (i.e., the estimated timing may change, in which case the new best estimate as of each effectiveness assessment date would be used). Various examples within ASC 815 illustrate the ramifications of hedged forecasted transactions no longer being probable, including certain of the cash flow hedge examples incorporated in Chapters 2 and 3.

1.2.2.3 Items specifically ineligible for designation as a hedged item or transaction

In addition to items or transactions that do not specifically meet the eligibility criteria described in the preceding subsections of Section 1.2.2, ASC 815-20-25-43 contains the following list of items or

transactions that are not eligible to be designated as a hedged item or transaction in the respective hedges:

- a. Subparagraph not used
- b. With respect to both fair value hedges and cash flow hedges:
 - An investment accounted for by the equity method in accordance with the requirements of Subtopic 323-10 or in accordance with the requirements of Topic 321
 - 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.
- c. With respect to fair value hedges only:
 - If the entire asset or liability is an instrument with variable cash flows, an implicit fixed-tovariable swap (or similar instrument) perceived to be embedded in a host contract with fixed cash flows
 - 2. For a held-to-maturity debt security, the risk of changes in its fair value attributable to interest rate risk
 - 3. An asset or liability that is remeasured with the changes in fair value attributable to the hedged risk reported currently in earnings [RSM commentary: As noted at ASC 815-20-25-29, the recognition of foreign currency transaction gains or losses based on changes in the spot rate is not considered to constitute this form of remeasurement.]
 - 4. An equity investment in a consolidated subsidiary
 - 5. A firm commitment either to enter into a business combination or to acquire or dispose of a subsidiary, a noncontrolling interest, or an equity method investee
 - 6. An equity instrument issued by the entity and classified in stockholders' equity in the statement of financial position
 - 7. A component of an embedded derivative in a hybrid instrument—for example, embedded options in a hybrid instrument that are required to be considered a single forward contract under paragraph 815-10-25-10 cannot be designated as items hedged individually in a fair value hedge in which the hedging instrument is a separate, unrelated freestanding option.
- d. With respect to cash flow hedges only:
 - 1. Subparagraph not used
 - If variable cash flows of the forecasted transaction relate to a debt security that is classified as held-to-maturity under Topic 320, the risk of changes in its cash flows attributable to interest rate risk

1.2.3 Eligible hedging instruments

The eligibility of hedging instruments is discussed beginning at ASC 815-20-25-4. In most cases, the hedging instrument in a hedge relationship is a derivative instrument, either in its entirety or a proportion thereof. Additionally, two or more derivative instruments can be jointly designated as the hedging instrument in a hedge relationship.

What is a derivative?

A derivative instrument is defined in ASC 815-10-15-83 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.
 - It provides for delivery of an asset that puts the recipient in a position not substantially different from net settlement.

Common derivatives that are designated as the hedging instrument in a hedge relationship include:

- For a commodities hedge, forward or futures contracts to buy or sell a stated quantity of a
 commodity at a predetermined price at a specified time in the future, or option contracts that give
 the purchaser of the option the right to buy or sell a stated quantity of a commodity at a later date at
 an agreed upon price.
- For a hedge of interest rate risk, an interest rate swap whereby one party to the swap pays a fixed
 interest rate applied to the notional amount of the swap and receives a variable rate, and the other
 party receives a fixed interest rate and pays a variable interest rate applied to the notional amount
 of the swap. Alternatively, interest rate floors or caps may be purchased so that payments will be
 received if interest rates fall or rise above a stated rate.
- For a hedge of foreign exchange risk, foreign exchange swaps to buy a stated amount of one currency (e.g., Euros) and sell another (e.g., U.S. dollars) at a specified date in the future.

As noted at ASC 815-20-25-22, a fixed-price contract associated with a forecasted purchase or sale that meets the definition of a derivative can be designated as the hedging instrument in an *all-in-one hedge*. This is illustrated beginning at ASC 815-20-55-111.

There are certain additional criteria that must be met for the following types of hedging instruments to be designated in a hedge:

- Written option (i.e., an option for which the entity receives a premium in cash or in the form of a favorable rate or other term), as discussed beginning at ASC 815-20-25-94 and illustrated through Example 20 beginning at ASC 815-20-55-179 and the example incorporated at Section 3.3.2
- Intra-entity derivatives for hedges of foreign exchange risk, as discussed beginning at ASC 815-20-25-46A, as well as ASC 815-20-25-52 and ASC 815-20-25-61
- Instrument used to modify interest payments from one variable rate to another variable rate, as discussed beginning at ASC 815-20-25-50

 Instrument in net investment hedges of foreign currency exposure, as discussed beginning at ASC 815-20-25-66

In addition to derivative instruments, certain nonderivative financial instruments, including intra-entity loans that may give rise to foreign currency transaction gains or losses, are eligible to be designated as the hedged item in a foreign currency hedge as is more fully elaborated on beginning at ASC 815-20-25-58 and illustrated with an example at Section 4.5.5.

1.2.3.1 Ineligible hedging instruments

In addition to hedging instruments that do not meet the preceding eligibility criteria, ASC 815-20-25-71 contains the following list of items that are specifically not eligible to be designated as hedging instruments:

- a. With respect to fair value hedges, cash flow hedges, and net investment hedges:
 - 1. A nonderivative instrument, such as a U.S. Treasury note, except as provided in paragraphs 815-20-25-58 through 25-59 and 815-20-25-66
 - 2. Components of a compound derivative instrument representing different risks
 - A hybrid financial instrument that an entity irrevocably elects under paragraph 815-15-25-4 to initially and subsequently measure in its entirety at fair value (with changes in fair value recognized in earnings)
 - 4. A hybrid instrument for which an entity cannot reliably identify and measure the embedded derivative instrument that paragraph 815-15-25-1 requires be separated from the host contract
 - Any of the individual components of a compound embedded derivative that is separated from the host contract.
- b. With respect to fair value hedges only:
 - 1. A nonderivative financial instrument as the hedging instrument in a fair value hedge of the foreign currency exposure of a recognized asset or liability.
 - 2. A nonderivative financial instrument as the hedging instrument in a fair value hedge of the foreign currency exposure of an available-for-sale debt security.
- c. With respect to cash flow hedges only:
 - 1. A nonderivative financial instrument as a hedging instrument in a foreign currency cash flow hedge.
- d. With respect to net investment hedges only:
 - A compound derivative instrument that has multiple underlyings—one based on foreign exchange risk and one or more not based on foreign exchange (for example, the price of gold or the price of an S&P 500 contract), except as indicated in paragraph 815-20-25-67 for certain cross-currency interest rate swaps
 - 2. A derivative instrument and a cash instrument in combination as a single hedging instrument (that is, an entity shall not consider a separate derivative instrument and a cash instrument as a single synthetic instrument for accounting purposes)
 - 3. Subparagraph not used

1.2.4 Hedge effectiveness

Spotlight on hedges involving LIBOR or another rate expected to be discontinued

As discussed in more detail in Section 1.3, reference rate reform will result in the elimination of LIBOR, and may result in the elimination of other interbank offered rates as well. For hedging relationships that

reference LIBOR (or another reference rate expected to be eliminated), temporary optional expedients and exceptions are provided in ASC 848 related to the accounting for that hedging relationship. One or more of these temporary optional expedients and exceptions relates to the guidance in this section. For additional information about these temporary optional expedients and exceptions refer to our white paper, Optional accounting expedients can make LIBOR transition easier.

Effectiveness in the context of hedge accounting relates to the extent to which expected changes in fair value or cash flows associated with the hedging instrument are expected to offset expected changes in fair value or cash flows associated with the hedged item, which are attributable to the hedged risk, during the term of the hedge. A hedge relationship needs to be highly effective at its inception and on an ongoing basis for an entity to apply hedge accounting. Hence, ASC 815-20 requires hedge effectiveness to be assessed both prospectively and retrospectively as elaborated on through the discussion that follows. Mismatches between the hedging instrument and the item or transaction it is hedging cause a hedge relationship to not be perfectly effective. The following are examples mentioned at ASC 815-20-25-77.

- a. A difference between the basis of the hedging instrument and the hedged item or hedged transaction, to the extent that those bases do not move in tandem
- b. Differences in critical terms of the hedging instrument and hedged item or hedged transaction, such as differences in any of the following:
 - 1. Notional amounts
 - 2. Maturities
 - 3. Quantity
 - 4. Location (not applicable for hedging relationships in which the variability in cash flows attributable to changes in a contractually specified component is designated as the hedged risk)
 - 5. Delivery dates.
- c. A change in the counterparty's creditworthiness.

Some common mismatches that we observe in practice include the following:

- In the context of hedging interest rate risk:
 - A variable-rate debt instrument has a floor of zero that is not mirrored in the interest rate swap, or differences in interest reset dates or indices.
 - A fair value hedge, given that credit risk needs to be considered when determining the fair value
 of the derivative, but would not be considered when determining the change in fair value of the
 hedged item attributable to changes in interest rates, or differences caused by unanticipated
 prepayments on the hedged item.
- In the context of hedging commodities:
 - Location, type, quality or other differences exist between the derivative index and the product it is hedging (some of these differences may be able to be ignored in a hedge of a contractually specified component), or the timing of hedged forecasted commodity transactions may not line up with the maturity date of the derivative.⁶

⁶ As noted at ASC 815-20-25-84A, when hedging a group of forecasted transactions, the timing can be assumed to match if the forecasted transactions occur within the same 31-day period or fiscal month that the derivative matures.

- In the context of hedging foreign currency exposure:
 - The hedged item or transactions may be denominated in a different currency than the underlying currency of the derivative, or the timing of hedged forecasted transactions may not line up with the maturity date of the derivative.⁷

In certain cases, the effectiveness of a hedge can be assessed qualitatively, and in other cases, a quantitative analysis is required or desired. Certain examples in Chapters 2 through 4 illustrate reasons why certain hedges are not perfectly effective and mention approaches that may be taken to assess the effectiveness of the hedge. The two most common quantitative approaches used to assess the effectiveness of a hedge are a dollar-offset approach and regression analysis, both of which are discussed later in this chapter. *Highly effective* is not specifically defined in ASC 815; however, in practice, it has been interpreted to mean a cumulative dollar-offset ratio that ranges from 80 to 125 percent (when a dollar-offset approach is used to assess effectiveness) and a coefficient of determination (R-squared) of .80 or greater when regression analysis is used.

1.2.4.1 Circumstances in which a qualitative assessment of effectiveness is permissible

Spotlight on hedges involving LIBOR or another rate expected to be discontinued

As discussed in more detail in Section 1.3, reference rate reform will result in the elimination of LIBOR, and may result in the elimination of other interbank offered rates as well. For hedging relationships that reference LIBOR (or another reference rate expected to be eliminated), temporary optional expedients and exceptions are provided in ASC 848 related to the accounting for that hedging relationship. One or more of these temporary optional expedients and exceptions relates to the guidance in this section. For additional information about these temporary optional expedients and exceptions refer to our white paper, Optional accounting expedients can make LIBOR transition easier.

As previously mentioned, the effectiveness of a hedge relationship needs to be assessed as of the inception date of the hedge in accordance with the time frames prescribed at Section 1.2 of this guide. This inception date assessment can be performed qualitatively if one of the exceptions in ASC 815-20-25-3(b)(2)(iv) is met. These exceptions are based on the underlying premise that if the critical terms of the hedging instrument are aligned with the critical terms of the item it is hedging, perfect effectiveness can be assumed. Absent meeting all of the requirements to qualify for one of the exceptions, the initial prospective assessment of effectiveness would need to consist of a quantitative analysis. For those hedging relationships that do qualify for an exception for effectiveness to be assessed qualitatively at inception, the ongoing burden to comply with the requirements of hedge accounting is also generally reduced, as an assertion can be made qualitatively that the hedge remains highly effective if all conditions required to qualify for the initial qualitative assessment of effectiveness continue to exist.

Even in those circumstances where no quantitative assessment of effectiveness is required at hedge inception because the entity elects and qualifies for either the shortcut method or critical terms match, we believe it is prudent to document specifically how the effectiveness of the hedge will be assessed going forward in the event circumstances change such that the requirements to assume perfect effectiveness are no longer met. An example would be to indicate that effectiveness will be assessed using the hypothetical-derivative method, which while it is outlined in the context of an interest rate swap at Section 1.2.4.3.3.2, it is commonly applied to other hedges and required in certain circumstances when the critical terms do not match.⁸ Refer to the RSM commentary that follows Example 1.2.1 for additional information.

⁷ See the preceding footnote.

⁸ ASC 815-30-35-33 requires the use of the hypothetical derivative method for a cash flow hedge with an option as the hedging instrument when effectiveness is based on the option's terminal value. Additionally, as elaborated on

The circumstances for which no quantitative assessment of effectiveness is required for the initial assessment are summarized in the following table.

Method	What it applies to	Requirements
Shortcut method	Cash flow or fair value hedge of interest rate risk using interest rate swap	ASC 815-20-25-102 to 25-117 (Section 1.2.4.1.4)
Critical terms match (hedging instrument is not an option)	Cash flow or fair value hedges other than interest rate risk	ASC 815-20-25-84 to 25-85 (Section 1.2.4.1.1)
Critical terms match (hedging instrument is an option)	Cash flow hedges	ASC 815-20-25-126 and ASC 815-20-25-129 to 25-129A (Section 1.2.4.1.2)
Simplified hedge accounting approach	Cash flow hedge of interest rate risk using interest rate swap. This approach can only be elected by private companies that are not financial institutions.	ASC 815-20-25-133 to 25-138 (Section 1.2.4.1.3)
Variable cash flows method	Cash flow hedge of interest rate risk using interest rate swap	ASC 815-30-35-22 (Section 1.2.4.3.3.1)
Hypothetical derivative method	The example provided is in the context of a cash flow hedge of interest rate risk using an interest rate swap; however, this method is also commonly applied to other types of cash flow hedges when performing quantitative assessments of effectiveness.	ASC 815-30-35-25 and 35-26 (Section 1.2.4.3.3.2)
Hedge effectiveness assessed based on changes in spot exchange rates	Net investment hedge	ASC 815-35-35-5 (Section 1.2.4.3.4.1.1) for derivative instruments or ASC 815-35-35- 12 (Section 1.2.4.3.4.2) for nonderivative instruments
Hedge effectiveness assessed based on changes in forward exchange rates	Net investment hedge	ASC 815-35-35-17A (Section 1.2.4.3.4.1.2)

1.2.4.1.1 Critical terms match approach. ASC 815-20-25-84 permits an entity to assume a hedge is perfectly effective if the critical terms of the hedging instrument and the item it hedges match. While this approach is permitted for both cash flow and fair value hedges, it is rare in practice that the critical terms match for a fair value hedge. Additionally, this methodology is generally not appropriate when the hedging instrument is an option, given there is separate guidance for options discussed in Section 1.2.4.1.2, and

24

throughout ASC 815-35-35, use of the hypothetical derivative method is also required for certain hedges of a net investment in a foreign operation.

generally not appropriate for hedges of interest rate risk in which the derivative instrument is an interest rate swap, given there is separate guidance discussed at Section 3.2 for those types of hedges.

The criteria that must be met to assume perfect effectiveness for a hedge of a forecasted purchase of a commodity with a forward contract are illustrated through the following example contained at ASC 815-20-25-84:

- a. The forward contract is for purchase of the same quantity of the same commodity at the same time and location as the hedged forecasted purchase. Location differences do not need to be considered if an entity designates the variability in cash flows attributable to changes in a contractually specified component as the hedged risk and the requirements in paragraphs 815-20-25-22A through 25-22B are met.
- b. The fair value of the forward contract at inception is zero.
- c. Either of the following criteria is met:
 - 1. The change in the discount or premium on the forward contract is excluded from the assessment of effectiveness pursuant to paragraphs 815-20-25-81 through 25-83.
 - 2. The change in expected cash flows on the forecasted transaction is based on the forward price for the commodity.

Upon the adoption of ASU 2017-12, when hedging a group of forecasted transactions, the timing can be assumed to match as long as the hedged transactions are expected to occur within the same 31-day period or fiscal month as the maturity date of the hedging instrument. We believe the time period should be specified in the initial documentation elaborated on at Section 1.2.1. For example, assume the forward contract or other hedging instrument matures on the 15th day of the month. Amongst other ways, the forecasted transactions could be defined as those expected to occur within the fiscal month, the 31-day period beginning on the 15th day of the month.

Various examples in ASC 815 further illustrate the concept of critical terms matching, including those ASC 815 examples included in Examples 2.5.4 and 2.5.8 of this guide.

1.2.4.1.2 Critical terms match approach for option contracts.

Spotlight on hedges involving LIBOR or another rate expected to be discontinued

As discussed in more detail in Section 1.3, reference rate reform will result in the elimination of LIBOR, and may result in the elimination of other interbank offered rates as well. For hedging relationships that reference LIBOR (or another reference rate expected to be eliminated), temporary optional expedients and exceptions are provided in ASC 848 related to the accounting for that hedging relationship. One or more of these temporary optional expedients and exceptions relates to the guidance in this section. For additional information about these temporary optional expedients and exceptions refer to our white paper, Optional accounting expedients can make LIBOR transition easier.

The requirements that must all be met to assume perfect effectiveness for a cash flow hedge involving an option as the hedging instrument are outlined at ASC 815-20-25-129 as follows:

- a. The critical terms of the hedging instrument (such as its notional amount, underlying, maturity date, and so forth) completely match the related terms of the hedged forecasted transaction (such as the notional amount, the variable that determines the variability in cash flows, the expected date of the hedged transaction, and so forth).
- b. The strike price (or prices) of the hedging option (or combination of options) matches the specified level (or levels) beyond (or within) which the entity's exposure is being hedged.
- c. The hedging instrument's inflows (outflows) at its maturity date completely offset the change in the hedged transaction's cash flows for the risk being hedged.
- d. The hedging instrument can be exercised only on a single date—its contractual maturity date.

As it relates to criterion (a), and determining if the maturity date of the hedging instrument matches the timing of the hedged transaction, as indicated in the preceding section, ASC 815-20-25-84A permits an assumption that the timing matches when hedging a group of forecasted transactions if the forecasted transactions are expected to occur within the same 31-day period or fiscal month that the derivative will mature.

This guidance applies to cash flow hedges that meet all of the following requirements outlined at ASC 815-20-25-126:

- a. The hedging instrument is a purchased option or a combination of only options that comprise either a net purchased option or a zero-cost collar.
- b. The exposure being hedged is the variability in expected future cash flows attributed to a particular rate or price beyond (or within) a specified level (or levels).
- c. The assessment of effectiveness is documented as being based on total changes in the option's cash flows (that is, the assessment will include the hedging instrument's entire change in fair value, not just changes in intrinsic value).

As is pointed out at ASC 815-20-25-127, it is not appropriate to analogize to this guidance for fair value hedges or for cash flow hedges that do not meet all of these conditions.

If these conditions are met, the hedging instrument's terminal value (i.e., the expected pay-off amount at maturity) can be focused on in determining whether the hedging relationship is expected to be highly effective. For a hedging instrument like an interest rate cap that consists of a series of purchased caplets that are each hedging a series of hedged transactions (e.g., monthly or quarterly interest payments), the focus can be on the terminal value of each caplet in determining whether each hedging relationship is expected to be highly effective.

If all of the preceding conditions are not met, ASC 815-30-35-33 provides for hedge effectiveness to be assessed by comparing the change in the fair value of the hedging instrument to the change in the fair value of a perfectly effective hypothetical hedging instrument that does meet all of the preceding conditions.

Example 1.2.2: Purchased option used in a cash flow hedge (from ASC 815-20-55-208 to 55-211)

An entity forecasts that 1 year later it will purchase 1,000 ounces of gold at then current market prices for use in its operations. The entity wishes to protect itself against increases in the cost of gold above the current market price of \$275 per ounce. The entity purchases a 1-year cash-settled at-themoney gold option on 1,000 ounces of gold, paying a premium of \$10,000. If the price of gold is above \$275 at the maturity (settlement) date, the counterparty will pay the entity 1,000 times the difference. If the price of gold is \$275 or below at the maturity date, the contract expires worthless. The option cannot be exercised before its contractual maturity date. The entity designates the purchased option contract as a hedge of the variability in the purchase price (cash outflow) of the 1,000 ounces of gold for prices above \$275 per ounce.

In assessing the effectiveness of the cash flow hedge, the entity would determine that because the change in the expected future pay-off amount of the purchased option completely offsets the change in the expected future cash flows on the purchase of 1,000 ounces of gold above \$275 per ounce, the hedging relationship is expected to be highly effective under paragraph 815-20-25-75(b).

The entity would conclude there is perfect effectiveness because all of the following conditions exist:

- All the critical terms of the hedging derivative completely match the hedged forecasted transaction.
- b. The strike price of the hedging instrument matches the specified level (\$275) beyond which the entity's exposure is being hedged.

- c. The hedging derivative's inflows at expiration completely offset the hedged transaction's outflows for any increase in the price of gold above \$275 per ounce.
- d. The hedging option cannot be exercised before its contractual maturity date.

1.2.4.1.3 Simplified hedge accounting approach for a cash flow hedge of a variable-rate borrowing with a receive-variable, pay-fixed interest rate swap

Spotlight on hedges involving LIBOR or another rate expected to be discontinued

As discussed in more detail in Section 1.3, reference rate reform will result in the elimination of LIBOR, and may result in the elimination of other interbank offered rates as well. For hedging relationships that reference LIBOR (or another reference rate expected to be eliminated), temporary optional expedients and exceptions are provided in ASC 848 related to the accounting for that hedging relationship. One or more of these temporary optional expedients and exceptions relates to the guidance in this section. For additional information about these temporary optional expedients and exceptions refer to our white paper, Optional accounting expedients can make LIBOR transition easier.

1.2.4.1.3.1 Overview. The simplified approach originated from the Private Company Council in 2014 to facilitate hedge accounting for private companies (other than financial institutions) that enter into plain-vanilla interest rate swaps to achieve a fixed rate of interest on variable-rate borrowings. Careful consideration should be paid to the definition of a private company and the definition of a public business entity (to which it refers) when determining if an entity qualifies for this approach.

The primary benefits of the simplified approach compared to one of the other methods that permit the assumption of perfect effectiveness are:

- The ability to elect to measure the swap at settlement value instead of fair value.
- Additional time to put the required documentation in place (see the summary at Section 1.2); namely, the date on which the annual financial statements are available to be issued.

Under certain circumstances, such as the following, it may not be advantageous to elect the simplified approach:

- If the private company may go public or be acquired by a public business entity given that hedge accounting under the simplified approach could not be reflected in financial statements prepared in accordance with accounting principles applicable to a public business entity in a filing with the SEC.
- If there is a likelihood that the hedged debt will be modified or prepaid or any other circumstance will occur that would result in the criteria to use the simplified approach no longer being met. (If the criteria are no longer met, the hedge would terminate and hedge accounting would cease as elaborated on in Section 6.4.) This may be the case, for example, if unscheduled pay downs on the debt are made such that the notional amount of the swap exceeds the amount of qualifying debt outstanding at any given point in time. Another example would be if the entity has the option to choose different variable-rate indices or reset frequencies on the debt and elects an option that no longer matches the variable-rate index or reset dates of the swap.

Assuming all requirements are met, a different method would permit the application of hedge accounting to continue uninterrupted if the private company goes public. Additionally, a different method would permit the application of hedge accounting to continue uninterrupted if there are changes with the debt as long as relevant requirements were met at the appropriate time frames, including documenting the quantitative approach that would be used to assess effectiveness and demonstrating that the hedge is highly effective using that approach.

1.2.4.1.3.2 Criteria to elect the simplified approach. The simplified approach can only be elected when all the following criteria are met as outlined at ASC 815-20-25-133 to 25-138:

- Both the variable rate on the swap and the borrowing are based on the same index and reset period (e.g., both are based on one-month LIBOR or both are based on three-month LIBOR).
- The terms of the swap are typical (i.e., a plain-vanilla swap), and there is no floor or cap on the variable interest rate of the swap unless the borrowing has a comparable floor or cap.
- The repricing and settlement dates for the swap and the borrowing match or differ by no more than a few days.
- The swap's fair value at inception (i.e., at the time the derivative was executed) is at or near zero.
- The notional amount of the swap matches the principal amount of the borrowing being hedged (i.e., it is not necessary to hedge the entire borrowing).
- All interest payments occurring on the borrowing during the term of the swap (or the effective term of the swap if it is forward starting) are designated as hedged (either in total or in proportion to the principal amount of the borrowing being hedged).

With regards to interest rate swaps and borrowings that contain caps or floors on the variable rate, the use of the word *comparable* in the second criterion does not necessarily mean equal. For example, if an interest rate swap has a variable rate based on LIBOR and the borrowing has a variable rate of LIBOR plus 2 percent, a 10 percent cap on the swap would be comparable to a 12 percent cap on the borrowing. Forward-starting swaps can also qualify for the simplified approach as long as the interest payments designated as the hedged transactions are probable, and all other criteria are met. For example, a two-year interest rate swap forward starting in three years could meet the required criteria if executed in the beginning of the first year of a five-year borrowing. In addition, a five-year interest rate swap forward starting in one year could meet the required criteria for a five-year borrowing forecasted to occur in one year.

Borrowings with different options for the variable-rate index are eligible for the simplified approach if the required criteria are met at the inception of the interest rate swap agreement. If the borrower subsequently elects a different rate index or reset period that differs from the swap, the hedge would be disqualified or dedesignated.

It is important to keep in mind that the general requirements in ASC 815 pertaining to cash flow hedge accounting also apply when the simplified approach is elected. This would include, for example, the requirement in ASC 815-20-25-122 to consider the likelihood of the counterparty's compliance with the contractual terms of the swap on an ongoing basis.

1.2.4.1.3.3 Documentation of election. ASC 815-20-25-136 provides until the date on which the annual financial statements are available to be issued to complete the required documentation to elect the simplified approach. It is important to note that while the documentation to elect the simplified approach does not need to be contemporaneous, it does need to meet the stringent and detailed requirements of ASC 815-20-25-3 with regards to content. Additionally, while additional time is provided for the election to apply the simplified approach to be made and documentation to be put in place, it would be prudent to not delay this process. In the event the requirements are not met to use the simplified approach, the entity would need to comply with the contemporaneous documentation and other requirements of the general provisions of ASC 815-20 to qualify for hedge accounting.

The following is an example of one approach an entity may use to document its election of the simplified approach. While the documentation does not have to follow this format, it does need to meet the requirements of ASC 815-20-25-3.

Example 1.2.3: Sample hedge election documentation

Date: [INSERT DATE]⁹ **To:** Accounting File

From: Private Company CFO

RE: Hedge designation of interest rate swap under the private company simplified hedge

accounting approach

Hedging relationship, risk management objective and strategy

Private Company LLC (the Company) entered into a \$10.5 million notional amount interest rate swap agreement on September 29, 2019 with XXX Institution. The agreement and hedging relationship were undertaken as a cash flow hedge of interest rate risk, specifically of the risk of changes in cash flows on interest payments associated with a corresponding amount of variable-rate borrowings that are attributable to changes in the contractually specified interest rate.

- Description of the hedging instrument: The hedging instrument is a pay-fixed, receive-variable interest rate swap agreement with a beginning notional amount of \$10.5 million. The term of the swap agreement begins on October 1, 2019 and expires on September 30, 2024.
- Description of the hedged transaction: The hedged transactions are the first previously
 undesignated interest payments made each quarter on the amount of an outstanding three-month
 LIBOR borrowing equivalent to the then notional amount of the swap during the term of the swap.
 (Specifically, this LIBOR borrowing is the note currently outstanding with XXX Institution or its
 replacement with similar qualifying terms.)
- Nature of the risk being hedged: There is a risk of variations in interest rate payments due to changes in the contractually specified interest rate outlined in the note agreement (three-month LIBOR). The Company's objective is to hedge against these variations by fixing the interest rate on a portion of the principal outstanding.
- Assessment of the hedging instrument's effectiveness: Under the simplified hedge accounting
 approach, the Company can assume perfect effectiveness for qualifying interest rate swaps. Use of
 the simplified hedge accounting approach is appropriate for certain private companies provided
 certain conditions are met. The Company considered the following conditions (as provided in ASC
 815-20-25-137) when concluding it was appropriate to apply the simplified hedge accounting
 approach to its cash flow hedge of the variable-rate borrowing:

Condition	Swap	Borrowing	Condition met
Variable rates are based on same index and reset period	Three-month LIBOR	While the borrowing has various interest rate options, three-month LIBOR is what the Company selected.	Y

⁹ When applying the simplified approach, this documentation must be completed by the date on which the first annual financial statements are available to be issued after hedge inception.

Condition	Swap	Borrowing	Condition met
The terms of the swap are typical ¹⁰	Terms are typical		Y
Repricing and settlement dates differ by no more than a few days:			
Repricing dates	First day of the quarter	First day of the quarter	Υ
Settlement dates	Last day of the quarter	Last day of the quarter	Υ
Fair value of swap is at or near zero at its inception	Swap fair value was zero on September 29, 2019.		Y
Notional amount of swap matches principal amount of borrowing being hedged (which does not need to be full amount of borrowing)	\$10.5 million, amortizing	The total borrowing is \$20 million and amortizes in such a manner that at all times the outstanding principal amount of it or its replacement will equal or exceed the notional amount of the swap. The amount of the borrowing that is being hedged equals the notional amount of the swap during the term of the swap.	Y
All interest payments occurring on the borrowing during the term of the swap (or the effective term of the swap underlying the forward starting swap) are designated as hedged whether in total or in proportion to the principal amount of the borrowing being hedged	Term is October 1, 2019 to September 30, 2024.	The hedged item is designated as all interest payments on the amount of outstanding borrowing equivalent to the notional amount of the swap during the term of the swap.	Y

¹⁰ ASC 815 does not elaborate on what constitutes typical terms other than to state that such a swap is generally considered to be *plain-vanilla* and have no floor or cap on its variable interest rate unless the borrowing has a comparable floor or cap.

Condition	Swap	Borrowing	Condition met
If the swap is forward starting, the occurrence of forecasted interest payments is probable	N/A	N/A	N/A

As provided in ASC 815-10-35-1A, the Company has elected to measure the interest rate swap at settlement value rather than fair value. The carrying amount of the swap asset or liability will be adjusted to its current settlement value at each reporting period end through other comprehensive income or loss. Amounts in other comprehensive income or loss will be reclassified into interest expense as interest accrues on the debt to result in an overall fixed rate of interest.

The Company will assess on an ongoing basis whether the preceding conditions for applying the simplified hedge accounting approach continue to be met and will assess the likelihood of the counterparty's compliance with its obligations under the interest rate swap agreement.

If the preceding conditions are no longer met, or the likelihood that the counterparty will not default ceases to be probable as elaborated on beginning at ASC 815-20-35-14, the relationship will no longer qualify for the simplified hedge accounting approach. Upon failing to qualify, the hedge will be dedesignated with the gain or loss on the swap in accumulated other comprehensive income reclassified to earnings in accordance with ASC 815-30-40-1 to 40-6. The swap will be measured at fair value on the date of dedesignation with subsequent changes in fair value reported in earnings.

1.2.4.1.3.4 Measurement at settlement value. If the simplified approach is elected for any swaps, as illustrated in the example in the preceding section, an election can be made to record those swaps at settlement value rather than fair value. The primary difference between settlement value and fair value is that nonperformance risk (which relates primarily to the creditworthiness of both parties to the swap) is not considered in determining settlement value. Settlement value is typically based on a present value calculation of the swap's remaining estimated cash flows.

1.2.4.1.4 Shortcut method for interest rate swaps

Spotlight on hedges involving LIBOR or another rate expected to be discontinued

As discussed in more detail in Section 1.3, reference rate reform will result in the elimination of LIBOR, and may result in the elimination of other interbank offered rates as well. For hedging relationships that reference LIBOR (or another reference rate expected to be eliminated), temporary optional expedients and exceptions are provided in ASC 848 related to the accounting for that hedging relationship. One or more of these temporary optional expedients and exceptions relates to the guidance in this section. For additional information about these temporary optional expedients and exceptions refer to our white paper, Optional accounting expedients can make LIBOR transition easier.

- **1.2.4.1.4.1 Overview.** There is a shortcut method available for both fair value and cash flow hedges of interest rate risk involving interest rate swaps, whereby if the hedging relationship meets all the relevant requirements and this method is elected, the hedge can be assumed to be perfectly effective. The shortcut method is illustrated in Example 3.3.3 for a cash flow hedge of variable-rate debt and in Example 3.3.10 for a fair value hedge of fixed-rate debt.
- **1.2.4.1.4.2 Requirements to apply the shortcut method.** The requirements that must be met to apply the shortcut method and their applicability are outlined at ASC 815-20-25-104 to 25-106 as follows. Keep

in mind that the term *match* is expected to be strictly applied to mean the relevant terms of the swap and debt instrument are exactly the same.

All of the following criteria apply to both fair value hedges and cash flow hedges:

- a. The notional amount of the interest rate swap matches the principal amount of the interest-bearing asset or liability being hedged.
- 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 paragraph 820-10-35-9B). If the hedging instrument is solely an interest rate swap that at the inception of the hedging relationship has a positive or negative fair value, but does not meet the one exception specified in this paragraph, the shortcut method shall not be used even if all the other conditions are met.
- 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 (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:
 - 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 bidask 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.
- 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.
 - 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.
- e. The interest-bearing asset or liability is not prepayable, that is, able to be settled by either party before its scheduled maturity or the assumed maturity date if the hedged item is measured in accordance with paragraph 815-25-35-13B, with the following qualifications:
 - 1. This criterion does not apply to an interest-bearing asset or liability that is prepayable solely due to an embedded call option (put option) if the hedging instrument is a compound derivative composed of an interest rate swap and a mirror-image call option (put option).
 - 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:

- 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 (purchaser) of the other call option.
- iii. Subparagraph not used.
- f. Subparagraph superseded by Accounting Standards Update No. 2017-12
- g. Any other terms in the interest-bearing financial instruments or interest rate swaps meet both of the following conditions:
 - 1. The terms are typical of those instruments.
 - 2. The terms do not invalidate the assumption of perfect effectiveness.

All of the following incremental conditions apply to fair value hedges only:

- a. The expiration date of the interest rate swap matches the maturity date of the interest-bearing asset or liability or the assumed maturity date if the hedged item is measured in accordance with paragraph 815-25-35-13B.
- b. There is no floor or cap on the variable interest rate of the interest rate swap.
- 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).
- 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 paragraph 815-20-25-104) matches the portion of the asset or liability being hedged.
- 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.
- 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.

All of the following incremental conditions apply to cash flow hedges only:

- All interest receipts or payments on the variable-rate asset or liability during the term of the interest rate swap are designated as hedged.
- b. No interest payments beyond the term of the interest rate swap are designated as hedged.

- 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 purposes 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.
- d. The repricing dates of the variable-rate asset or liability and the hedging instrument must 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 the hedging instrument is retrospective, those repricing dates do not match.
- 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.
- 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.
- g. The index on which the variable leg of the interest rate swap is based matches the contractually specified interest rate designated as the interest rate being hedged for that hedging relationship.
- **1.2.4.1.4.3** Other considerations relevant to the shortcut method. As pointed out at ASC 815-20-55-72, the shortcut method cannot be applied in a cash flow hedge of a forecasted transaction (e.g., debt that does not yet exist). Additionally, as ASC 815-20-25-103 points out, an additional implicit requirement is that a basis exists to conclude on an ongoing basis that the hedging relationship is expected to be highly effective. This necessitates ongoing monitoring, including giving consideration to the likelihood that the swap counterparty will comply with the contractual payment terms of the swap.
- **1.2.4.1.4.4** Additional insights on prepayable instruments that do and do not qualify for the shortcut method. It is not uncommon for instruments to fail to qualify for the shortcut method due to the preceding criterion in ASC 815-20-25-104(e), which is applicable to both fair value and cash flow hedges. When determining if a mirror-image call or put option exists, call or put prices on debt are typically based on a percentage of par value. Conversely, options embedded in an interest rate swap are generally based on a rate or current yield. ASC 815-20-55-79 outlines an approach that can be employed to determine if these *strike prices* are the same. Additionally, the guidance beginning at ASC 815-20-25-112 elaborates on the meaning of prepayable in the context of this criterion and specifically indicates that an instrument is not considered to be prepayable if either of the following conditions are met:
 - a. The debtor has the right to cause settlement of the entire contract before its stated maturity at an amount that is always greater than the then fair value of the contract absent that right.

b. The creditor has the right to cause settlement of the entire contract before its stated maturity at an amount that is always less than the then fair value of the contract absent that right.

Additionally, as noted at ASC 815-20-25-113, none of the following are considered to be a prepayment provision:

- a. Any term, clause, or other provision in a debt instrument that gives the debtor or creditor the right to cause prepayment of the debt contingent upon the occurrence of a specific event related to the debtor's credit deterioration or other change in the debtor's credit risk, such as any of the following:
 - 1. The debtor's failure to make timely payment, thus making it delinquent
 - 2. The debtor's failure to meet specific covenant ratios
 - 3. The debtor's disposition of specific significant assets (such as a factory)
 - A declaration of cross-default
 - 5. A restructuring by the debtor.
- b. Any term, clause, or other provision in a debt instrument that gives the debtor or creditor the right to cause prepayment of the debt contingent upon the occurrence of a specific event that meets all of the following conditions:
 - 1. It is not probable at the time of debt issuance.
 - 2. It is unrelated to changes in benchmark interest rates, contractually specified interest rates, or any other market variable.
 - 3. It is related either to the debtor's or creditor's death or to regulatory actions, legislative actions, or other similar events that are beyond the control of the debtor or creditor.
- c. Contingent acceleration clauses that permit the debtor to accelerate the maturity of an outstanding note only upon the occurrence of a specified event that meets all of the following conditions:
 - 1. It is not probable at the time of debt issuance.
 - 2. It is unrelated to changes in benchmark interest rates, contractually specified interest rates, or any other market variable.
 - 3. It is related to regulatory actions, legislative actions, or other similar events that are beyond the control of the debtor or creditor.

Lastly, a right to prepay a debt instrument at its then fair value would not cause the instrument to be considered prepayable because that right would have a fair value of zero at all times and essentially just provides liquidity to the holder. The application of the prepayment guidance is further illustrated through examples at ASC 815-20-55-75.

1.2.4.1.4.5 Implications if the shortcut method was not or no longer is appropriate. Prior to the issuance of ASU 2017-12, if an entity elected the shortcut method and subsequently determined that it never or no longer met the requirements for that method, hedge accounting for that hedge relationship needed to be discontinued (unless a new effective hedge relationship could be appropriately established), and consideration given to restating the previous periods in which the requirements were not met to reverse the application of hedge accounting. Upon adoption of ASU 2017-12, ASC 815-20-25-117A permits hedge accounting to continue uninterrupted when the determination is made that the use of the shortcut method was not or no longer is appropriate if the entity: (a) documented at hedge inception which quantitative method it would use to assess hedge effectiveness in the event the shortcut method was not or no longer is appropriate and (b) can demonstrate the hedging relationship was highly effective on a prospective and retrospective basis using that method for the periods in which the shortcut method criteria were not met. The terms of the hedged item and hedging instrument as they existed on the date that the shortcut criteria ceased to be met would be used in this assessment of effectiveness. If the hypothetical derivative method is used for a cash flow hedge (as discussed at Section 1.2.4.3.3.2), the

value of the hypothetical derivative should be set to zero as of hedge inception. If the period in which the shortcut criteria ceased to be met is not known, the quantitative effectiveness assessments should be performed for all periods since hedge inception.

1.2.4.1.5 Ongoing qualitative assessments of effectiveness

Spotlight on hedges involving LIBOR or another rate expected to be discontinued

As discussed in more detail in Section 1.3, reference rate reform will result in the elimination of LIBOR, and may result in the elimination of other interbank offered rates as well. For hedging relationships that reference LIBOR (or another reference rate expected to be eliminated), temporary optional expedients and exceptions are provided in ASC 848 related to the accounting for that hedging relationship. One or more of these temporary optional expedients and exceptions relates to the guidance in this section. For additional information about these temporary optional expedients and exceptions refer to our white paper, Optional accounting expedients can make LIBOR transition easier.

- **1.2.4.1.5.1 Hedges for which no initial quantitative assessment was required.** Hedge relationships that meet one of the circumstances in the chart in Section 1.2.4.1 of this guide such that an initial quantitative assessment of effectiveness is not required can generally be assessed qualitatively on an ongoing basis, which entails giving documented consideration to whether the criteria that permitted the inception-date qualitative assessment of effectiveness continue to be met, as well as considering the ability of the counterparties to the derivative and hedged transaction (if applicable) to perform. As pointed out at ASC 815-20-35-12, if the critical terms of the hedging instrument or the hedged forecasted transaction have changed, or there have been adverse developments with the risk of counterparty default, the quantitative method documented in the initial hedge documentation should be used to determine if the hedge is expected to continue to be highly effective.
- **1.2.4.1.5.2 Hedges that were initially assessed quantitatively.** Ongoing hedge effectiveness can also be assessed qualitatively for hedges that did not meet one of the circumstances in the chart in Section 1.2.4.1 of this guide if the quantitative assessment performed as of the inception of the hedge demonstrated that the hedge is highly effective and an expectation of high effectiveness can be reasonably supported on a qualitative basis in subsequent periods. Relevant guidance is contained at ASC 815-20-35-2A to 35-2F.

The qualitative assessment for these hedges should also be performed and documented whenever financial statements or earnings are reported and at least every three months. The assessment entails documenting whether the facts and circumstances related to the hedging relationship have not changed such that the entity can continue to assert qualitatively that the hedging relationship was and continues to be highly effective. This is elaborated on at ASC 815-20-35-2C. Consideration should also be given to whether there have been adverse developments related to the risk of counterparty default and other relevant factors, such as the probability of hedged forecasted transactions occurring as was initially expected.

If facts and circumstances change such that the entity can no longer assert qualitatively that the hedging relationship was and continues to be highly effective, hedge effectiveness should be assessed on a quantitative basis (using the method that was identified in the initial hedge documentation), beginning as of the period that the facts and circumstances changed (or the current period if there is no identifiable event leading to the change) and for subsequent periods. After performing at least one quantitative assessment, the guidance permits reverting back to qualitative assessments of effectiveness if, with consideration given to the list of factors that follows from ASC 815-20-55-79G, an expectation of high effectiveness for subsequent periods can be reasonably supported.

- a. Results of the quantitative assessment of effectiveness performed for the hedging relationship.
- b. Alignment of the critical terms of the hedging relationship. If one or more of the critical terms of the hedging instrument and the hedged item are not aligned, an entity should consider whether changes in market conditions may cause the changes in fair values or cash flows of the hedging instrument and hedged item or hedged forecasted transaction attributable to the hedged risk to diverge as a result of those differences in terms.
 - 1. In cases in which the underlyings of the hedged item and hedging instrument are different, an entity should consider the extent and consistency of the correlation exhibited between the changes in the underlyings of the hedged item and hedging instrument.
 - i. This may inform the entity about whether expected changes in market conditions could cause the changes in fair values or cash flows of the hedging instrument and the hedged item or hedged forecasted transaction attributable to the hedged risk to diverge. Particularly in the context of reverting to qualitative assessments of hedge effectiveness after being required to perform a quantitative assessment (as discussed in paragraph 815-20-35- 2D), this may inform an entity about whether there is a reasonable expectation that the hedging relationship is expected to remain stable or whether that divergence is expected to continue or recur in the future.
 - ii. A specific event or circumstance may cause a temporary disruption to the market that results in an entity concluding that the facts and circumstances of the hedging relationship have changed such that it no longer can assert qualitatively that the hedging relationship was and continues to be highly effective. In those instances, if the results of the quantitative assessment of effectiveness do not significantly diverge from the results of the initial assessment of effectiveness, that market disruption should not prevent the entity from returning to qualitative testing in subsequent periods. If the results of the quantitative assessment of effectiveness do significantly diverge from the results of the initial assessment of effectiveness, the entity should continually monitor whether the temporary market disruption has been resolved when determining whether to return to qualitative testing in subsequent periods.

Examples are included at ASC 815-20-55-79I to 55-79N to illustrate the application of this guidance. It is evident from these examples that the following characteristics are conducive to qualitative effectiveness assessments:

- The initial or most recent quantitative assessment of effectiveness indicates that the relationship is close to achieving perfect offset.
- The underlyings (if different) have been consistently highly correlated such that expected changes in market conditions are not expected to prevent the hedge from being highly effective.

The scenarios from ASC 815-20-55-79P to 55-79V that follow serve to illustrate the thought process when there is a change in facts and circumstances.

Example 1.2.4: Change in facts and circumstances in qualitative effectiveness assessments (from ASC 815-20-55-79P to 55-79V)

Scenario A

Entity B expects to purchase 10,000 metric tons of cottonseed meal throughout April 20X3 based on the spot price of the cottonseed meal index on the respective date of each purchase. Entity B wants to hedge the variability in cash flows attributable to changes in the cottonseed meal index on the price that it will pay for the cottonseed meal. It enters into a forward contract on August 24, 20X1, with a notional of 10,000 metric tons, a maturity of April 1, 20X3, and an underlying of the soybean meal index because no market exists for derivatives indexed to the cottonseed meal index. Concurrent with the execution of the forward, Entity B designates the forward as the hedging instrument in a hedging relationship in which the hedged item is documented as the forecasted

purchases of the first 10,000 metric tons of cottonseed meal expected to be purchased during April 20X3 and the hedged risk is documented as the variability in cash flows attributable to changes in the contractually specified cottonseed meal index in the not-yet-existing contract. On August 24, 20X1, Entity B determines that all requirements for cash flow hedge accounting are met and that the requirements of paragraph 815-20-25-22A will be met in the contract once executed in accordance with paragraph 815-20-25-22B. Entity B also will assess whether the criteria in 815-20-25-22A are met in the contract when it is executed.

Because the hedged risk and forward contract are based on different indexes, the hedging relationship does not qualify for one of the exemptions in paragraph 815-20-25-3(b)(2)(iv)(01). Entity B performs an initial quantitative hedge effectiveness assessment and determines that the hedging instrument is highly effective at achieving offsetting cash flows associated with the hedged item attributable to the hedged risk. In Entity B's hedge documentation, it elects to perform subsequent assessments of hedge effectiveness on a qualitative basis. It makes this election based on the following factors:

- The results of the quantitative effectiveness assessment performed at hedge inception indicate that the hedging relationship is close to achieving perfect offset.
- b. Changes in the value of the cottonseed meal index have been consistently highly correlated with changes in value of the soybean meal index such that expected changes in market conditions are not anticipated to prevent the hedging relationship from achieving highly effective offset.
- Although the underlyings of the hedging instrument and hedged item do not match, the notional amount of the derivative and the expected quantity to be purchased do match. Based on the quantitative effectiveness assessment, Entity B also determined that the difference in timing between the maturity date of the derivative and the dates on which the group of forecasted purchases is expected to occur is insignificant.

During the fourth quarter of 20X1, a storm damages the soybean harvest, which leads to a shortage in soybean meal supply and a sharp increase in the price of soybean meal based on the soybean meal index. The cottonseed meal index has not experienced a similar increase because cotton harvests were unaffected by the storm that damaged the soybean harvest. Because the increase in the soybean meal index is not reflected in the cottonseed meal index, Entity B concludes that a change in facts and circumstance has occurred that prevents a qualitative assertion in subsequent periods that the hedging relationship continues to be highly effective at achieving offsetting cash flows. Thus, on the next subsequent effectiveness assessment date (December 31, 20X1), the company begins performing quantitative assessments of hedge effectiveness based on the method used to perform the initial prospective assessment of effectiveness. In the effectiveness assessment performed on December 31, 20X1, Entity B determines that the hedging relationship remains highly effective but that it is not close to achieving perfect offset.

Entity B returns to assessing effectiveness qualitatively as of June 30, 20X2, because the evaluation of the following criteria leads to the conclusion that high effectiveness can be asserted prospectively on a qualitative basis:

- Entity B determines that the event that caused the soybean meal index and cottonseed meal index to experience a lack of correlation was temporary, that it was an isolated weather event, and the effect of the weather event has passed.
- b. The changes in value of the soybean meal index and cottonseed meal index reverted to levels of correlation that were consistent with those before the storm.
- The results of the June 30, 20X2 quantitative assessment of effectiveness are in line with the results of the quantitative assessment of effectiveness performed at hedge inception.
- d. No further disruptions in supply are expected.

Scenario B

On August 17, 20X1, Entity C issues at par a \$100 million 5-year fixed-rate noncallable debt instrument with an annual 8 percent interest coupon. On that date, Entity C enters into a 5-year interest rate swap with Financial Institution D and designates it as the hedging instrument in a fair value hedge of the LIBOR interest rate risk of the \$100 million liability. Under the terms of the interest rate swap, Entity C will receive fixed interest at 6 percent and pay variable interest at LIBOR based on a notional amount of \$100 million. The variable leg of the interest rate swap resets at the end of each quarter for the interest payment that is due at the end of the following quarter.

Entity C performs the initial quantitative and first subsequent hedge effectiveness assessments on September 30 (the entity's first quarterly testing date after hedge inception) and determines that the hedging relationship is highly effective at achieving offsetting changes in fair value attributable to interest rate risk. Entity C also elects at hedge inception to subsequently assess hedge effectiveness on a qualitative basis and documents how it would carry out that qualitative assessment. In its quarterly effectiveness assessment on December 31, the entity asserts that facts and circumstances related to the hedging relationship have not changed and the hedging relationship was and continues to be highly effective.

However, in the first quarter of 20X2, Financial Institution D's risk of default significantly increases, which affects the valuation of the interest rate swap with Entity C. Entity C notes that it no longer can qualitatively assert that the hedging relationship was and continues to be highly effective at achieving offsetting changes in fair value attributable to changes in benchmark interest rates. Thus, on the next subsequent effectiveness assessment date (March 31, 20X2), Entity C begins performing quantitative assessments of effectiveness using the method documented at hedge inception. In subsequent periods, Entity C does not return to qualitative effectiveness assessments because it cannot reasonably support an expectation of high effectiveness on a qualitative basis for the following reasons:

- a. The significant risk of default of Financial Institution D has not reversed and is not expected to be temporary.
- b. The results of quantitative effectiveness tests performed indicate that the hedging relationship is close to no longer being highly effective.

1.2.4.2 Deciding whether or not to make the election to assess effectiveness qualitatively

For those hedging relationships that do not meet one of the circumstances in the chart in Section 1.2.4.1 of this guide such that perfect effectiveness can be assumed, consideration should be given to the costs and benefits of electing to assess effectiveness qualitatively on an ongoing basis. As noted in paragraph BC208 of ASU 2017-12, entities that have a significant volume of hedging relationships and existing systems to assess the effectiveness of their hedging relationships quantitatively may find it to be cost effective to continue performing the quantitative assessments rather than separately determining and monitoring which individual hedges qualify for qualitative testing. Conversely, we believe entities that do not have in-house systems or capabilities to perform the quantitative tests will likely find it advantageous to perform the ongoing assessments qualitatively where warranted by the facts and circumstances.

1.2.4.3 Quantitative methods used to assess hedge effectiveness

Spotlight on hedges involving LIBOR or another rate expected to be discontinued

As discussed in more detail in Section 1.3, reference rate reform will result in the elimination of LIBOR, and may result in the elimination of other interbank offered rates as well. For hedging relationships that reference LIBOR (or another reference rate expected to be eliminated), temporary optional expedients and exceptions are provided in ASC 848 related to the accounting for that hedging relationship. One or more of these temporary optional expedients and exceptions relates to the guidance in this section. For

additional information about these temporary optional expedients and exceptions refer to our white paper, Optional accounting expedients can make LIBOR transition easier.

The two most common quantitative approaches that are used to assess the effectiveness of a hedging relationship are the dollar-offset approach and regression analysis, each of which are discussed in a section that follows. Of these two approaches, dollar-offset is typically easier to perform and understand; however, relationships may fail due to small dollar differences. As a result, regression analysis is more commonly applied. Hedge effectiveness is required to be assessed both prospectively and retrospectively. In many cases, entities select and use a single method each period to satisfy both requirements.

Prospective (ASC 815-20-25-79a)

As the name implies, a prospective assessment of effectiveness is forward looking and considers whether the hedge relationship can be expected to be highly effective over future periods. This assessment is typically based on regression or dollar-offset analysis of past changes in fair values or cash flows. The quantitative prospective assessment of hedge effectiveness should consider all reasonably possible changes in fair value (if a fair value hedge) or in fair value or cash flows (if a cash flow hedge) of the derivative instrument and the hedged items (i.e., the analysis should not be limited only to the likely or expected changes in fair value or cash flows).

Retrospective (ASC 815-20-25-79b)

The retrospective assessment of effectiveness considers how effective the hedge has been through the assessment date. The retrospective assessment is also typically based on regression or dollaroffset analysis of past changes in fair values or cash flows.

There may be circumstances whereby the most recent retrospective analysis demonstrates that the hedge was not highly effective, yet the prospective analysis demonstrates that the hedge relationship can be expected to be highly effective over future periods. This is more likely to occur when a dollar-offset approach is used to assess the effectiveness of a hedge, given that the retrospective assessment only considers the results since the inception of the hedge, and a hedge relationship is more likely to fail over a short period of time. Hedge accounting should not be applied for the period of time that failed the retrospective assessment; however, it can be continued prospectively as long as the entity can continue to support the expectation of high effectiveness, using the method it originally documented it would use. If at any time the prospective analysis does not demonstrate the hedge is highly effective, hedge accounting could not be applied and the hedge should be discontinued. As noted at Sections 5.3 and 6.4.1, if all the requirements are met (including the expectation of high effectiveness), it may be possible to designate a new hedge relationship with a different derivative or hedged item.

For the most part, the guidance in ASC 815 does not prescribe a particular method that should be used to assess the effectiveness of a hedge. In certain cases, the guidance specifically indicates that the hypothetical derivative method should be used.¹¹ This method is described in the context of an interest rate swap hedging variable cash flows at Section 1.2.4.3.3.2 and is commonly selected and applied for other types of cash flow hedges. It entails comparing the change in the fair value or cash flows of the actual derivative or other hedging instrument with the change in the fair value or cash flows of a hypothetical hedging instrument that has terms that identically match the hedged item, and can be

¹¹ ASC 815-30-35-33 requires the use of the hypothetical derivative method for a cash flow hedge with an option as the hedging instrument when effectiveness is based on the option's terminal value. Additionally, as elaborated on throughout ASC 815-35-35, use of the hypothetical derivative method is also required for certain hedges of a net investment in a foreign operation.

applied using either a dollar-offset approach or regression analysis. Regardless of the specific method that is used, there are certain guidelines to follow, including:

- The method used should be consistently performed and consistent with the method selected and documented in the initial hedge documentation.
- Similar methods should be used for similar hedges (including whether or not a portion of the gain or loss on a derivative is excluded from the assessment of effectiveness), unless a different method is justified.¹²
- The method should be reasonable and appropriate in light of the nature of the risk being hedged and the type of hedging instrument used.
- Consideration should generally be given to the time value of money when assessing the effectiveness
 of cash flow hedges, particularly if the hedging instrument involves periodic cash settlements. (ASC
 815-20-25-125 permits using undiscounted amounts for options.)
- Consideration should be given to the possibility of default by the counterparty to the derivative instrument as elaborated on at ASC 815-20-35-14 to 35-18, and to the probability of hedged forecasted transactions occurring as and when expected as discussed at Section 1.2.2.2.1.1.

The sections that follow expand on how effectiveness is assessed both prospectively and retrospectively using a dollar-offset approach and using regression analysis.

1.2.4.3.1 Assessing effectiveness using a dollar-offset approach. As previously noted, a dollar-offset approach is typically easier to perform and understand; however, relationships may fail due to small dollar differences. The computation is performed using either a period-by-period or cumulative approach as decided on and documented in the initial hedge documentation.

Dollar-offset approaches	
Period-by-period approach	Cumulative approach
The changes in the hedging instrument's fair values (or cash flows) that have occurred during the period being assessed (up to three months) are compared to the changes in the hedged item's fair value (or hedged transaction's cash flows) attributable to the risk hedged that have occurred during the same period.	The cumulative changes in the hedging instrument's fair values (or cash flows) from inception of the hedge to the assessment date are compared to the cumulative changes in the hedged item's fair value (or hedged transaction's cash flows) attributable to the risk hedged for the same period.

The cumulative approach is applied more frequently in practice in light of the fact that the previously noted issue related to small dollar changes is more likely to occur in a discrete period than over the life of a hedge. Referring to Example 2.5.3 of this guide, the dollar-offset ratio on the first subsequent assessment of effectiveness is 90 percent, computed by dividing the \$45,000 estimated change in cash flows on the actual derivative (forward contract on Colombian coffee) by the \$50,000 estimated change in cash flows on the hedged transaction (forecasted purchase of Brazilian coffee). As noted in Section 1.2.4, while highly effective is not specifically defined in ASC 815, in practice, it has been interpreted to mean a cumulative dollar-offset ratio that ranges from 80 to 125 percent. Therefore, the hedge relationship would be viewed as highly effective on a retrospective basis as of this assessment date. To illustrate the potential issue related to small dollar changes when using the dollar-offset approach, if the estimated

¹² As noted at ASC 815-20-65-3(i), this requirement does not apply to certain hedging relationships executed before and after the adoption of ASU 2017-12.

change in cash flows on the derivative were \$1,000 for the period in comparison to a \$2,000 change in estimated cash flows on the hedged transaction, the dollar-offset ratio would be 50 percent and the relationship would be viewed as not highly effective, despite the insignificance of the difference in changes in cash flows.

While the prospective assessment of effectiveness was not demonstrated through this example, it was noted in ASC 815-30-55-3 that:

Both at inception and on an ongoing basis, Entity G could assess the effectiveness of the hedge by comparing changes in the expected cash flows from the Colombian coffee forward contract with the expected net change in cash outflows attributable to changes in the contractually specified component for purchasing the Brazilian coffee for different market prices. (A simpler method that should produce the same results would consider the expected future correlation of the prices of Brazilian and Colombian coffee, based on the correlation of those prices over past six-month periods.)

As such, if this entity had elected to assess the effectiveness prospectively using a dollar-offset method, this could have been accomplished by considering what the ratio would have been using reasonably possible changes in market prices over a period of time comparable to the hedge. The following section includes a discussion of a method that considers the expected future correlation of the prices.

1.2.4.3.2 Use of regression analysis to assess effectiveness. If regression analysis is used to assess the effectiveness of a hedging relationship, generally for a fair value hedge, changes in the fair value of the derivative are regressed against changes in the fair value of the hedged item. For a cash flow hedge, the data regressed may be changes in cash flows rather than fair value. Additionally, as noted in ASC 815-20-25-79, the quantitative assessment can be based on other relevant data, such as changes in commodity prices, foreign exchange rates or interest rates, as appropriate for a particular hedge. To illustrate the use of regression analysis in the context of Example 2.5.3, in which the statement was made that the effectiveness computation could consider "the expected future correlation of the prices of Brazilian and Colombian coffee, based on the correlation of those prices over past six-month periods," an acceptable approach that could be used to assess effectiveness both prospectively and retrospectively would be to perform regression analysis to determine how closely correlated changes in Brazilian coffee prices were to changes in Colombian coffee prices over the most recent six-month periods (to correspond with the hedge period). Such an approach could be employed to determine the effectiveness of the hedge both prospectively and retrospectively, in which case, the computation for both purposes would incorporate the same number of data points that are periodically updated in accordance with ASC 815-20-35-3. In other words, at the inception of the hedge, the regression analysis could consider the historical correlation of changes in Brazilian coffee prices to changes in Colombian coffee prices for sixmonth periods of time ending at the inception of the hedge. At each subsequent effectiveness assessment date, data for the period of time subsequent to the last assessment of effectiveness would be added and the same number of data points removed from the oldest data in the computation to update the analysis while incorporating the same number of data points. The data that is being regressed should typically encompass a time horizon that mirrors or is less than the original time horizon of the hedge (six months in this example). Thirty data points for each variable are typically viewed as the minimum number to result in a statistically valid sample. As previously indicated, regression analysis is more complex than the dollar-offset approach, but is also more likely to result in a conclusion of high effectiveness. Its complexity and the need to have expertise in this area is emphasized in the following remarks made by the SEC staff at the 2003 Thirty-First AICPA National Conference on Current SEC Developments:

Specifically, the staff has noted instances where registrants have utilized statistical techniques to assess hedge effectiveness, such as regression analysis, but did not have sufficient experience with or understanding of such techniques to apply them in an appropriate manner. The use of regression analysis is not problematic. What is problematic is when regression analysis is used and the statistical validity of such analysis is not adequately considered. Specifically, the staff is aware of situations where certain registrants have not fully considered the relevant outputs from the regression analysis when assessing whether the hedge is expected to be highly effective. The staff acknowledges that the

assessment of whether a hedging relationship is expected to be highly effective will be determined based on the facts and circumstances of that specific relationship. However, the staff believes that, at a minimum, certain regression outputs such as the coefficient of determination (R-squared), the slope coefficient and the t or F-statistic should be considered when using regression analysis to assess whether a hedge is expected to be highly effective. Additionally, depending on the specifics of the hedging strategy, other regression outputs may also need to be considered. The staff expects that if registrants are utilizing statistical techniques to assess hedge effectiveness that they understand how to use and appropriately evaluate such techniques, which may necessitate the use of specialists.

In practice, a coefficient of determination (R-squared) of .80 or greater is viewed as a highly effective hedge relationship; however, as noted in the SEC staff speech, it is not sufficient to solely consider the coefficient of determination. Certain computerized spreadsheet applications can be utilized to perform regression analysis; however, specialized expertise is often necessary to structure the analysis and evaluate the results.

1.2.4.3.3 Quantitative methods to assess the effectiveness of cash flow hedges involving interest rate swaps

Spotlight on hedges involving LIBOR or another rate expected to be discontinued

As discussed in more detail in Section 1.3, reference rate reform will result in the elimination of LIBOR, and may result in the elimination of other interbank offered rates as well. For hedging relationships that reference LIBOR (or another reference rate expected to be eliminated), temporary optional expedients and exceptions are provided in ASC 848 related to the accounting for that hedging relationship. One or more of these temporary optional expedients and exceptions relates to the guidance in this section. For additional information about these temporary optional expedients and exceptions refer to our white paper, Optional accounting expedients can make LIBOR transition easier.

There are three primary methods outlined beginning at ASC 815-30-35-10 that can be used to assess the effectiveness of cash flow hedges involving interest rate swaps. These methods can be used when hedging interest rate risk or overall changes in hedged cash flows associated with variable interest payments on existing variable-rate assets or liabilities, as well as assets that will be acquired and liabilities that will be incurred at a later date. Regardless of the method used, the risk of default by counterparties to the interest rate swap or hedged transaction should be considered as the likelihood of the obligor not defaulting needs to be assessed as probable for hedge accounting to continue.

The methods and a discussion of each follow:

- Change-in-variable-cash-flows method
- Hypothetical-derivative method
- Change-in-fair-value method

1.2.4.3.3.1 Change-in-variable-cash-flows method. The change-in-variable-cash-flows method can only be used if the fair value of the swap at the inception of the hedge is at or near zero. Application of this method involves comparing the present value of the cumulative change in the expected future cash flows on the variable leg of the interest rate swap with the present value of the cumulative change in the expected future interest cash flows on the variable-rate asset or liability that is being hedged. The discount rates applicable to determining the fair value of the interest rate swap should be used in deriving the present value amount for both the swap and interest cash flows associated with the hedged item.

This method will result in a perfectly effective hedge if all of the following conditions from ASC 815-30-35-22 are met:

- a. The variable-rate leg of the interest rate swap and the hedged variable cash flows of the asset or liability are based on the same interest rate index (for example, three-month London Interbank Offered Rate (LIBOR) swap rate.
- b. The interest rate reset dates applicable to the variable-rate leg of the interest rate swap and to the hedged variable cash flows of the asset or liability are the same.
- c. The hedging relationship does not contain any other basis differences (for example, if the variable leg of the interest rate swap contains a cap and the variable-rate asset or liability does not).
- d. The likelihood of the obligor not defaulting is assessed as being probable.

This method is illustrated through Example 15 beginning at ASC 815-30-55-91.

- **1.2.4.3.3.2 Hypothetical-derivative method.** The hypothetical-derivative method involves comparing the change in the fair value of the actual interest rate swap designated as the hedging instrument with the change in the fair value of a hypothetical interest rate swap that has terms that identically match the critical terms of the floating-rate asset or liability that is being hedged. Critical terms include all of the following:
- Notional amount
- Repricing dates
- Variable-rate index
- Mirror-image caps and floors

Additionally, the hypothetical interest rate swap would be structured to have a zero fair value at the inception of the hedging relationship and essentially would need to satisfy all of the applicable criteria to qualify for use of the shortcut method, except the criterion in ASC 815-20-25-104(e). For reasons explained at Example 7 beginning at ASC 815-20-55-106, the hypothetically perfect derivative could be the same as the actual derivative when hedging prepayable debt.

When determining the fair value of both the perfect hypothetical interest rate swap and the actual interest rate swap, the discount rates used should be based on the relevant interest rate swap curves.

As mentioned at Section 1.2.4.1, this method of assessing effectiveness is often adapted to various other types of hedging relationships whereby through either a dollar-offset approach or regression analysis, the change in fair value or cash flows associated with the actual derivative is compared to the change in fair value or cash flows of a hypothetically perfect derivative that has terms that exactly match the critical terms of the hedged item.

1.2.4.3.3.3 Change-in-fair-value method. The change-in-fair-value method involves comparing the present value of the cumulative change in expected variable future interest cash flows that are designated as the hedged transactions to the cumulative change in the fair value of the interest rate swap that is designated as the hedging instrument. Discount rates applicable to determining the fair value of the interest rate swap should also be applied to the computation of present values of the cumulative changes in the hedged cash flows.

1.2.4.3.4 Assessing the effectiveness of net investment hedges

1.2.4.3.4.1 Assessing effectiveness when the hedging instrument is a derivative. ASC 815-35-35 outlines the two different methods that can be used when the hedging instrument in a net investment hedge is a derivative instrument. Namely, effectiveness can be assessed based on changes in spot exchange rates or changes in forward exchange rates. The method selected should be applied consistently for all net investment hedges in which the hedging instrument is a derivative instrument. Any change to the method would need to be accomplished through a dedesignation of the original hedge relationship and the designation of a new hedge relationship in accordance with ASC 815-20-55-56.

1.2.4.3.4.1.1 Assessing effectiveness based on changes in spot exchange rates. When applying this method, the change in the fair value of the derivative instrument attributable to changes in the difference between the forward rate and spot rate is excluded from the assessment of hedge effectiveness and the hedging relationship is considered to be perfectly effective if all of the following conditions in ASC 815-35-35-5 are met:

- a. The notional amount of the derivative instrument designated as a hedge of a net investment in a foreign operation matches (that is, equals) the portion of the net investment designated as being hedged.
- b. The derivative instrument's underlying exchange rate is the exchange rate between the functional currency of the hedged net investment and the investor's functional currency.
- c. When the hedging derivative instrument is a cross-currency interest rate swap, it is eligible for designation in a net investment hedge in accordance with ASC 815-20-25-67. [RSM commentary: As indicated at ASC 815-35-35-9, this condition is not met if the two legs of a cross-currency interest rate swap are not both based on comparable interest rate curves.]

If all of these conditions are not met, the effectiveness of the hedge should be assessed by comparing the change in the fair value of a hypothetical derivative with the change in the fair value of the actual derivative. The hypothetical derivative would meet all of these conditions and have the same maturity, repricing and payment frequencies for any interim payments as the actual derivative.

1.2.4.3.4.1.2 Assessing effectiveness based on changes in forward exchange rates. When applying this method in assessing effectiveness, all changes in the fair value of a derivative instrument, including the time value component of purchased options and the interest accruals and periodic cash settlement components of qualifying cross-currency interest rate swaps, are reported in the cumulative translation adjustment section of other comprehensive income. Perfect effectiveness can be assumed and no quantitative assessment of effectiveness is required at hedge inception if the notional amount of the derivative instrument matches the portion of the net investment designated as being hedged and the derivative instrument's underlying relates solely to the foreign exchange rate between the functional currency of the hedged net investment and the investor's functional currency. As indicated at ASC 815-35-35-18, the hedge relationship would not be perfectly effective if the hedging instrument is a cross-currency interest rate swap, and both legs are not based on comparable interest rate curves.

When differences exist such that perfect effectiveness cannot be assumed, effectiveness is assessed as follows, depending on the nature of the differences, and as outlined at ASC 815-35-35-19:

- a. Different notional amounts. If the notional amount of the derivative instrument designated as a hedge of the net investment does not match the portion of the net investment designated as being hedged, hedge effectiveness shall be assessed by comparing the following two values:
 - The change in fair value of the actual derivative instrument designated as the hedging instrument
 - 2. The change in fair value of a hypothetical derivative instrument that has a notional amount that matches the portion of the net investment being hedged and a maturity that matches the maturity of the actual derivative instrument designated as the net investment hedge. See paragraph 815-35-35-26 for situations in which the hedge of a net investment in a foreign operation is hedging foreign currency risk on an after-tax basis, as permitted by paragraph 815-20-25-3(b)(2)(vi).
- b. Different currencies. If the derivative instrument designated as the hedging instrument has an underlying foreign exchange rate that is not the exchange rate between the functional currency of the hedged net investment and the investor's functional currency (a tandem currency hedge), hedge effectiveness shall be assessed by comparing the following two values:

- 1. The change in fair value of the actual cross-currency hedging instrument
- 2. The change in fair value of a hypothetical derivative instrument that has as its underlying the foreign exchange rate between the functional currency of the hedged net investment and the investor's functional currency and a maturity and repricing and payment frequencies for any interim payments that match the maturity and repricing and payment frequencies for any interim payments of the actual derivative instrument designated as the net investment hedge.
- c. Multiple underlyings. In accordance with paragraph 815-20-25-67(a), the only derivative instruments with multiple underlyings permitted to be designated as a hedge of a net investment are receive-variable-rate, pay variable-rate cross-currency interest rate swaps that meet certain criteria. Paragraph 815-20-25-67(b) also permits receive-fixed-rate, pay-fixed rate cross-currency interest rate swaps to be designated as a hedge of a net investment.
- **1.2.4.3.4.1.3** Assessing effectiveness when the hedging instrument is a cross-currency interest rate swap. ASC 815-35-35-20 and 35-21 provide guidance for assessing the effectiveness of a net investment hedge when a cross-currency interest rate swap is the designated hedging instrument as follows:

If a receive-variable-rate, pay-variable-rate cross-currency interest rate swap is designated as the hedging instrument in a net investment hedge, hedge effectiveness shall be assessed by comparing the following two values:

- The change in fair value of the actual cross-currency interest rate swap designated as the hedging instrument
- b. The change in fair value of a hypothetical receive-variable-rate, pay-variable- rate cross-currency interest rate swap in which the interest rates are based on the same currencies contained in the hypothetical swap and both legs of the hypothetical swap have the same repricing intervals and dates. The hypothetical derivative instrument also shall have a maturity that matches the maturity of the actual cross-currency interest rate swap designated as the net investment hedge.

If a receive-fixed-rate, pay-fixed-rate cross-currency interest rate swap is designated as the hedging instrument in a net investment hedge, hedge effectiveness shall be assessed by comparing the following two values:

- a. The change in fair value of the actual cross-currency interest rate swap designated as the hedging instrument
- b. The change in fair value of a hypothetical receive-fixed-rate, pay-fixed rate cross-currency interest rate swap in which the interest rates are based on the same currencies contained in the hypothetical swap. The hypothetical derivative instrument shall also have a maturity that matches the maturity of the actual cross-currency interest rate swap designated as the net investment hedge.

1.2.4.3.4.2 Assessing effectiveness when hedging instrument is not a derivative. Entities sometimes hedge their exposure associated with a net investment in a foreign operation through the use of a nonderivative instrument, such as debt that is denominated in a foreign currency. ASC 815-35-35-12 indicates that a hedging relationship would be considered perfectly effective, and no prospective quantitative effectiveness assessment is required at hedge inception, if both of the following conditions are met:

- a. The notional amount of the nonderivative instrument matches the portion of the net investment designated as being hedged.
- b. The nonderivative instrument is denominated in the functional currency of the hedged net investment.

If both of these conditions are not met, effectiveness is assessed in accordance with ASC 815-35-35-14 by comparing the following two values:

- a. The foreign currency transaction gain or loss based on the spot rate change (after tax effects, if appropriate) of that nonderivative instrument
- b. The transaction gain or loss based on the spot rate change (after tax effects, if appropriate) that would result from the appropriate hypothetical nonderivative instrument that does not incorporate those differences. The hypothetical nonderivative instrument shall also have a maturity that matches the maturity of the actual nonderivative instrument designated as the net investment hedge.

1.2.4.3.4.3 Redesignation considerations when effectiveness is based on the beginning net investment balance. Guidance is provided at ASC 815-35-35-27 to address circumstances whereby the effectiveness of a hedge of the net investment is assessed based on the beginning balance of the net investment and the net investment changes during the year. This necessitates considering the need to redesignate the hedging relationship to indicate what the hedging instrument is and what numerical portion of the current net investment is the hedged portion whenever financial statements or earnings are reported, and at least every three months. An example follows.

Example 1.2.5: Frequency of designation of hedged net investment (from ASC 815-35-55-1)

Assume that an entity enters into a foreign currency forward contract that has a notional amount equal to the beginning balance of its investment in a foreign operation (for example, 100,000 foreign currency units [FC]). This foreign currency forward contract is immediately designated as a hedge of the entire beginning balance of the net investment at the inception of the hedge. As the net investment changes, the entity would periodically assess the original hedging relationship and decide whether it needs to remove (that is, dedesignate) that original relationship and designate a new hedging relationship for the following assessment period. The following presents one method of such redesignation in those circumstances in which the entity chooses not to obtain a new derivative instrument:

- a. If the net investment had increased (for example, to FC 120,000), the entire forward contract would be designated prospectively as hedging only a portion of the beginning balance of the net investment in that foreign operation. The hedged portion would be the ratio of the net investment at the inception of the hedge to the net investment at the beginning of the new assessment period (for example, five-sixths of the FC 120,000).
- b. If the net investment had decreased (for example, to FC 90,000), only a proportion of the forward contract would be designated prospectively as hedging the entire beginning balance of the net investment in that foreign operation. The proportion of the forward contract designated prospectively as the hedging instrument would be the ratio of the net investment at the beginning of the new assessment period to the net investment at the inception of the hedge (for example, nine-tenths of the forward contract). The proportion of the forward contract not designated prospectively as the hedging instrument in the net investment hedge could be designated as a hedging instrument in a different hedging relationship or simply reported at fair value with its gain or loss after the dedesignation date recognized currently in earnings pursuant to paragraph 815-20-35-1(a).

RSM commentary: Guidance is provided at ASC 815-35-35-27 to address circumstances whereby the effectiveness of a hedge of the net investment is assessed based on the beginning balance of the net investment and the net investment changes during the year. This necessitates considering the need to redesignate the hedging relationship to indicate what the hedging instrument is and what numerical portion of the current net investment is the hedged portion whenever financial statements or earnings are reported, and at least every three months.

1.2.4.3.5 Changing to a different quantitative method for assessing effectiveness

Spotlight on hedges involving LIBOR or another rate expected to be discontinued

As discussed in more detail in Section 1.3, reference rate reform will result in the elimination of LIBOR, and may result in the elimination of other interbank offered rates as well. For hedging relationships that reference LIBOR (or another reference rate expected to be eliminated), temporary optional expedients and exceptions are provided in ASC 848 related to the accounting for that hedging relationship. One or more of these temporary optional expedients and exceptions relates to the guidance in this section. For additional information about these temporary optional expedients and exceptions refer to our white paper, Optional accounting expedients can make LIBOR transition easier.

As noted at Section 1.2.4.3, the method or methods that are selected to assess the effectiveness of the hedging relationship should be consistently applied. ASC 815-20-35-19 indicates that if an improved method of assessing effectiveness is identified that an entity wants to apply prospectively, this can be accomplished by discontinuing the existing hedging relationship and designating the new relationship using the improved method. (Refer to Section 5.3 for additional information on discontinuing a fair value hedge and Section 6.4 for additional information on discontinuing a cash flow hedge.) The new method should be applied to similar hedges unless the use of a different method for similar hedges is justified. A change in the method of assessing hedge effectiveness is not considered to be a change in accounting principle.

1.2.4.4 Excluding certain components from the assessment of effectiveness

Spotlight on hedges involving LIBOR or another rate expected to be discontinued

As discussed in more detail in Section 1.3, reference rate reform will result in the elimination of LIBOR, and may result in the elimination of other interbank offered rates as well. For hedging relationships that reference LIBOR (or another reference rate expected to be eliminated), temporary optional expedients and exceptions are provided in ASC 848 related to the accounting for that hedging relationship. One or more of these temporary optional expedients and exceptions relates to the guidance in this section. For additional information about these temporary optional expedients and exceptions refer to our white paper, Optional accounting expedients can make LIBOR transition easier.

ASC 815-20-25-82 permits entities to exclude all or a part of a hedging instrument's time value from the assessment of hedge effectiveness. Specifically, if the hedging instrument is an option contract, all or certain components of the change in the time value of the option can be excluded from the assessment of effectiveness. If the hedging instrument is a forward or futures contract, such as a swap, 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 can be excluded from the assessment of effectiveness. If the hedging instrument is a currency swap, the portion of its change in fair value attributable to a cross-currency basis spread can be excluded from the assessment of effectiveness.

The decision about whether or not to exclude time value or a component thereof from the assessment of effectiveness should be made consistently for similar hedges and documented as part of the documentation required by ASC 815-20-25-3. No other components of a hedging instrument's gain or loss can be excluded from the assessment of effectiveness. This decision should be carefully evaluated as it can impact whether or not the hedge is highly effective and whether the hedge qualifies for the assumption of perfect effectiveness such that a quantitative assessment of effectiveness is not necessary.

As is elaborated on more fully in Chapter 5 (for fair value hedges) and Chapter 6 (for cash flow hedges), the initial value of a component that is excluded from the assessment of effectiveness is recognized in

earnings over the life of the hedging instrument using a systematic and rational method unless an election is made to record changes in the fair value of the excluded component in earnings as they occur. Certain examples illustrate the concept of excluding time value from the assessment of effectiveness, including Examples 2.5.2, 2.5.6, 2.5.10, 2.5.11 and 3.3.8 of this guide.

1.2.4.5 Ramifications of counterparty possibility of default on hedge effectiveness and the valuation of a derivative

Regardless of whether a qualitative or quantitative method is used to assess the effectiveness of a hedging relationship, each time the effectiveness of the relationship is assessed, consideration should be given to the possibility that the counterparty to the hedging derivative will default. The ramifications of potential default on the effectiveness of the hedge differ depending on whether the hedge is a cash flow or fair value hedge and are discussed in the sections that follow. Additionally, ASC 820 requires nonperformance risk (including credit risk of both the reporting entity and the counterparty as relevant) to be incorporated into the valuation of derivatives, to the extent that such nonperformance risk affects the price that would be received to sell the derivative in an asset position or paid to transfer a derivative in a liability position in an orderly transaction with market participants.¹³

1.2.4.5.1 Ramifications to effectiveness of cash flow hedge. To conclude that a hedging relationship is expected to be highly effective in achieving offsetting changes in cash flows, consideration should be given to whether payments that may be owed under the contractual provisions of the derivative instrument will be collected. This entails assessing and updating the possibility that the counterparty to the derivative instrument will default by failing to make any contractually required payments. In making this assessment, consideration should be given to the counterparty's credit ratings, as well as other relevant factors, such as collateral and financial guarantees. If at any time the likelihood that the counterparty will not default is no longer probable, a cash flow hedge would no longer be considered highly effective and hedge accounting should be discontinued. As long as it remains probable that the counterparty will not default, a change in the risk of nonperformance often does not impact the effectiveness assessment of a cash flow hedge. For example, when applying the most common quantitative method of assessing effectiveness (the hypothetical-derivative method discussed at Section 1.2.4.3.3.2), ASC 815-30-35-29 indicates that the same discount rates (the relevant interest rate swap curves) should be used in determining the fair value of both the perfect hypothetical interest rate swap and the actual interest rate swap.

1.2.4.5.2 Ramifications to effectiveness of fair value hedge. If there is a change in the creditworthiness of either party to a derivative instrument designated as the hedging instrument in a fair value hedge, this change has an immediate effect on the derivative's fair value, given the need to consider the risk of nonperformance in deriving the fair value. In light of the fair value being impacted by a change in creditworthiness, this will also immediately affect the effectiveness assessment and generally create a difference between the change in the fair value of the hedging instrument and the change in the fair value of the hedged item attributable to the hedged risk, which is recognized in earnings under fair value hedge accounting. The shortcut method, discussed at Section 1.2.4.1.4, requires that consideration be given to the likelihood of the counterparty's compliance with the contractual payment terms of the hedging derivative; however, if compliance is probable, perfect effectiveness can be assumed, despite differences in credit risk associated with the hedging instrument and hedged item.

¹³ An exception to this is provided under ASC 815-10-35-1A for private companies that qualify for and elect the simplified approach whereby as noted at Section 1.2.4.1.3.4, an election can be made to measure the interest rate swap at settlement value as a practical expedient for fair value.

1.2.4.6 Special considerations for assessing the effectiveness of options

Reference should be made to the guidance at ASC 815-20-25-88 to 25-99 (as relevant) in assessing the effectiveness of hedges with options as the designated hedging instrument.

1.3 Reference rate reform

Due to concerns about structural risks to interbank offered rates, regulators in various jurisdictions around the world have been working to replace LIBOR and other interbank offered rates with reference interest rates that are supported by transactions in liquid and observable markets. As a result of these efforts, LIBOR is anticipated to be discontinued as early as the end of 2021. In the U.S., the Alternative Reference Rates Committee convened by the Federal Reserve Board has recommended SOFR as the preferred alternative to LIBOR. The elimination of LIBOR and the expected elimination of other reference rates are referred to as reference rate reform, which will affect entities that have assets, debt instruments, interest rate swap agreements or other contracts that reference LIBOR or another rate that is expected to be eliminated.

To ease the expected burden of reference rate reform on financial reporting, the FASB issued ASU 2020-04, which created ASC 848 to provide temporary optional expedients and exceptions to the guidance in U.S. GAAP otherwise applicable to contract modifications, hedge accounting and other transactions. For hedging relationships affected by reference rate reform, election of the temporary optional expedients and exceptions would allow entities to continue to apply hedge accounting to these relationships, provided certain criteria are met. The following is a partial list of the activities that may be involved in replacing a reference rate in a hedging relationship, and (or) the accounting for that replacement, for which ASC 848 provides temporary optional expedients and exceptions:

- Updating formal hedge documentation
- Amending the critical terms of a hedging relationship, such as making changes to the contractual terms of the hedging instrument, hedged item or forecasted transaction or the designated method of assessing the effectiveness of a cash flow hedge
- Changing the designated benchmark rate in a fair value hedge
- Applying the shortcut method to existing fair value hedges
- Assessing the probability of the hedged forecasted transaction in a cash flow hedge
- Changing the designated hedged risk in a cash flow hedge
- Assessing the effectiveness of a cash flow hedge (both initially and subsequently), including the shortcut method and simplified approach for certain private companies

The temporary optional expedients and exceptions provided in ASC 848 to alleviate the accounting repercussions of reference rate reform, as well as the circumstances under which they may be applied and their effective and expiration dates, are discussed in detail in our white paper, Optional accounting expedients can make LIBOR transition easier. Entities should carefully consider the temporary optional expedients and exceptions in ASC 848 because electing and applying one or more of them could make the difference between being able to continue to apply hedge accounting and being required to discontinue hedge accounting.

Chapter 2: Commodities hedging

2.1 Overview

Manufacturing entities commonly enter into derivatives for protection against fluctuating commodity prices and the impact this fluctuation may have on the value of inventory, cost of raw materials or finished goods sales prices. Other common uses of commodities derivatives include hedging utility or fuel costs or sales prices. While beyond the scope of this guide, commodities purchase agreements with vendors, and sales agreements with customers, may by definition be a derivative and require recognition as such unless the entity qualifies for, and elects, the normal purchases and normal sales scope exception outlined beginning at ASC 815-10-15-22. While derivatives can be designated as hedging instruments in a fair value or cash flow hedge, including *all-in-one hedges* as illustrated beginning at ASC 815-20-55-111, they cannot be designated as a hedged item. Thus, when contemplating hedge accounting, consideration should be given to whether a potential hedged item or transaction is required to be accounted for as a derivative.

The level of effort to comply with the requirements of hedge accounting and demonstrate that a hedge is highly effective can vary depending on the manner in which a hedge is structured, as well as how it is defined and documented to meet the hedge accounting requirements. For example, a cash flow hedge of a contractually specified component associated with the forecasted purchase or sale of a commodity is typically easier to implement and has a greater likelihood of being highly effective than a cash flow or fair value hedge of total changes in price. This is illustrated in the chart that follows using specific examples incorporated in Section 2.5.

Situation	Factors that preclude the hedge from being perfectly effective	Alternate structure that may be more feasible
Fair value hedge of natural gas inventories in Texas using futures contracts based on delivery at the Henry Hub point in Louisiana (refer to Example 2.5.10 of this guide)	Factors associated with the location (e.g., transmission costs, local supply and demand)	Alternative may be to structure as cash flow hedge of contractually specified component associated with forecasted purchases or sales of natural gas, if a contractually specified component exists or is expected to exist. As noted at ASC 815-20-25-77, location differences would not need to be considered.
Fair value hedge of tire inventory using a forward contract to sell rubber (refer to Example 2.5.11 of this guide)	Nonrubber components that impact the price of tires, as well as location differences	Alternative may be to structure as cash flow hedge of forecasted purchases of the rubber to be used in manufacturing the tires. If this can be accomplished, effectiveness would not be impacted by changes in cash flows associated with the nonrubber components of tires. Additionally, if a contractually specified component exists or is expected to exist for the pricing

Situation	Factors that preclude the hedge from being perfectly effective	Alternate structure that may be more feasible
		of the forecasted purchases of rubber (e.g., price is contractually linked to a rubber index), and is designated as the hedged risk, location differences would not need to be considered.
Fair value hedge of growing wheat with futures contracts based on fully grown harvested wheat (refer to Example 2.5.12 of this guide)	Futures contracts are based on harvested wheat and the hedged item is unharvested wheat, which would have different values than harvested wheat due to various factors, such as additional production and harvesting costs, as well as physical condition.	Alternative may be to structure as cash flow hedge of the forecasted sale of the harvested wheat. If this can be accomplished, the state of production would not cause a mismatch between the futures contracts and the wheat it is hedging. Additionally, if a contractually specified component exists for the pricing of the forecasted sales of wheat (e.g., price is contractually linked to a wheat index), location differences would not need to be considered.

2.2 Cash flow hedge of a contractually specified component

The ability to designate the hedged risk as changes in cash flows attributable to a contractually specified component of commodities and other nonfinancial assets was brought about with the issuance of ASU 2017-12. Prior to its issuance, it was necessary to designate the hedged risk as total changes in cash flows.

What is a contractually specified component?

A contractually specified component is defined as "an index or price explicitly referenced in an agreement to purchase or sell a nonfinancial asset, other than an index or price calculated or measured solely by reference to an entity's own operations."

ASC 815-20-55-26A elaborates on this by indicating that the definition is considered to be met if the component is explicitly referenced in agreements that support the price at which a nonfinancial asset will be purchased or sold and provides the following example:

...an entity intends to purchase a commodity in the commodity's spot market. If as part of the governing agreements of the transaction or commodities exchange it is noted that prices are based on a pre-defined formula that includes a specific index and a basis, those agreements may be utilized to identify a contractually specified component.

Assuming all relevant criteria are met, an entity can elect to hedge changes in cash flows attributable to a contractually specified component of a forecasted purchase or sale of commodities, rather than all changes in cash flows associated with a forecasted purchase or sale of commodities. It is typically

challenging to structure a commodity hedge that is highly effective at hedging all changes in cash flows or fair value, as well as time consuming to monitor the effectiveness of such hedges. This is due to the fact that derivatives that are commonly available for commodities hedges have cash flows that are only impacted by changes in a commodity index. Conversely, the cash flows associated with a forecasted purchase or sale of a commodity, as well as the fair value of a commodity, are likely also impacted by additional factors, such as transportation costs, quality or grade differentials and local supply and demand for the particular commodity. The advantage of being able to designate the risk being hedged in the forecasted purchase or sale of commodities as the risk of changes in cash flows attributable to a contractually specified component is that these other factors can be ignored when assessing the effectiveness of the hedge. This is evident from Example 2.5.8 whereby basis differentials between grades of plastic and location can be ignored when assessing the effectiveness of the hedge because the hedged risk was designated as the variability in cash flows attributable to changes in the contractually specified component.

Examples 2.5.1, 2.5.3 and 2.5.7 of this guide also illustrate various aspects of hedging a contractually specified component.

2.2.1 Criteria for hedging a contractually specified component

ASC 815-20-25-22A and B outline criteria that should be considered to determine if a contractually specified component can be designated as the hedged risk in a cash flow hedge. 14 Namely, consideration should be given to whether the purchase or sale contract associated with the contractually specified component is a derivative in its entirety, or contains an embedded derivative. If the contract is a derivative in its entirety, a contractually specified component can be designated as the hedged risk only if the entity qualifies for, and elects, the normal purchases and normal sales scope exception for that contract as outlined beginning at ASC 815-10-15-22. Similarly, if a contractually specified component that is embedded in a contract that is not a derivative in its entirety requires bifurcation as a derivative, that embedded component cannot be designated as the hedged risk.



2.2.1.1 Hedging contractually specified component before, after, or without a contractual period

When determining whether a contractually specified component exists, it is not necessary to have a contract in place at the inception of the hedge. This is evident from the discussion at paragraph BC50 of ASU 2017-12, as well as ASC 815-20-55-26, whereby purchases and sales conducted in the spot market are deemed to have a contractually specified component if the governing agreements for the transaction or exchange indicate that the prices are based on a specific index. Additionally, as is evident from Example 2.5.1, it is permissible to hedge a contractually specified component for a hedge period that extends beyond the contractual term of an existing contract or to hedge a contractually specified

¹⁴ Reference should also be made to Section 1.2 in determining if the general criteria for cash flow hedge accounting are met.

component in a contract that does not yet exist as long as the requirements are expected to be met when a replacement contract is executed. The FASB discussed matters such as this at its March 28, 2018 meeting and indicated that upon entering into the contract or other document referencing the contractually specified component, the analysis required by ASC 815-20-25-22A should be performed. The FASB also indicated the following in its minutes for this meeting:

If an entity does not have a contract at hedge inception, it must develop an expectation (for example, through previous experience) that when the transaction is entered into:

- The written agreement for a forecasted purchase or sale will contain an explicitly referenced contractually specified component.
- The pricing formula that references the explicitly referenced contractually specified component will determine the price of the nonfinancial item.
- The requirements for cash flow hedge accounting will be met.
- The agreement will be substantive.

2.2.2 Ongoing monitoring associated with hedges of contractually specified components

As is the case with any hedges of forecasted transactions, as part of the ongoing assessments of effectiveness (refer to Section 1.2.4 for additional information), consideration should be given to whether the forecasted transactions are probable of occurring and any expected differences between the derivative and the transactions it is hedging should be considered in the quantitative assessment of effectiveness. Hedge accounting should be discontinued if the forecasted transactions are no longer probable of occurring, the hedge is no longer highly effective based on the expected terms, or as it relates to hedges associated with contracts that do not yet exist (as discussed in Section 2.2.1.1), if the contract when executed does not have a contractually specified component.

2.2.3 Changes in the designated contractually specified component

Given the ability to hedge a contractually specified component before or after the contract period, circumstances may arise whereby the contractually specified component that was designated as the hedged risk at the inception of the hedge is expected to be replaced with a different contractually specified component. This is illustrated through Example 2.5.1 of this guide. The FASB decided to permit the continuation of hedge accounting uninterrupted in this circumstance as long as the hedge remains highly effective in light of the revised hedged risk and the hedged forecasted transactions remain probable. This decision by the FASB constitutes a departure from the general guidance in ASC 815-20-55-56, which indicates that a change to any of the critical terms of a hedging relationship necessitates a dedesignation of that relationship and the designation of a new hedging relationship. As pointed out in paragraph BC66 of ASU 2017-12, it is not necessary for the initial hedge documentation or hedge effectiveness assessments to contemplate a possible change to the contractually specified component. The initial hedge documentation should be based on the expected contractually specified component and each assessment of effectiveness should be performed based on the contractually specified component that is expected to occur at the time each effectiveness assessment is performed.

2.3 Cash flow hedge of all changes in cash flows associated with commodities hedge

Our expectation is that most entities will structure cash flow hedges of forecasted commodity transactions as a hedge of a contractually specified component when possible. In those situations when a contractually specified component does not, and is not, expected to exist, ASC 815-20-25-15(i) requires the hedged risk to be designated as the risk of changes in cash flows related to all changes in the purchase or sales price. As demonstrated in the chart in Section 2.1, this creates mismatches between the hedging instrument and the forecasted transactions it is hedging that could potentially be avoided through a hedge of a contractually specified component. Examples 2.5.4 and 2.5.5 of this guide illustrate cash flow hedges of total changes in price.

2.4 Fair value commodities hedge

For there to be perfect effectiveness in a fair value hedge of a nonfinancial asset, such as inventory, the underlying of the derivative would need to be of the same variety, grade and location as the inventory, which is generally hard to achieve. In light of the difficulties associated with fair value hedges of nonfinancial assets (see the chart in Section 2.1 of this guide), entities commonly structure hedges as cash flow hedges if possible. Examples 2.5.9 to 2.5.13 illustrate fair value hedges of commodities.

2.5 Commodity hedge examples

The following select examples related to commodities hedges are from the implementation guidance in ASC 815.

Index of examples

Cash flow hedges

- 2.5.1 Contractually specified component in a not-yet-existing contract
- 2.5.2 Option time value excluded from the assessment of effectiveness in a cash flow hedge and recorded in earnings under an amortization approach
- 2.5.3 Effectiveness of cash flow hedge of a forecasted purchase of inventory with a forward contract
- 2.5.4 Cash flow hedge of the forecasted sale of a commodity when the critical terms match
- 2.5.5 Designation and discontinuance of a cash flow hedge of the forecasted purchase of inventory
- 2.5.6 Accounting for a derivative instrument's gain or loss in a cash flow hedge—effectiveness based on changes in intrinsic value
- 2.5.7 Assessing effectiveness of a cash flow hedge of a forecasted purchase of inventory with a forward contract (contractually specified component)
- 2.5.8 Designation of a cash flow hedge of a forecasted purchase of inventory for which commodity exposure is managed centrally

Fair value hedges

- 2.5.9 Firm commitment as hedged item in relation to long-term supply contracts with embedded price caps or floors
- 2.5.10 Fair value hedge of natural gas inventory with futures contracts
- 2.5.11 Fair value hedge of tire inventory with a forward contract
- 2.5.12 Fair value hedge of growing wheat with futures contracts
- 2.5.13 Fair value hedge of a commodity inventory

Example 2.5.1: Contractually specified component in a not-yet-existing contract (from ASC 815-20-55-26B to 55-26E)

This guidance discusses the implementation of paragraphs 815-20-25-22B and 815-30-35-37A. Entity A's objective is to hedge the variability in cash flows attributable to changes in a contractually specified component in forecasted purchases of a specified quantity of soybeans on various dates during June 20X1. Entity A has executed contracts to purchase soybeans only through the end of March 20X1. Entity A's contracts to purchase soybeans typically are based on the ABC soybean index price plus a variable basis differential representing transportation costs. Entity A expects that the forecasted purchases during June 20X1 will be based on the ABC soybean index price plus a variable basis differential.

On January 1, 20X1, Entity A enters into a forward contract indexed to the ABC soybean index that matures on June 30, 20X1. The forward contract is designated as a hedging instrument in a cash flow hedge in which the hedged item is documented as the forecasted purchases of a specified quantity of soybeans during June 20X1. As of the date of hedge designation, Entity A expects the contractually specified component that will be in the contract once it is executed to be the ABC soybean index. Therefore, in accordance with paragraph 815-20-25-3(d)(1), Entity A documents as the hedged risk the variability in cash flows attributable to changes in the contractually specified ABC soybean index in the not-yet-existing contract. On January 1, 20X1, Entity A determines that all requirements for cash flow hedge accounting are met and that the requirements of paragraph 815-20-25-22A will be met in the contract once executed in accordance with paragraph 815-20-25-22B. Entity A also will assess whether the criteria in 815-20-25-22A are met when the contract is executed.

As part of its normal process of assessing whether it remains probable that the hedged forecasted transactions will occur, on March 31, 20X1, Entity A determines that the forecasted purchases of soybeans in June 20X1 will occur but that the price of the soybeans to be purchased will be based on the XYZ soybean index rather than the ABC soybean index. As of March 31, 20X1, Entity A begins assessing the hedge effectiveness of the hedging relationship on the basis of the changes in cash flows associated with the forecasted purchases of soybeans attributable to variability in the XYZ soybean index. Because the hedged forecasted transactions (that is, purchases of soybeans) are still probable of occurring, Entity A may continue to apply hedge accounting if the hedging instrument (indexed to the ABC soybean index) is highly effective at achieving offsetting cash flows attributable to the revised contractually specified component (the XYZ soybean index). On April 30, 20X1, Entity A enters into a contract to purchase soybeans throughout June 20X1 based on the XYZ soybean index price plus a variable basis differential representing transportation costs.

If the hedging instrument is not highly effective at achieving offsetting cash flows attributable to the revised contractually specified component, the hedging relationship must be discontinued. As long as the hedged forecasted transactions (that is, the forecasted purchases of the specified quantity of soybeans) are still probable of occurring, Entity A would reclassify amounts from accumulated other comprehensive income to earnings when the hedged forecasted transaction affects earnings in accordance with paragraphs 815-30-35-38 through 35-41. The reclassified amounts should be presented in the same income statement line item as the earnings effect of the hedged item. Immediate reclassification of amounts from accumulated other comprehensive income to earnings would be required only if it becomes probable that the hedged forecasted transaction (that is, the purchases of the specified quantity of soybeans in June 20X1) will not occur. As discussed in paragraph 815-30-40-5, a pattern of determining that hedged forecasted transactions are probable of not occurring would call into question both an entity's ability to accurately predict forecasted transactions and the propriety of applying cash flow hedge accounting in the future for similar forecasted transactions.

Example 2.5.2: Option time value excluded from the assessment of effectiveness in a cash flow hedge and recorded in earnings under an amortization approach (from ASC 815-20-55-235 to 55-238)

This Example illustrates the application of paragraph 815-20-25-83A. On December 31, 20X0, an entity intends to purchase 1,000 barrels of crude oil in December 20X4. The entity decides to hedge changes in the price of the crude oil by purchasing an at-the-money call option on 1,000 barrels of crude oil. The entity purchases the option on December 31, 20X0, with an initial premium of \$9,250, a strike price of \$75, and a maturity date of December 31, 20X4. The entity designates the option as the hedging instrument in a cash flow hedge of a forecasted purchase of crude oil.

The entity elects to exclude the time value of the option from the assessment of effectiveness in accordance with paragraph 815-20-25-82 and applies the amortization approach for recognizing excluded components in accordance with paragraph 815-20-25-83A. The entity applies a straight-line amortization method and, based on the initial option premium of \$9,250, the entity determines

an annual amortization amount of \$2,313. The entity records all changes in fair value over the term of the derivative in other comprehensive income and records amortization in earnings each period with an offsetting entry to other comprehensive income. The changes in value of the option over the life of the hedging relationship are as follows.

	12/31/20X1	12/31/20X2	12/31/20X3	12/31/20X4
Ending market price of crude oil	\$77	\$76	\$74	\$81
Ending fair value of option				
Time value	7,500	5,500	3,000	-
Intrinsic value	2,000	1,000	-	6,000
Total	\$9,500	\$6,500	\$3,000	\$6,000
Change in time value	(\$1,750)	(\$2,000)	(\$2,500)	(\$3,000)
Change in intrinsic value	2,000	(1,000)	(1,000)	6,000
Total current-period gain (loss) on derivative	\$250	(\$3,000)	(\$3,500)	\$3,000

On December 31, 20X4, the entity purchases 1,000 barrels of crude oil, and the option expires with an intrinsic value of \$6,000. This amount will remain in accumulated other comprehensive income until the commodity is sold in 20X5. The journal entries over the life of the hedging relationship are as follows.

December 31, 20X0				
Derivative asset	\$9,250			
Cash		\$9,250		
To record the derivative asset based on the initial premiu	m.			
December 31, 20X1				
Derivative asset	\$250			
Other comprehensive income		\$250		
To record the change in value of the derivative in other co	omprehensive inco	ome.		
Cost of goods sold	\$2,313			
Other comprehensive income		\$2,313		
To record amortization of the excluded amount.				
December 31, 20X2				
Other comprehensive income	\$3,000			
Derivative asset		\$3,000		
To record the change in value of the derivative in other co	omprehensive inco	ome.		
Cost of goods sold	\$2,313			
Other comprehensive income		\$2,313		
To record amortization of the excluded amount.				
December 31, 20X3				
Other comprehensive income	\$3,500			
Derivative asset		\$3,500		
To record the change in value of the derivative in other comprehensive income.				
Cost of goods sold	\$2,313			
Other comprehensive income		\$2,313		
To record amortization of the excluded amount.				

December 31, 20X4				
Derivative asset	\$3,000			
Other comprehensive income		\$3,000		
To record the change in value of the derivative in other	comprehensive inco	ome.		
Cost of goods sold	\$2,311 ^(a)			
Other comprehensive income		\$2,311 ^(a)		
To record amortization of the excluded amount.				
July 1, 20X5				
Accumulated other comprehensive income	\$6,000			
Cost of goods sold		\$6,000		
Upon sale of commodity, to record intrinsic value to cost of goods sold.				
(a) \$2 rounding adjustment				

Example 2.5.3: Effectiveness of cash flow hedge of a forecasted purchase of inventory with a forward contract (from ASC 815-30-55-1A to 55-8)

This Example illustrates the application of the guidance in Subtopic 815-20 and this Subtopic to assessing effectiveness for a cash flow hedge of a forecasted purchase of inventory with a forward contract in which the forward contract index differs from the index of the underlying hedged transaction. Assume that the entity elected to perform subsequent quarterly hedge effectiveness assessments on a quantitative basis and that all hedge documentation requirements were satisfied at inception.

Entity G forecasts the purchase of 500,000 pounds of Brazilian coffee for U.S. dollars in 6 months. The agreement outlining purchase terms between Entity G and its supplier contains a contractually specified component referencing a Brazilian coffee index denominated in U.S. dollars. Entity G designates the variability in cash flows related to its forecasted purchase of Brazilian coffee attributable to changes in the contractually specified component (Brazilian coffee index) as the hedged risk. Rather than acquire a derivative instrument based on Brazilian coffee, Entity G enters into a 6-month forward contract to purchase 500,000 pounds of Colombian coffee for U.S. dollars and designates the forward contract as a hedging instrument in a cash flow hedge of the variability in cash flows attributable to changes in the contractually specified Brazilian coffee index component of its forecasted purchase of Brazilian coffee.

Entity G bases its assessment of hedge effectiveness on changes in forward prices, with the resulting gain or loss discounted to reflect the time value of money. Both at inception and on an ongoing basis, Entity G could assess the effectiveness of the hedge by comparing changes in the expected cash flows from the Colombian coffee forward contract with the expected net change in cash outflows attributable to changes in the contractually specified component for purchasing the Brazilian coffee for different market prices. (A simpler method that should produce the same results would consider the expected future correlation of the prices of Brazilian and Colombian coffee, based on the correlation of those prices over past six-month periods.)

In assessing hedge effectiveness on an ongoing basis, Entity G also must consider the extent of offset between the change in expected cash flows on its Colombian coffee forward contract and the expected net change in expected cash flows for the forecasted purchase of Brazilian coffee attributable to changes in the contractually specified component. Both changes would be measured on a cumulative basis for actual changes in the forward price of the respective coffees during the hedge period.

See Topic 820 (including paragraph 820-10-55-13) for a discussion of expected cash flows.

Because the only difference between the forward contract and forecasted purchase relates to the type of coffee (Colombian versus Brazilian), Entity G could consider the changes in the cash flows on a forward contract for Brazilian coffee to be a measure of perfectly offsetting changes in cash flows for its forecasted purchase of Brazilian coffee. For example, for given changes in the U.S. dollar prices of six-month and three-month Brazilian and Colombian contracts, Entity G could compute the effect of a change in the price of coffee on the expected cash flows of its forward contract on Colombian coffee and of a forward contract for Brazilian coffee as follows.

	Estimate of change in cash flows		
	Hedging Instrument: Forward Contract on Colombian Coffee Estimate of Forect Transaction: Forect Contract on Braze Coffee		
Forward price of Colombian and Brazilian coffee:			
At hedge inception—6-month price	\$2.54	\$2.43	
3 months later—3-month price	2.63	2.53	
Cumulative change in price—gain	0.09	0.10	
× 500,000 pounds of coffee	× 500,000	× 500,000	
Estimate of change in cash flows	\$45,000	\$50,000	

Using the amounts in paragraph 815-30-55-6, Entity G could evaluate effectiveness 3 months into the hedge on its first subsequent quarterly effectiveness assessment testing date by comparing the \$45,000 change on its Colombian coffee contract with what would have been a perfectly offsetting change in cash flow for its forecasted purchase—the \$50,000 change on an otherwise identical forward contract for Brazilian coffee. Entity G concludes that the hedging relationship would be highly effective, and it would record the \$45,000 change in the fair value of the forward contract on Colombian coffee in other comprehensive income.

Example 2.5.4: Cash flow hedge of the forecasted sale of a commodity when the critical terms match (from ASC 815-30-55-20 to 55-23)

This Example illustrates the application of the guidance in paragraphs 815-20-25-84 through 25-85 and this Subtopic to the accounting for a cash flow hedge of a forecasted sale of a commodity. The terms of the hedging derivative have been negotiated to match the terms of the forecasted transaction. Assume that there is no time value in the derivative instrument. Entity ABC has chosen to hedge the variability of the cash flows from the forecasted sale of the commodity instead of the changes in its fair value. For simplicity, commissions and most other transaction costs, initial margin, and income taxes are ignored unless otherwise stated. Assume that there are no changes in creditworthiness that would alter the effectiveness of the hedging relationship.

Because there is no contractually specified component, Entity ABC hedges the risk of changes in its cash flows relating to changes in the sales price of a forecasted sale of 100,000 bushels of Commodity A by entering into a derivative instrument, Derivative Z. Entity ABC expects to sell the 100,000 bushels of Commodity A on the last day of Period 1. On the first day of Period 1, Entity ABC enters into Derivative Z and designates it as a cash flow hedge of the forecasted sale. Entity ABC neither pays nor receives a premium on Derivative Z (that is, its fair value is zero). Entity ABC expects that there will be perfect offset between the hedging instrument and the hedged item because all of the following conditions exist:

a. The notional amount of Derivative Z is 100,000 bushels and the forecasted sale is for 100,000 bushels.

- b. The underlying of Derivative Z is the price of the same variety and grade of Commodity A that Entity ABC expects to sell (assuming delivery to Entity ABC's selling point).
- c. The settlement date of Derivative Z is the last day of Period 1 and the forecasted sale is expected to occur on the last day of Period 1.

The entity need not perform an initial quantitative assessment of hedge effectiveness in accordance with paragraph 815-20-25-3(b)(2)(iv)(01) because the conditions in paragraphs 815-20-25-84 through 25-85 are met.

At inception of the hedge, the expected sales price of 100,000 bushels of Commodity A is \$1,100,000. On the last day of Period 1, the fair value of Derivative Z has increased by \$25,000, and the expected sales price of 100,000 bushels of Commodity A has decreased by \$25,000. Both the sale of 100,000 bushels of Commodity A and the settlement of Derivative Z occur on the last day of Period 1. The following table illustrates the accounting, including the net effect on earnings and other comprehensive income, for the situation described.

	Debit (Credit)			
	Cash	Derivative	Other Comprehensive Income	Earnings ^(a)
Recognize change in fair value of derivative		\$25,000	(\$25,000)	
Recognize revenue from sale	\$1,075,000			(\$1,075,000)
Recognize settlement of derivative	25,000	(25,000)		
Reclassify change in fair value of derivative to earnings			25,000	(25,000)
Total	\$1,100,000	\$ -	\$ -	(\$1,100,000)

⁽a) The change in fair value of the hedging derivative is presented in the same income statement line item as the earnings effect of the hedged item.

At the inception of the hedge, Entity ABC anticipated that it would receive \$1,100,000 from the sale of 100,000 bushels of Commodity A. This Example illustrates that by hedging the risk of changes in its cash flows relating to the forecasted sale of 100,000 bushels of Commodity A, Entity ABC still received a total of \$1,100,000 in cash flows even though the sales price of Commodity A declined during the period.

Example 2.5.5: Designation and discontinuance of a cash flow hedge of the forecasted purchase of inventory (from ASC 815-30-55-40 to 51)

This Example illustrates the effect on earnings and other comprehensive income of discontinuing a cash flow hedge by dedesignating the hedging derivative under paragraph 815-30-40-1(c) before the variability of the cash flows from the hedged forecasted transaction has been eliminated. It also discusses the effect that the location of a physical asset has on the effectiveness of a hedging relationship. For simplicity, commissions and most other transaction costs, initial margin, and income taxes are ignored unless otherwise stated. Assume that there are no changes in creditworthiness that would alter the effectiveness of the hedging relationship.

On February 3, 20X1, Entity JKL forecasts the purchase of 100,000 bushels of corn on May 20, 20X1. The contract does not contain a contractually specified component, and Entity JKL designates changes in cash flows related to the forecasted transaction attributable to all changes in the purchase price as the hedged risk. It expects to sell finished products produced from the corn on May 31, 20X1. On February 3, 20X1, Entity JKL enters into 20 futures contracts, each for the

purchase of 5,000 bushels of corn on May 20, 20X1 (100,000 in total), and designates those contracts as a hedging instrument in a cash flow hedge of the forecasted purchase of corn.

Entity JKL chooses to assess effectiveness by comparing the entire change in fair value of the futures contracts to changes in the expected cash flows on the forecasted transaction. Entity JKL estimates its expected cash flows on the forecasted transaction based on the futures price of corn adjusted for the difference between the cost of corn delivered to Chicago and the cost of corn delivered to Minneapolis. Entity JKL does not choose to use a tailing strategy (as described in paragraph 815-20-25-121). Entity JKL expects changes in fair value of the futures contracts to be highly effective at offsetting changes in the expected cash outflows for the forecasted purchase of corn because both of the following conditions exist:

- The futures contracts are for the same variety and grade of corn that Entity JKL plans to purchase.
- b. On May 20, 20X1, the futures price for delivery on May 20, 20X1 will be equal to the spot price (because futures prices and spot prices converge as the delivery date approaches).

However, the hedge may not achieve perfect offset between the hedged item and hedging instrument because of the difference in the delivery location between the hedging instrument and forecasted transaction.

Entity JKL will purchase corn for delivery to its production facilities in Minneapolis, but the price of the futures contracts is based on delivery of corn to Chicago. Changes in the difference between the price of corn delivered to Chicago and the price of corn delivered to Minneapolis would result in not achieving perfect offset between the hedged item and hedging instrument and, if of significant magnitude, may preclude the hedging relationship from achieving highly effective offset.

On February 3, 20X1, the futures price of corn for delivery to Chicago on May 20, 20X1, is \$2.6875 per bushel resulting in a total price of \$268,750 for 100,000 bushels.

On May 1, 20X1, Entity JKL dedesignates the related futures contracts and closes them out by entering into offsetting contracts on the same exchange. As of that date, Entity JKL had recognized in accumulated other comprehensive income gains on the futures contracts of \$26,250. Entity JKL still plans to purchase 100,000 bushels of corn on May 20, 20X1. Consequently, the gains that occurred before dedesignation will remain in other comprehensive income until the finished product is sold. If Entity JKL had not closed out the futures contracts when it dedesignated them, any further gains or losses would have been recognized in earnings.

On May 20, 20X1, Entity JKL purchases 100,000 bushels of corn, and on May 31, 20X1, Entity JKL sells the finished product.

The futures prices of corn that are in effect on key dates are assumed to be as follows.

Date	Futures Price per Bushel for Delivery to Chicago on May 20, 20X1	Futures Price Adjusted for Delivery to Minneapolis on May 20, 20X1
Inception of hedging relationship—February 3, 20X1	\$2.6875	\$2.7375
End of quarter—March 31, 20X1	3.1000	3.1500
Discontinue hedge—May 1, 20X1	2.9500	3.0000
Purchase of corn—May 20, 20X1	2.8500	2.9000

The changes in fair value of the futures contracts between inception (February 3, 20X1) and discontinuation (May 1, 20X1) of the hedge are as follows.

	February 3–March 31, 20X1	April 1–May 1, 20X1
Futures price at beginning of period	\$2.6875	\$3.1000
Futures price at end of period	3.1000	2.9500
Change in price per bushel	0.4125	(0.1500)
Bushels under contract (20 contracts		
@ 5,000 bushels each)	× 100,000	× 100,000
Change in fair value—gain (loss)	\$41,250	(\$15,000)

The following table displays the entries to recognize the effects of all of the following:

- a. Entering into futures contracts as a hedge of the forecasted purchase of corn
- b. Dedesignating and closing out the futures contracts
- c. Completing the forecasted purchase of corn
- d. Selling the finished products produced from the corn.

Because the difference in prices between corn delivered to Chicago and corn delivered to Minneapolis (\$.05 per bushel, as illustrated in paragraph 815-30-55-47) did not change during the period of the hedge, the hedging relationship achieved perfect offset between the hedged item and the hedging instrument. If that difference had changed, the entire change in fair value of the futures contracts would still have been recorded in accumulated other comprehensive income until the discontinuation date assuming the hedging relationship remained highly effective at offsetting variability in cash flows and the hedged forecasted transaction was still probable of occurring.

	Debit (Credit)			
	Cash	Inventory	Other Comprehensive Income	Earnings ^(a)
March 31, 20X1 (end of quarter)				
Recognize change in fair value of future contracts	\$41,250		(\$41,250)	
May 1, 20X1 (discontinue hedge)				
Recognize change in fair value of future contracts	(15,000)		15,000	
May 20, 20X1				
Recognize purchase of corn	(290,000)	\$290,000		
May 31, 20X1				
Recognize cost of sale of product		(290,000)		\$290,000
Reclassify changes in fair value of futures contracts to earnings			26,250	(26,250)
Total	(\$263,750)	\$ -	\$ -	\$263,750

⁽a) The change in the fair value of the hedging derivative is presented in the same income statement line item as the earnings effect of the hedged item.

To simplify this Example and focus on the effects of the hedging relationship, the margin account with the clearinghouse and certain amounts that would be involved in a sale of Entity JKL's inventory (for example, additional costs of production, selling costs, and sales revenue) have been ignored.

The effect of the hedging strategy is that the cost of the corn recognized in earnings when the finished product was sold was \$263,750. If the hedging relationship had not been discontinued early, the cost recognized in earnings would have been \$273,750, which was the futures price of the corn, adjusted for delivery to Minneapolis, at the inception of the hedge. Without the strategy, Entity JKL would have recognized \$290,000, which was the price of corn delivered to Minneapolis at the time it was purchased.

RSM commentary: In this example, it appears that cash that changes hands with the clearing house through the margin account as the fair value of the futures contract changes is legally characterized as settling the futures contract (rather than collateralizing it), such that each day the futures contract has no or nominal value. As a consequence, the change in the fair value of the derivative is recognized through cash rather than an adjustment to the derivative carrying amount as was the case in the preceding example, where the derivative is not settled until its maturity. Refer to the January 4, 2017 confirmation letter issued by the International Swaps and Derivatives Association (ISDA) Accounting Policy Committee to the Office of the Chief Accountant of the SEC and the related ISDA whitepaper and follow-up submissions for additional information.

Example 2.5.6: Accounting for a derivative instrument's gain or loss in a cash flow hedge—effectiveness based on changes in intrinsic value (from ASC 815-30-55-63 to 55-66)

This Example illustrates application of the accounting guidance for cash flow hedges described in paragraph 815-30-35-3. At the beginning of Period 1, Entity XYZ purchases for \$9.25 an at-themoney call option on 1 unit of Commodity X with a strike price of \$125.00 to hedge a forecasted purchase of 1 unit of that commodity projected to occur early in Period 5. Entity XYZ's documented policy is to assess hedge effectiveness by comparing changes in expected cash flows on the hedged transaction (based on changes in the Commodity X spot price) with changes in the option contract's intrinsic value. Because the hedging instrument is a purchased call option, its intrinsic value cannot be less than zero. If the price of the commodity is less than the option's strike price, the option is out-of-the-money. Its intrinsic value cannot decrease further regardless of how far the commodity price falls, and the intrinsic value will not increase until the commodity price increases to exceed the strike price. Thus, changes in cash flows from the option due to changes in its intrinsic value will offset changes in cash flows on the forecasted purchase only when the option is in the money or at the money. That phenomenon is demonstrated in Period 3 in the following table when the commodity price declines by \$1.25. Because the commodity price is \$.75 below the option's strike price, the option's intrinsic value declines by only \$.50 (to zero). The effect reverses in Period 4 when the commodity index price increases by \$6.50 and the option's intrinsic value increases by \$5.75. For simplicity, commissions and most other transaction costs, initial margin, and income taxes are ignored unless otherwise stated. Assume that there are no changes in creditworthiness that would alter the effectiveness of the hedging relationship.

	Period 1	Period 2	Period 3	Period 4
Assumptions				
Ending market price of Commodity X	\$127.25	\$125.50	\$124.25	\$130.75
Ending fair value of option:				
Time value	\$7.50	\$5.50	\$3.00	\$ -
Intrinsic value	2.25	0.50	-	5.75
Total	\$9.75	\$6.00	\$3.00	\$5.75
Change in time value	(\$1.75)	(\$2.00)	(\$2.50)	(\$3.00)
Change in intrinsic value	2.25	(1.75)	(0.50)	5.75
Total current-period gain (loss) on derivative	\$0.50	(\$3.75)	(\$3.00)	\$2.75

	Period 1	Period 2	Period 3	Period 4
Gain (loss) on derivative, adjusted to remove the component excluded from the effectiveness test:				
For the current period	\$2.25	(\$1.75)	(\$0.50)	\$5.75
Cumulative	2.25	0.50	-	5.75
Change in expected future cash flows on hedged transaction:				
For the current period	(2.25)	1.75	1.25	(6.50)
Cumulative	(2.25)	(0.50)	0.75	(5.75)

The following are the entries required to account for the cash flow hedge. Note that consistent with paragraph 815-20-35-1(c), the change in fair value of the hedging instrument that is included in the assessment of hedge effectiveness is recorded in other comprehensive income for qualifying hedging relationships. For this type of hedging relationship, Entity XYZ elects to record changes in the option's time value excluded from the assessment of hedge effectiveness currently in earnings in accordance with paragraph 815-20-25-83B. Amounts recorded in earnings should be presented in the same income statement line item as the earnings effect of the hedged item in accordance with paragraph 815-20-45-1A:

		Debit (Credit)		
Period	Description	Derivative	Earnings	Other Comprehensive Income
1	Adjust derivative to fair value and other comprehensive income by the calculated amount	\$0.50	\$1.75	(\$2.25)
2	Adjust derivative to fair value and other comprehensive income by the calculated amount	(3.75)	2.00	1.75
3	Adjust derivative to fair value and other comprehensive income by the calculated amount	(3.00)	2.50	0.50
4	Adjust derivative to fair value and other comprehensive income by the calculated amount	2.75	3.00	(5.75)

The amount reflected in earnings relates to the component excluded from the effectiveness test, that is, the time value component. The change in cash flows from the hedged transaction was not fully offset in Period 3. However, as described in paragraph 815-20-25-76, a purchased call option is considered effective if it provides one-sided offset.

Example 2.5.7: Assessing effectiveness of a cash flow hedge of a forecasted purchase of inventory with a forward contract (contractually specified component) (from ASC 815-30-55-134 to 55-141)

This Example illustrates the application of the guidance in Subtopic 815-20 and this Subtopic for assessing effectiveness for a cash flow hedge of a forecasted purchase of inventory with a forward contract for which the hedged risk is variability in cash flows attributable to changes in a contractually specified component. Assume the entity elects to perform subsequent assessments of

hedge effectiveness on a quantitative basis using a cumulative-dollar-offset approach and all hedge documentation requirements were satisfied at inception.

Entity J manufactures keys for door locks on buildings and cars. The keys are cut from sheets of metal called key plates. Entity J primarily purchases its key plates from Supplier 1 as needed. Supplier 1 and Entity J have an outstanding agreement specifying that the per-unit cost of each key plate will be determined by Supplier 1 on the first business day of each month on the basis of the following pricing formula:

- Spot price of COMEX Zinc per pound x 0.2 pounds, plus
- Spot price of COMEX Copper per pound x 0.1 pounds, plus
- The current cost of refining copper and zinc into key plates, plus
- The current cost of transporting the key plates to Entity J.

In January 20X1, Entity J expects to purchase 100,000 key plates in July 20X1, which requires 10,000 pounds of copper for the manufacturing process. Entity J decides that it wishes to hedge only the change in value of the price of COMEX Copper used to create the key plates being purchased in July 20X1.

On January 15, 20X1, Entity J enters into a forward contract maturing on July 1, 20X1 (that is, the date on which the price of copper used to manufacture the key plates is fixed) to purchase 10,000 pounds of COMEX Copper at \$2.10 per pound. Any settlement amount on the forward contract will be based on the difference between the contract price of \$2.10 per pound and the spot price of COMEX Copper on the maturity date (July 1, 20X1), multiplied by the notional amount of 10,000 pounds.

Entity J designates a cash flow hedge in which the hedging instrument is the forward contract, the hedged item is the forecasted purchase of key plates in July 20X1, and the hedged risk is the variability in the purchase price of the key plates attributable to changes in the COMEX Copper price index, which is a contractually specified component within the frame agreement. Entity J documents in its hedge documentation that the requirements to designate variability in cash flows attributable to changes in a contractually specified component as the hedged risk in paragraph 815-20-25-22A are met.

Entity J bases its assessment of hedge effectiveness on cumulative changes in the fair value of the hedging instrument and the hedged item attributable to changes in the hedged risk.

In assessing hedge effectiveness on an ongoing basis, Entity J must consider the extent of offset between the change in expected cash flows on the hedging instrument (the copper forward contract) and the hedged item attributable to changes in the hedged risk (change in expected cash flows associated with forecasted purchases of key plates attributable to changes in the COMEX Copper price index). The table below illustrates the cumulative changes in the hedging instrument and hedged item attributable to changes in the hedged risk as of the first subsequent quarterly effectiveness assessment date.

	Estimate of Change in Cash Flows	
	Hedging Instrument	Hedged Item Due to Fluctuation in Hedged Risk
Forward price of copper (dollars per pound)		
At hedge inception (Jan 15, 20X1)	\$2.10	\$2.10
At first subsequent assessment date (March 31, 20X1)	\$2.25	\$2.25
Change in forward price of copper	\$0.15	\$0.15
Cumulative change in copper (per pound) × 10,000 pounds of copper	\$1,500.00	\$1,500.00

Entity J could assess effectiveness as of March 31, 20X1, by comparing the \$1,500 change in the hedging instrument with the \$1,500 change in the hedged item attributable to changes in the hedged risk because the hedging instrument's maturity date and the date on which the price of copper will be fixed match (that is, July 1, 20X1).

Example 2.5.8: Designation of a cash flow hedge of a forecasted purchase of inventory for which commodity exposure is managed centrally (from ASC 815-30-55-142 to 55-148)

This Example illustrates the application of the guidance in Subtopic 815-20 and this Subtopic to the designation of a cash flow hedge of a forecasted purchase of inventory in which the commodity exposure is managed centrally at the aggregate level. Assume the entity elects to perform subsequent assessments of hedge effectiveness on a qualitative basis and all hedge documentation requirements were satisfied at inception.

Entity Q is seeking to hedge the variability in cash flows associated with commodity price risk of its monthly plastic purchases for the next 12 months. It has two different manufacturing plant locations (Plant A and Plant B) that are purchasing five different grades of plastic from Supplier A. The plastic purchase price for each month is based on the month-end Joint Plastic (JP) index and a fixed basis differential component. The fixed basis differential offered by the supplier is determined by:

- a. The grade of the plastic purchased
- b. The distance between the plant location and supplier location.

At January 1, 20X1, Entity Q enters into a supply agreement with Supplier A to purchase plastic over the next 12 months. The respective agreements allow Entity Q to purchase the various grades of plastic at both of its plant locations as the need arises over the following year. The following table summarizes the pricing provisions contained in the supply agreement for each grade of plastic.

	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5
Plant A	JP + \$0.14	JP + \$0.11	JP + \$0.09	JP + \$0.05	JP - \$0.02
Plant B	JP + \$0.16	JP + \$0.12	JP + \$0.07	JP + \$0.06	JP - \$0.03

Entity Q's risk management objective is to hedge the variability in the purchase price of plastic attributable to changes in the JP index of the first 80,000 pounds of plastic purchased in each month regardless of grade or plant location delivered to. To accomplish this objective, Entity Q executes 12 separate forward contracts at January 1, 20X1, to purchase plastic as follows.

	Settlement Date	Notional Amount	Underlying Index
Jan forward	January 30, 20X1	80,000 (lbs)	JP
Feb forward	February 28, 20X1	80,000 (lbs)	JP
Mar forward	March 30, 20X1	80,000 (lbs)	JP
April forward	April 30, 20X1	80,000 (lbs)	JP
May forward	May 30, 20X1	80,000 (lbs)	JP
June forward	June 30, 20X1	80,000 (lbs)	JP
July forward	July 30, 20X1	80,000 (lbs)	JP
Aug forward	August 30, 20X1	80,000 (lbs)	JP
Sep forward	September 30, 20X1	80,000 (lbs)	JP
Oct forward	October 30, 20X1	80,000 (lbs)	JP
Nov forward	November 30, 20X1	80,000 (lbs)	JP
Dec forward	December 30, 20X1	80,000 (lbs)	JP

Entity Q determines that the variable JP index referenced in the supply agreement constitutes a contractually specified component and that the requirements to designate variability in the cash flows attributable to changes in a contractually specified component as the hedged risk in paragraph 815-20-25-22A are met.

Because Entity Q determined that it will purchase at least 80,000 pounds of plastic each month in the coming 12 months to fulfill its expected manufacturing requirements, it documents that the hedged item (that is, the forecasted transaction within each month) is probable of occurring. Entity Q designates each forward contract as a cash flow hedge of the variability in cash flows attributable to changes in the contractually specified JP index on the first 80,000 pounds of plastic purchased (regardless of grade or plant location delivered to) for the appropriate month. The individual purchases of differing grades of plastic by Plant A and Plant B during each month share the risk exposure to the variability in the purchase price of the plastic attributable to changes in the contractually specified JP index. Therefore, the individual transactions in the hedged portfolio of plastic purchases for each month share the same risk exposure for which they are designated as being hedged in accordance with paragraph 815-20-25-15(a)(2).

In accordance with paragraph 815-20-25-3(b)(2)(iv)(01)(B), if Entity Q has determined the critical terms of the hedged item and hedging instrument match, it may elect to assess effectiveness qualitatively both at inception of the hedging relationship and on an ongoing basis on the basis of the following factors in accordance with paragraphs 815-20-25-84 through 25-85:

- a. The hedging instrument's underlying matches the index upon which plastic purchases will be determined (that is, the JP Index).
- b. The notional of the hedging instrument matches the forecasted quantity designated as the hedged item.
- c. The date on which the derivatives mature matches the timing in which the forecasted purchases are expected to be made. That is, the quantity of the hedged item, 80,000 pounds, is an aggregate amount expected to be purchased over the course of the respective month (that is, the same 31- day period) in which the derivative matures.
- d. Each hedging instrument was traded with at-market terms (that is, it has an initial fair value of zero).
- e. Assessment of effectiveness will be performed on the basis of the total change in the fair value of the hedging instrument.
- f. Although the amount of plastic being hedged each period is a cumulative amount across multiple grades of plastic, the basis differentials between grades of plastic and location are not required to be included in assessments of effectiveness because Entity Q has designated the variability in cash flows attributable to changes in the JP index (the contractually specified component) as the hedged risk within its purchases of plastics.

Example 2.5.9: Firm commitment as hedged item in relation to long-term supply contracts with embedded price caps or floors (from ASC 815-20-55-84 to 55-87)

This Example illustrates the application of paragraph 815-20-25-12 and the definition of firm commitment in relation to long-term supply contracts with embedded price caps or floors.

Entity A enters into a long-term supply contract with a customer to sell a specified amount of a certain material. The selling price is the current monthly average list price for the quantity delivered each month but not to exceed \$15 per pound. The current list price at the contract signing date is \$12 per pound. The contract can be settled only by physical delivery. The contract also includes a penalty provision that is sufficiently large to make performance probable. The customer is not required to make an up-front cash payment for the written option (that is, the price cap) in the supply

contract. Consequently, the supply contract is neither a recognized asset nor a recognized liability at inception.

The supply contract in its entirety does not meet the definition of a derivative instrument due to the absence of a net settlement characteristic—that is, the contract does not permit or require net settlement (see guidance beginning in paragraph 815-10-15-100), there is no market mechanism (see guidance beginning in paragraph 815-10-15-110), and it does not require delivery of an asset that is readily convertible to cash (see guidance beginning in paragraph 815-10-15-119). Pursuant to the guidance in paragraph 815-15-25-19, the embedded cap on the selling price is an option that does not warrant separate accounting under Subtopic 815-15 because it is clearly and closely related to the host supply contract. In addition, because the supply contract is not remeasured with changes in fair value reported currently in earnings, it meets the criteria in paragraph 815-20-25-43(c)(3) to qualify as a hedged item in a fair value hedge.

Entity A wishes to enter into a transaction to hedge the risk of changes in the fair value of the embedded written price cap in the supply contract. Accordingly, it purchases a cash-settled call option with a strike price of \$15 per pound and a notional amount equal to the quantity specified in the supply contract. In accordance with the guidance in paragraph 815-20-25-12, a supply contract for which the contract price is fixed only under certain circumstances (such as when market prices are above an embedded price cap) meets the definition of a firm commitment for purposes of designating the hedged item in a fair value hedge. Therefore, if the selling price in a supply contract is subject to a cap, a floor, or both, either party to the contract is eligible to apply fair value hedge accounting in a hedging relationship to hedge the fair value exposure of the cap or floor. For the range of monthly average list prices above \$15 per pound, the contract has a fixed \$15 per pound price. Thus, Entity A may designate the written cap embedded in the supply contract as the hedged item in a fair value hedging relationship provided the other criteria for a fair value hedge are met. The embedded written cap in this Example is a specific portion of the contract that is subject to the risk of changes in fair value due to changes in the list price of the underlying materials. Because it is not accounted for separately from the supply contract, the embedded written cap may be designated as the hedged item in a fair value hedge. Paragraph 815-20-25-12 allows a nonbifurcated call option that is embedded in a supply contract to be the hedged item in a fair value hedge regardless of whether that supply contract is a recognized asset or liability or an unrecognized firm commitment.

Example 2.5.10: Fair value hedge of natural gas inventory with futures contracts (from ASC 815-25-55-1 to 55-7)

This Example illustrates the guidance in Sections 815-20-25, 815-20-35, and 815-25-35 for how an entity may assess hedge effectiveness in a fair value hedge of natural gas inventory with futures contracts. Assume that the hedge satisfied all of the criteria for hedge accounting at inception.

Entity A has 20,000 million British thermal units of natural gas stored at its location in West Texas. To hedge the fair value exposure of the natural gas, Entity A sells the equivalent of 20,000 million British thermal units of natural gas futures contracts on a national mercantile exchange. The futures contracts prices are based on delivery of natural gas at the Henry Hub gas collection point in Louisiana.

The price of Entity A's natural gas inventory in West Texas and the price of the natural gas that is the underlying for the futures contracts it sold will differ as a result of regional factors (such as location, pipeline transmission costs, and supply and demand). Entity A therefore may not automatically assume that the hedge will be highly effective at achieving offsetting changes in fair value, and it cannot assess effectiveness by looking solely to the change in the price of natural gas delivered to the Henry Hub. 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.

Both at inception of the hedge and on an ongoing basis, Entity A might assess the hedge's expected effectiveness on a quantitative basis based on the extent of correlation in recent years for periods similar to the spot prices term of the futures contracts between the spot prices of natural gas in West Texas and at the Henry Hub. If those prices have been and are expected to continue to be highly correlated, Entity A might reasonably expect the changes in the fair value of the futures contracts attributable to changes in the spot price of natural gas at the Henry Hub to be highly effective in offsetting the changes in the fair value of its natural gas inventory. In assessing effectiveness during the term of the hedge, Entity A must take into account actual changes in spot prices in West Texas and at the Henry Hub. The period of time over which correlation of prices should be assessed would be based on management's judgment in the particular circumstance.

Entity A may not assume that the change in the spot price of natural gas located at Henry Hub, Louisiana, is the same as the change in fair value of its West Texas inventory. The physical hedged item is natural gas in West Texas, not natural gas at the Henry Hub. In identifying the price risk that is being hedged, Entity A also may not assume that its natural gas in West Texas has a Louisiana natural gas component. Use of a price for natural gas located somewhere other than West Texas to assess the effectiveness of a fair value hedge of natural gas in West Texas would be inconsistent with this Subtopic and could result in an assumption that a hedge was highly effective when it was not. If the price of natural gas in West Texas is not readily available, Entity A might use a price for natural gas located elsewhere as a base for estimating the price of natural gas in West Texas. However, that base price must be adjusted to reflect the effects of factors, such as location, transmission costs, and supply and demand, that would cause the price of natural gas in West Texas to differ from the base price.

Consistent with Entity A's method of assessing whether the hedge is expected to be highly effective, the hedge would not be perfectly effective and there would be a net earnings effect to the extent that the actual change in the fair value of the futures contracts attributable to changes in the spot price of natural gas at the Henry Hub did not offset the actual change in the spot price of natural gas in West Texas per million British thermal units multiplied by 20,000.

That method excludes the change in the fair value of the futures contracts attributable to changes in the difference between the spot price and the forward price of natural gas at the Henry Hub in assessing effectiveness. The excluded amount would be recognized in earnings through an amortization approach in accordance with paragraph 815-20-25-83A or a mark-to-market approach in accordance with paragraph 815-20-25-83B and presented in the same income statement line item as the earnings effect of the hedged item in accordance with paragraph 815-20- 45-1A.

Example 2.5.11: Fair value hedge of tire inventory with a forward contract (from ASC 815-25-55-8 to 55-12)

This Example illustrates the guidance in Sections 815-20-25, 815-20-35, and 815-25-35 for how an entity may assess hedge effectiveness in a fair value hedge of tire inventory with a forward contract. Assume that the hedge satisfied all of the criteria for hedge accounting at inception.

Entity B manufactures tires. The production of those tires incorporates a variety of physical components, of which rubber and steel are the most significant, as well as labor and overhead. Entity B hedges its exposure to changes in the fair value of its inventory of 8,000 steel-belted radial tires by entering into a forward contract to sell rubber at a fixed price.

Entity B decides to perform subsequent hedge effectiveness assessments on a quantitative basis and bases its assessment on changes in the fair value of the forward contract attributable to changes in the spot price of rubber. To determine whether the forward contract is expected to be highly effective at offsetting the change in fair value of the tire inventory, Entity B could estimate and compare such changes in the fair value of the forward contract and changes in the fair value of the

tires (computed as the market price per tire multiplied by 8,000 tires) for different rubber and tire prices. Entity B also should consider the extent to which past changes in the spot prices of rubber and tires have been correlated. Because tires are a nonfinancial asset and rubber is only an ingredient in manufacturing them, Entity B may not assess hedge effectiveness by looking to the change in the fair value of only the rubber component of the steel-belted radial tires (see paragraph 815-20-25-12(e)). Both at inception of the hedge and during its term, Entity B must base its assessment of hedge effectiveness on changes in the market price of steel-belted radial tires and changes in the fair value of the forward contract attributable to changes in the spot price of rubber.

It is unlikely that this transaction would be highly effective in achieving offsetting changes in fair value. However, if Entity B concludes that the hedge will be highly effective and the hedge otherwise qualifies for hedge accounting, the hedge would have a net earnings effect to the extent that the actual changes in the following amounts did not offset:

- a. The fair value of the forward contract attributable to the change in the spot price of rubber
- b. The market price of steel-belted radials multiplied by the number of tires in inventory.

Because Entity B bases its assessment of effectiveness on changes in spot prices, the change in the fair value of the forward contract attributable to changes in the difference between the spot and forward price of rubber would be excluded from the assessment of effectiveness, recognized in earnings through an amortization approach in accordance with paragraph 815-20-25-83A or a mark-to-market approach in accordance with paragraph 815-20-25-83B, and presented in the same income statement line item as the earnings effect of the hedged item in accordance with paragraph 815-20-45-1A.

Example 2.5.12: Fair value hedge of growing wheat with futures contracts (from ASC 815-25-55-13 to 55-17)

This Example illustrates the guidance in Sections 815-20-25, 815-20-35, and 815-25-35 for how an entity may assess hedge effectiveness in a fair value hedge of growing wheat with futures contracts. Assume that the hedge satisfied all of the criteria for hedge accounting at inception.

Entity C has a tract of land on which it is growing wheat. Historically, Entity C has harvested at least 40,000 bushels of wheat from that tract of land. Two months before its expected harvest, Entity C sells 2-month futures contracts for 40,000 bushels of wheat, which it wants to designate as a fair value hedge of its growing wheat, rather than as a cash flow hedge of the projected sale of the wheat after harvest.

Even though the futures contracts are for the same type of wheat that Entity C expects to harvest in two months, the futures contracts and hedged wheat have different bases because the futures contracts are based on fully grown, harvested wheat, while the hedged item is unharvested wheat with two months left in its growing cycle. Entity C therefore may not automatically assume that the hedge will be highly effective in achieving offsetting changes in fair value.

To determine whether the futures contracts are expected to be highly effective in providing offsetting changes in fair value for the growing wheat, Entity C would need to estimate and compare the fair value of its growing wheat and of the futures contracts for different levels of wheat prices. Entity C may not base its estimate of the value of its growing wheat solely on the current price of wheat because that price is for grown, harvested wheat. Entity C might, however, use the current price of harvested wheat together with other relevant factors, such as additional production and harvesting costs and the physical condition of the growing wheat, to estimate the current fair value of its growing wheat crop.

It is unlikely that wheat futures contracts would be highly effective in offsetting the changes in value of growing wheat.

Example 2.5.13: Fair value hedge of a commodity inventory (from ASC 815-25-55-30 to 55-39)

The following Cases illustrate application of the guidance in Sections 815-20-25, 815-20-35, and 815-25-35 to a fair value hedge of a commodity inventory:

- a. The terms of the hedging derivative have been negotiated such that the hedging relationship is perfectly effective (Case A).
- b. The hedging relationship is not perfectly effective (Case B).

To simplify the illustration and focus on basic concepts, the derivative instrument in Cases A and B is assumed to have no time value. In practice, a derivative instrument used for a fair value hedge of a commodity would have a time value that would change over the term of the hedging relationship. The changes in that time value may be accounted for through an amortization approach in accordance with paragraph 815-20-25-83A or a mark-to-market approach in accordance with paragraph 815-20-25-83B. Under either of those approaches, the portion of excluded components recognized in earnings should be presented in the same income statement line item as the earnings effect of the hedged item in accordance with paragraph 815-20-45-1A.

Other Examples in this Section illustrate accounting for the time value component of a derivative instrument.

For simplicity, commissions and most other transaction costs, initial margin, and income taxes are ignored unless otherwise stated. Assume that there are no changes in creditworthiness that would alter the effectiveness of the hedging relationship.

Cases A and B share all of the following assumptions:

- a. Entity ABC decides to hedge the risk of changes during the period in the overall fair value of its entire inventory of Commodity A by entering into a derivative instrument, Derivative Z.
- b. On the first day of Period 1, Entity ABC enters into Derivative Z and neither receives nor pays a premium (that is, the fair value at inception is zero).
- c. Entity ABC designates the derivative instrument as a hedge of the changes in fair value of the inventory due to changes in the price of Commodity A during Period 1.
- d. The hedging relationship qualifies for fair value hedge accounting. Entity ABC will assess effectiveness on a quantitative basis both initially and subsequently by comparing the entire change in fair value of Derivative Z with the change in the market price of the hedged commodity inventory.

Case A: Perfect Effectiveness in the Hedging Relationship

In this Case, Entity ABC expects the hedge to be perfectly effective because both of the following conditions exist:

- a. The notional amount of Derivative Z matches the amount of the hedged inventory (that is, Derivative Z is based on the same number of bushels as the number of bushels of the commodity that Entity ABC designated as hedged).
- b. The underlying of Derivative Z is the price of the same variety and grade of Commodity A as the inventory at the same location.

At inception of the hedge, Derivative Z has a fair value of zero and the hedged inventory has a carrying amount of \$1,000,000 and a fair value of \$1,100,000. On the last day of Period 1, the fair value of Derivative Z has increased by \$25,000, and the fair value of the inventory has decreased by \$25,000. The inventory is sold, and Derivative Z is settled on the last day of Period 1. The following table illustrates the accounting for the situation described in this Case.

	Debit (Credit)			
Period 1	Cash	Derivative	Inventory	Earnings ^(a)
Recognize change in fair value of derivative		\$25,000		(\$25,000)
Recognize change in fair value of inventory			(\$25,000)	25,000
Recognize revenue from sale	\$1,075,000			(1,075,000)
Recognize cost of sale of inventory			(975,000)	975,000
Recognize settlement of derivative	25,000	(25,000)		
Total	\$1,100,000	\$ -	(\$1,000,000)	(\$100,000)

⁽a) For presentation purposes, the change in the fair value of the hedging instrument is in the same income statement line item as the hedged item.

If Entity ABC had sold the hedged inventory at the inception of the hedge, its gross profit on that sale would have been \$100,000. This Case illustrates that, by hedging the risk of changes in the overall fair value of its inventory, Entity ABC recognized the same gross profit at the end of the hedge period even though the fair value of its inventory decreased by \$25,000.

Case B: Hedging Relationship Is Not Perfectly Effective

The hedge in Case A was perfectly effective because the gain on Derivative Z exactly offsets the loss on the inventory. However, in this Case, assume the terms of Derivative Z do not perfectly match the inventory and its fair value has increased by \$22,500 as compared with the decline in fair value of the inventory of \$25,000. The mismatch of \$2,500 has to be recognized in earnings and presented in the same income statement line item as the earnings effect of the hedged item. The following table illustrates the accounting for the situation described in this Case.

	Debit (Credit)			
Period 1	Cash	Derivative	Inventory	Earnings (a)
Recognize change in fair value of derivative		\$22,500		(\$22,500)
Recognize change in fair value of inventory			(\$25,000)	25,000
Recognize revenue from sale	\$1,075,000			(1,075,000)
Recognize cost of sale of inventory			(975,000)	975,000
Recognize settlement of derivative	22,500	(22,500)		
Total	\$1,097,500	\$ -	(\$1,000,000)	(\$97,500)

⁽a) For presentation purposes, the change in the fair value of the hedging instrument is in the same income statement line item as the hedged item.

The difference between the effect on earnings in Case B and the effect on earnings in Case A is \$2,500.

Chapter 3: Hedges related to interest rate risk

3.1 Overview

Hedges of interest rate risk are quite common and typically arise from a desire to convert a variable-rate debt instrument to a fixed rate or convert a fixed-rate debt instrument to a variable rate using an interest rate swap. Some entities with variable-rate debt instruments choose to limit their exposure to changing interest rates by purchasing an interest rate cap or floor rather than using an interest rate swap to obtain a fixed rate.

The level of effort to comply with the requirements of hedge accounting and demonstrate that a hedge is highly effective can vary depending on the manner in which a hedge is structured, as well as how it is defined and documented to meet the hedge accounting requirements. For example, a cash flow hedge of changes in cash flows attributable to a contractually specified interest rate can typically be structured in a manner such that perfect effectiveness can be assumed, and as such, is the strategy most commonly employed in practice. This strategy, along with a fair value hedge of changes in fair value attributable to a benchmark interest rate, constitute hedges of interest rate risk. While ASU 2017-12 brought about various improvements to simplify fair value hedges of interest rate risk, such a hedge will not be perfectly effective unless it meets the requirements for, and the entity elects, the shortcut method described at Section 1.2.4.1.4.

It is also permissible to hedge other components of risk associated with debt instruments, such as credit risk, as well as to hedge all changes in cash flows or fair values; however, hedges that extend beyond interest rate risk can be challenging to implement and are not commonly employed in practice. If, for example, an interest rate swap or cap was used to hedge total cash flows on a variable-rate debt instrument, the hedge relationship may not be highly effective given that other factors, such as a change in the margin paid on the variable-rate index to arrive at the rate of interest on the debt instrument, would cause variability in the cash flows of the debt instrument that would not be mirrored with an interest rate swap or cap. Similarly, when hedging a portfolio of variable-rate assets, changes or differences in the composition of the portfolio, such as the prepayment of old receivables and the origination of new receivables with different credit spreads, could cause the overall hedged portfolio cash flows to change in a manner disproportionate to the change in the cash flows on the derivative.

This chapter, therefore, focuses on hedges of interest rate risk.

Cash flow hedge of a contractually specified interest rate

Fair value hedge of benchmark interest rate

Cash flow or fair value hedge of total changes in cash flows or fair value

Degree of difficulty, from less to more

3.2 Hedges of interest rate risk

Spotlight on hedges involving LIBOR or another rate expected to be discontinued

As discussed in more detail in Section 1.3, reference rate reform will result in the elimination of LIBOR, and may result in the elimination of other interbank offered rates as well. For hedging relationships that reference LIBOR (or another reference rate expected to be eliminated), temporary optional expedients and exceptions are provided in ASC 848 related to the accounting for that hedging relationship. One or more of these temporary optional expedients and exceptions relates to the guidance in this section. For additional information about these temporary optional expedients and exceptions refer to our white paper, Optional accounting expedients can make LIBOR transition easier.

The term interest rate risk has different meanings, depending on the context in which it is used. This is elaborated on in the chart that follows. The first two contexts are cash flow hedges and the last one is a fair value hedge.

Context	Meaning
Recognized variable-rate financial instruments and forecasted issuances or purchases of variable-rate financial instruments	The risk of changes in the hedged item's cash flows attributable to changes in the contractually specified interest rate in the agreement
Forecasted issuances or purchases of fixed-rate financial instruments	The risk of changes in the hedged item's cash flows attributable to changes in the designated benchmark interest rate
Recognized fixed-rate financial instruments	The risk of changes in the hedged item's fair value attributable to changes in the designated benchmark interest rate

Benchmark interest rates are defined by financial markets and represent the most widely used and quoted rates. The following are the rates designated by the FASB as benchmark rates for the United States.

- Interest rates on direct Treasury obligations of the U.S. government
- The London Interbank Offered Rate (LIBOR) swap rate
- Fed Funds Effective Swap Rate (also referred to as the Overnight Index Swap [OIS] Rate)
- Securities Industry and Financial Markets Association (SIFMA) Municipal Swap Rate
- Secured Overnight Financing Rate (SOFR) OIS Rate¹⁵

The ability to hedge changes in cash flows attributable to a contractually specified interest rate was introduced with the issuance of ASU 2017-12 and replaces the concept of hedging changes in cash flows attributable to changes in a benchmark rate. As a consequence of this change, it is possible to hedge interest rate risk associated with variable-rate debt regardless of whether the variable rate is a benchmark rate. The main advantage to hedging interest rate risk either through a cash flow hedge of a contractually specified interest rate or a fair value hedge of a benchmark interest rate is that other factors, such as changes in credit risk that can impact the cash flows or fair value associated with the hedged item, can be ignored. Under pre-existing guidance, if the variable rate in a variable-rate debt instrument is not one of

¹⁵ The SOFR OIS rate was added as a benchmark rate with the issuance of ASU 2018-16, which is effective upon the adoption of ASU 2017-12, for entities that have not yet adopted ASU 2017-12. For those that have adopted ASU 2017-12, ASU 2018-16 is effective for public business entities and for all other entities in fiscal years beginning after December 15, 2018 and 2019, respectively, with early adoption permitted if ASU 2017-12 has been early adopted.

the previously mentioned rates that are designated as a benchmark rate in the U.S., the hedging relationship needs to encompass changes in cash flows related to changes in all factors (including credit risk) rather than just changes due to changes in interest rates, which is the only factor most derivatives address. This created significant complexity in hedging portfolios of loans that are not based on a benchmark rate, such as a portfolio of prime or SIFMA based loans. Any changes in the composition of the portfolio (e.g., the prepayment of old receivables and the origination of new receivables with different credit spreads) could cause the overall hedged portfolio cash flows to change in a manner disproportionate to the change in the cash flows on the derivative designated as the hedging instrument. This could cause the hedging relationship to not be highly effective. ASU 2017-12 remedied this by permitting hedging changes in cash flows attributable to a contractually specified interest rate, which will be beneficial to entities that want to hedge variable interest payments on debt or loans that are indexed to prime or other nonbenchmark rates.

In a hedge of interest rate risk, the benchmark or contractually specified interest rate that is being hedged should be specifically identified. Additionally, the contractually specified interest rate must be the contractual rate for the interest payments that are being hedged and cannot be an implied rate. This is illustrated at ASC 815-20-55-62A, whereby it is noted that an entity cannot issue variable-rate debt based on its own prime rate and designate the hedged risk as changes in cash flows of the Wall Street Journal prime rate. While the entity could hedge its own prime rate, given it is a contractually specified interest rate, because the cash flows of the derivative are based on a different index, this would impact the effectiveness of the hedge given the basis differences associated with the two different underlying rates.

ASC 815 outlines various methods that can be used to assess the effectiveness of a hedge involving interest rate risk using an interest rate swap as the hedging instrument. With the exception of the shortcut method that can be applied to both fair value and cash flow hedges if the relevant criteria are met, these methods apply only to cash flow hedges. Additionally, the use of the simplified hedge accounting approach is restricted to certain private companies. A high level overview of each method follows along with a reference to the section of this guide that contains a more comprehensive overview of the requirements.

- Simplified hedge accounting approach (Section 1.2.4.1.3): Private companies (other than financial
 institutions) who use a plain-vanilla interest rate swap to achieve a fixed rate of interest on a variablerate borrowing can assume the hedge is perfectly effective and account for the swap at settlement
 value rather than fair value if all criteria are met. Additionally, this method provides additional time for
 the relevant documentation to be in place.
- Shortcut method (Section 1.2.4.1.4): Permits the assumption of perfect effectiveness in a cash flow or fair value hedge of interest rate risk involving a recognized interest-bearing asset or liability (as well as certain firm commitments to purchase or issue a recognized asset or liability) and an interest rate swap (including one with a mirror-image call or put option) if all criteria are met.
- Change-in-variable-cash-flows method (Section 1.2.4.3.3.1): Outlines a quantitative approach that
 can be used to assess the effectiveness of a cash flow hedge of either interest rate risk or the risk of
 overall changes in hedged cash flows using an interest rate swap to hedge variable interest payments
 on existing or future variable-rate assets or liabilities. Permits the assumption of perfect effectiveness
 if all criteria are met. This method cannot be used if the fair value of the interest rate swap is not
 somewhat near zero at the inception of the hedge.
- Hypothetical-derivative method (Section 1.2.4.3.3.2): Outlines a quantitative approach that can be
 used to assess the effectiveness of a cash flow hedge of either interest rate risk or the risk of overall
 changes in hedged cash flows using an interest rate swap to hedge variable interest payments on
 existing or future variable-rate assets or liabilities. Permits the assumption of perfect effectiveness if
 certain criteria are met.

Change-in-fair-value method (Section 1.2.4.3.3.3): Outlines a quantitative approach that can be used
to assess the effectiveness of a cash flow hedge of either interest rate risk or the risk of overall
changes in hedged cash flows using an interest rate swap to hedge variable interest payments on
existing or future variable-rate assets or liabilities.

3.2.1 Cash flow hedges of interest rate risk (contractually specified interest rate)

Cash flow hedges of interest rate risk commonly take forms such as the following:

- Use of an interest rate swap to effectively fix the interest rate associated with the forecasted interest payments on an existing variable-rate debt instrument (refer to Example 3.3.3 for an overview of the accounting).
- Use of an interest rate swap to effectively fix the interest rate on forecasted interest payments associated with a *to be issued* debt instrument. For example, if an entity intends to issue variable-rate debt in 6 months that will have a 5-year term, the future interest payments associated with the debt will be subject to variability due to changes in interest rates throughout the 5-year term of the debt. Conversely, if the entity intends to issue fixed-rate debt in six months, the future interest payments associated with the debt will be subject to variability due to changes in interest rates only until the interest rate is fixed (e.g., when the debt is issued).
- Use of an interest rate cap, floor or collar to ensure that the interest rate on a variable-rate instrument does not go above (cap) or below (floor) a predefined rate, or stays within a predefined range (collar).

When hedging interest payments on variable-rate debt, there is no requirement that the interest payments relate to a specific debt obligation. Given that an entity's sources of debt, and for lending institutions, loan portfolios, are often subject to change due to events such as refinancings, pay downs or new borrowings, it is typically beneficial to designate the hedged transactions more generically as discussed at Section 1.2.1. As noted at ASC 815-20-55-109, it is permissible to replace one source of variable-rate payments with another without terminating the existing hedge relationship as long as the hedge remains highly effective.

3.2.1.1 Hedging forecasted issuances of debt

Spotlight on hedges involving LIBOR or another rate expected to be discontinued

As discussed in more detail in Section 1.3, reference rate reform will result in the elimination of LIBOR, and may result in the elimination of other interbank offered rates as well. For hedging relationships that reference LIBOR (or another reference rate expected to be eliminated), temporary optional expedients and exceptions are provided in ASC 848 related to the accounting for that hedging relationship. One or more of these temporary optional expedients and exceptions relates to the guidance in this section. For additional information about these temporary optional expedients and exceptions refer to our white paper, Optional accounting expedients can make LIBOR transition easier.

As previously mentioned, cash flow hedging strategies can extend to a forecasted issuance of debt. Several of the cash flow hedge examples in Section 3.3 illustrate such hedges. If an entity anticipates issuing or purchasing a fixed-rate debt instrument and wants to hedge only interest rate risk, the hedged risk should be designated as variability in cash flows attributable to changes in the benchmark interest rate. Conversely, if an entity anticipates issuing or purchasing a variable-rate debt instrument and wants to hedge only interest rate risk, the hedged risk would be designated as the variability in cash flows attributable to changes in the anticipated contractually specified interest rate.

ASC 815-20-25-19B addresses what to do if an entity is unsure whether the forecasted debt that will be issued or purchased will have a fixed or variable rate. Namely, the hedged risk should be designated as the variability in cash flows attributable to changes in a stated rate that would qualify both as a benchmark

interest rate if the instrument ultimately has a fixed rate and as a contractually specified interest rate if the instrument ultimately has a variable rate.

Example 3.2.1: Designating the hedged risk associated with the forecasted issuance of debt

In June, an entity decides it will enter into a \$10 million debt instrument in six months (December) that is expected to have a 5-year term. The entity has not yet decided whether it will issue fixed or variable-rate debt, but anticipates that in the event variable-rate debt is issued, it will be indexed to LIBOR. The entity would like to hedge its interest rate risk and therefore enters into a \$10 million notional amount, pay fixed, receive LIBOR interest rate swap in June that has a 5-year term that begins in December, to mirror the debt. The entity designates the variability of the LIBOR rate as the hedged risk given that LIBOR will qualify as a contractually stated rate if the variable-rate debt is issued as anticipated and will also qualify as a benchmark rate if fixed-rate debt is issued. Assuming that in June and throughout the life of the swap, the entity meets all the requirements to elect and apply hedge accounting, the interest rate swap would be recorded on the balance sheet at its fair value, from its June inception date, with changes in fair value recorded in other comprehensive income.

Variable-rate debt scenario:

In December, the entity enters into a \$10 million variable-rate debt instrument indexed to LIBOR and effectively recognizes interest expense over the term of the debt and swap at a fixed rate given that amounts in other comprehensive income are reclassified into interest expense in accordance with ASC 815-30-35-38 as illustrated in Example 3.3.3 of this guide.

Fixed-rate debt scenario:

In December, the entity enters into a \$10 million fixed-rate debt instrument. At that point in time, the swap is terminated, given that the entity is no longer exposed to interest rate risk. The carrying amount of the swap is adjusted to its settlement amount through other comprehensive income, with the carrying amount generally extinguished through a cash payment to or from the counterparty. Given that, with the issuance of the debt, the hedged interest payments remain probable, the amounts in other comprehensive income are reclassified into interest expense in accordance with ASC 815-30-35-38.

3.2.1.2 Hedged exposure is limited, but derivative is not

It is becoming more common for debt instruments to have a floor such that the variable rate on the debt cannot go below zero. If the interest rate swap that an entity enters into as a hedge of the interest rate risk associated with the debt does not have a mirror-image floor, the exposure to changes in cash flows is limited on the debt, but not the swap. Similarly, some entities seek to hedge callable debt with a swap that does not have a mirror-image call feature, in which case, the debt's exposure is limited in a way that the swap is not. As the examples that begin at ASC 815-20-55-195 demonstrate, in circumstances such as these, consideration needs to be given to whether the derivative instrument can be expected to be highly effective in light of any option that is embedded in the debt, but not mirrored in the derivative instrument. Perfect effectiveness could not be assumed in these circumstances; however, the hedge relationship could meet the requirements for an expectation of high effectiveness if the option is expected to be out of the money, with consideration given to a probability-weighted analysis of the range of possible changes in interest rates.

3.2.1.3 First-payments-received technique in hedging variable interest payments on a group of loans

When hedging interest-bearing assets such as loans, it is typically advantageous to hedge the interest payments associated with a similar portfolio of loans rather than the interest payments specific to one or a limited number of loans. For example, ASC 815-20-55-33A outlines a first-payments-received technique

whereby the hedged forecasted transactions in a cash flow hedge are identified as the first interest payments based on the contractually specified interest rate received by an entity during each recurring period covered by the hedging instrument. This is further illustrated through Example 3.3.1 of this guide.

3.2.2 Fair value hedges of interest rate risk

Spotlight on hedges involving LIBOR or another rate expected to be discontinued

As discussed in more detail in Section 1.3, reference rate reform will result in the elimination of LIBOR, and may result in the elimination of other interbank offered rates as well. For hedging relationships that reference LIBOR (or another reference rate expected to be eliminated), temporary optional expedients and exceptions are provided in ASC 848 related to the accounting for that hedging relationship. One or more of these temporary optional expedients and exceptions relates to the guidance in this section. For additional information about these temporary optional expedients and exceptions refer to our white paper, Optional accounting expedients can make LIBOR transition easier.

Fair value hedges of interest rate risk are most common in the financial institution industry. Lending customers often desire a fixed-rate loan; however, an institution may be unwilling to lock itself into a fixed rate for a long period of time in light of the fact that loans are often funded with short-term deposits that are variable rate in nature. Consequently, a financial institution may decide to honor customers' requests for fixed-rate loans and concurrently enter into an interest rate swap to convert the fixed rate to a variable rate. Such a hedge relationship can be structured with a separate swap for each loan the institution desires to hedge or using one interest rate swap to hedge a portfolio of loans. When hedging a portfolio of loans, the individual assets or liabilities within the portfolio need to share the risk exposure for which they are designated as being hedged as is more fully elaborated on at Section 1.2.2.1.

In the context of a fair value hedge of a fixed-rate debt instrument, the following are eligible to be designated as the risk being hedged:

- Changes in the overall fair value of the entire instrument
- Changes in its fair value attributable to changes in the designated benchmark interest rate (referred to as interest rate risk)
- Changes in its fair value attributable to credit risk
- Both interest rate risk and credit risk

Most commonly, entities elect to hedge solely interest rate risk as that can be accomplished with a straight-forward interest rate swap. Example 3.3.10 illustrates the accounting for such a fair value hedge.

As indicated at Appendix A, ASU 2017-12 brought about various improvements relevant to fair value hedges of interest rate risk, including permitting the following:

- The change in fair value of the hedged item to be measured on the basis of the benchmark rate component rather than on the basis of full contractual coupon cash flows as illustrated in part through Examples 3.3.11, 3.3.13 and 3.3.14 of this guide. (Limiting the measurement of the change in the fair value of the hedged item to the benchmark rate component should improve the effectiveness of a hedge by excluding credit factors that would impact the spread between the benchmark rate and full contractual coupon cash flows.)
- The hedged item in a partial-term hedge to be measured for changes in fair value attributable to interest rate risk by assuming it has a term that reflects only the designated cash flows being hedged as illustrated in part through Example 3.3.13 of this guide. While preexisting guidance permitted hedging select cash flows during a selected portion of the term of a debt instrument as the hedged item in a fair value hedge, it was challenging to establish an effective hedge relationship given that

the principal repayment of the debt would occur subsequent to the maturity date of the hedging instrument. Hence, with the issuance of ASU 2017-12, the FASB decided to permit an assumption that the maturity of the hedged item occurs on the date in which the last hedged cash flow is due and payable. ASU 2019-04 also clarified that there can be multiple separately designated partial-term fair value hedging relationships of a single financial instrument outstanding at the same time, and the issuance of the hedged item is assumed to occur on the date the first hedged cash flow begins to accrue. It also permits measuring the change in fair value of the hedged item attributable to interest rate risk with this assumed term when the hedged item is designated in a hedge of both interest rate and foreign exchange risk. However, the change in carrying value of the hedged item attributable to foreign exchange risk should be measured based on changes in the foreign currency spot rate in accordance with ASC 815-25-35-18.

- The ability to consider only how changes in the benchmark interest rate affect a decision to settle a prepayable debt instrument before its scheduled maturity when calculating the change in the fair value of the hedged item (refer to Section 3.2.2.1 for additional information).
- Use of a *last-of-layer* designation method when hedging a closed portfolio of prepayable financial assets whereby the hedged item can be designated as an amount that is not expected to be affected by prepayments, defaults and other events that could impact cash flows (refer to Section 3.2.2.1.1 for additional information).

While these improvements have made it easier to establish a highly effective fair value hedge, absent qualifying for the shortcut method discussed at Section 1.2.4.1.4, a fair value hedge is unlikely to be perfectly effective for certain reasons that include the fact that the risk of nonperformance (i.e., counterparty creditworthiness) is considered when computing the change in the fair value of the derivative, but not considered when computing the change in fair value of the hedged item in a fair value hedge of interest rate risk.

3.2.2.1 Prepayable debt instruments

As it relates to the third bullet point in the preceding section, prior to the issuance of ASU 2017-12, ASC 815-20-25-6 was interpreted to mean that all factors that might lead an entity to settle a prepayable financial instrument before its scheduled maturity (e.g., changes in interest rates, credit spreads, other factors) need to be considered even if the entity was only hedging interest rate risk. This caused unnecessary complexity in determining how to quantify the impact of factors other than interest rates, which led to the decision to permit, with the issuance of ASU 2017-12, an entity to consider only how changes in the benchmark interest rate affect the likelihood of settlement before scheduled maturity. As pointed out at ASC 815-25-35-13A, the factors considered when assessing the effectiveness of a hedge should be consistent with the factors that are incorporated when adjusting the carrying amount of the hedged item. Therefore, if an election is made to consider only how changes in the benchmark interest rate affect the decision to prepay a debt instrument when assessing hedge effectiveness, only that factor should be considered when adjusting the carrying amount of the hedged item.

Subsequent to the issuance of ASU 2017-12, the FASB issued *Staff Interpretations of Update 2017-12 for Prepayable Financial Instruments* to clarify the meaning of prepayable in the context of the third and fourth bullet point in the preceding section. Prepayable is defined in the Master Glossary of the ASC as follows: "Able to be settled by either party before its scheduled maturity." The Staff Interpretations concluded that this definition should cover a broad scope of instruments. Specifically, the following types of instruments are considered prepayable. The right hand column provides insights for how changes in the fair value of the prepayment option would be measured when the prepayment option is designated as a hedged item.

Instruments that have noncontingent When measuring changes in the fair value of the hedged features that are currently exercisable and item attributable to interest rate risk, consideration should prepayable at any time (Examples noted only be given to how the effect of changes in benchmark include instruments with yield maintenance interest rates affect the decision to prepay. agreements and make-whole provisions, For instruments with make-whole provisions, because the which are designed to compensate an issuer is indifferent to exercising based on interest rates, investor for the loss of interest payments this type of feature does not affect the assessment of due to prepayment.) effectiveness or measurement of the change in fair value of the hedged item attributable to benchmark interest rates. Instruments that will become prepayable When measuring changes in fair value of the hedged item solely due to the passage of time if they attributable to interest rate risk, consideration should only are prepayable at some point during the be given to how the effect of changes in benchmark interest hedging relationship rates affect the decision to prepay. Instruments that will become prepayable When measuring changes in fair value of the hedged item upon the occurrence of a specified event attributable to interest rate risk, the contingent feature that could occur at any time (Specific should not be considered in the measurement of the examples of events noted include change hedged item during the contingent phase given that in control, change in tax law or death of the changes in benchmark interest rates do not affect the holder. Instruments with only contingent occurrence of these events. After the contingency is acceleration clauses based on credit are resolved, consideration should be given to the effect of the specifically excluded from the definition of prepayment feature in the measurement of the hedged item based only on how changes in benchmark interest rates prepayable.) affect the decision to prepay. Instruments with interest-rate-related When measuring changes in fair value of the hedged item contingencies (i.e., become prepayable attributable to interest rate risk, the hedged item should be upon movement in a specified interest measured with consideration given to: (a) fluctuations in rate) interest rates that cause the contingent event to occur and (b) the probability of exercise given the interest rate scenario (only considering the effect of the benchmark interest rate). If the contingency is linked to a rate that is not a benchmark rate, consideration does not need to be given to the effects of movements in the actual interest rate linked to the contingency if different from movements in the benchmark rate (for simplicity, it can be assumed that any spread between the benchmark interest rate and the actual interest rate that is linked to the contingency is fixed). Instruments with conversion features, as When measuring changes in fair value of convertible debt long as conversion is contractually attributable to interest rate risk, consideration should only permitted during the hedge period be given to how changes in benchmark interest rates affect the decision to prepay. In other words, while the decision to convert a specific security is typically based on equity prices, equity volatility and dividends, those factors should not be considered because they are not affected by

changes in benchmark interest rates.

3.2.2.1.1 Last-of-layer method. ASU 2017-12 introduced a *last-of-layer method* for designating the hedged item in a fair value hedge of a closed portfolio of prepayable financial assets (e.g., loans or debt securities) or one or more beneficial interests secured by a portfolio of prepayable financial instruments. (Refer to the discussion of what constitutes prepayable in the preceding section. Each asset in the closed portfolio needs to be prepayable during the term of the hedge.) This method is advantageous as it entails designating the hedged item as a stated amount of the beneficial interest or closed portfolio of assets that is not expected to be affected by prepayments, defaults and other factors that could affect the timing and amount of cash flows.

Example 3.2.2: Illustration of last-of-layer method

Bank A is hedging its interest rate risk associated with a closed portfolio of fixed-rate prepayable commercial loans that have an aggregate balance of \$400 million at hedge inception. The hedging instrument is a 3-year receive-variable, pay-fixed interest rate swap with a \$50 million notional amount. Bank A designates the hedged item as the last \$50 million of loan balances remaining in this closed portfolio and expects the relationship to be highly effective as long as, with consideration given to prepayments, defaults and other events impacting the amount and timing of cash flows, \$50 million of the portfolio is expected to be outstanding at the end of the 3-year hedge period.

Fair value hedges of a portfolio are challenging absent electing a *last-of-layer* method, given that consideration needs to be given to prepayment risk at an individual asset level because of the significant effect it has on the fair value of the assets. A last-of-layer designation needs to be made in conjunction with the partial-term hedging election. Additionally, if an election is made to use only the benchmark rate component of the contractual coupon cash flows when measuring the change in the fair value of the hedged item, all assets can be assumed to have the same maturity and the same benchmark rate coupon in a hedge of interest rate risk. (Refer to Section 3.2.2 for additional discussion of these elections.) Consequentially, the assessment to determine if the individual assets in the portfolio share the same risk exposure, as elaborated on in Section 1.2.2.1, can be performed qualitatively and only at hedge inception. (All assets in the portfolio for hedge accounting purposes are considered nonamortizing and nonprepayable with the same maturity and coupon, and therefore share the same risk exposure.)

In addition to the inception date documentation requirements outlined at Section 1.2.1, an entity that designates the hedged item under the last-of-layer method is required to perform and document at inception of the hedge, and at each subsequent effectiveness assessment date, an analysis to support the expectation that the hedged item (i.e., the last layer that is designated) will be outstanding during the term of the hedge. This analysis should consider expected prepayments, defaults and any other events that would affect the timing and amount of cash flows associated with the overall portfolio or beneficial interest. However, these factors are assumed to impact the undesignated portion of the beneficial interest or closed portfolio first, and ideally leave the designated *last layer* intact.

If at a subsequent testing date the entity can no longer support that the designated hedged item (last-of-layer) is anticipated to be outstanding during the term of the hedge, hedge accounting should minimally be discontinued for the portion of the hedged item that is no longer expected to be outstanding at the hedged item's assumed maturity date. As indicated at ASC 815-25-40-8, hedge accounting for the relationship in its entirety should be discontinued if the outstanding balance of the closed portfolio of prepayable financial assets or one or more beneficial interests is less than the amount designated as the

¹⁶ As part of the materials for its September 5, 2018 meeting, the FASB clarified that the reference to a closed portfolio does not preclude selling or transferring assets out of a last-of-layer portfolio designated as the hedged item, as long as the entity can support the expectation that the designated layer will be outstanding during the term of the hedge.

hedged item at the time of any subsequent testing dates. (As noted in paragraph BC118 of ASU 2017-12, a shortfall in the outstanding balance would indicate that the entity cannot appropriately forecast and should no longer be given the flexibility of partial dedesignations.) Refer to Section 5.3 for additional guidance on discontinuing fair value hedge accounting.

Spotlight on future standard setting

The FASB has a project on its agenda, Hedging—Last-of-Layer Method, which is expected to address issues related to accounting for basis adjustments associated with a portfolio of loans designated as the hedged item in a last-of-layer approach. (Refer to Section 5.2.1.1 for additional discussion.) As such, further guidance should be forthcoming. As part of this project, the FASB is also expected to address whether to permit multiple-layer hedging under the last-of-layer approach. For additional information about the status of this project, refer to the related FASB project update page.

3.3 Examples of cash flow and fair value hedges related to interest rate risk

The following select examples of cash flow and fair value hedges related to interest rate risk are from the implementation guidance in ASC 815.

Index of examples

Cash flow hedges

- 3.3.1 Variable interest payments on a group of variable-rate, interest-bearing loans as the hedged item
- 3.3.2 Application of the net written option test to collar-based hedging relationships
- 3.3.3 Cash flow hedge of variable-rate interest-bearing asset
- 3.3.4 Changes in a cash flow hedge of forecasted interest payments with an interest rate swap
- 3.3.5 Impact on accumulated other comprehensive income of issuing debt with a term that is shorter than originally forecasted
- 3.3.6 Effect on accumulated other comprehensive income from issuing debt at a date that is not the same as originally forecasted

Fair value hedges

- 3.3.7 Hedging a portfolio of fixed-rate financial assets
- 3.3.8 Fair value hedge of U.S. Treasury bond with put options
- 3.3.9 Fair value hedge of an embedded purchased option with a written option
- 3.3.10 Fair value hedge of fixed-rate interest-bearing debt
- 3.3.11 Fair value hedge of the LIBOR swap rate in a \$100,000 BBB-quality 5-year fixed-rate noncallable note
- 3.3.12 Interaction with loan impairment
- 3.3.13 Fair value hedge of interest rate risk using the partial-term approach
- 3.3.14 Fair value hedge of the LIBOR swap rate in a \$100 million A1-quality 5-year fixed-rate noncallable debt

Example 3.3.1: Variable interest payments on a group of variable-rate, interest-bearing loans as the hedged item (from ASC 815-20-55-88 to 55-99)

The following Cases illustrate the implications of two different approaches to designation of variable interest payments on a group of variable-rate, interest-bearing loans:

- a. Designation based on first payments received (Case A)
- b. Designation based on a specific group of individual loans (Case B).

For Cases A and B, assume Entity A and Entity B both make to their respective customers London Interbank Offered Rate- (LIBOR-) indexed variable- rate loans for which interest payments are due at the end of each calendar quarter, and the LIBOR-based interest rate resets at the end of each quarter for the interest payment that is due at the end of the following quarter. Both entities determine that they will each always have at least \$100 million of those LIBOR-indexed variable- rate loans outstanding throughout the next 3 years, even though the composition of those loans will likely change to some degree due to prepayments, loan sales, and potential defaults.

This Example does not address cash flow hedging relationships in which the hedged risk is the risk of overall changes in the hedged cash flows related to an asset or liability, as discussed in paragraph 815-20-25-15(j)(1).

Case A: Designation Based on First Payments Received

In this Case, Entity A wishes to hedge its interest rate exposure to changes in the quarterly interest receipts on \$100 million principal of those LIBOR- indexed variable-rate loans by entering into a 3-year interest rate swap that provides for quarterly net settlements based on Entity A receiving a fixed interest rate on a \$100 million notional amount and paying a variable LIBOR-based rate on a \$100 million notional amount.

In a cash flow hedge of interest rate risk, Entity A may identify the hedged forecasted transactions as the first LIBOR-based interest payments received by Entity A during each 4-week period that begins 1 week before each quarterly due date for the next 3 years that, in the aggregate for each quarter, are payments on \$100 million principal of its then existing LIBOR-indexed variable- rate loans. The LIBOR-based interest payments received by Entity A after it has received payments on \$100 million aggregate principal would be unhedged interest payments for that quarter.

The hedged forecasted transactions for Entity A in this Case are described with sufficient specificity so that when a transaction occurs, it is clear whether that transaction is or is not the hedged transaction.

Because Entity A has designated the hedging relationship as hedging the risk of changes attributable to changes in the LIBOR interest rate in Entity A's first LIBOR-based interest payments received, any prepayment, sale, or credit difficulties related to an individual LIBOR-indexed variable-rate loan would not affect the designated hedging relationship.

Provided Entity A determines it is probable that it will continue to receive interest payments on at least \$100 million principal of its then existing LIBOR-indexed variable-rate loans, Entity A can conclude that the hedged forecasted transactions in the documented cash flow hedging relationships are probable of occurring.

An entity may not assume perfect effectiveness in such a hedging relationship as described in paragraph 815-20-25-102 because the hedging relationship does not involve hedging the interest payments related to the same recognized interest-bearing loan throughout the life of the hedging relationship. Consequently, at a minimum, Entity A must consider the timing of the hedged cash flows vis-à-vis the swap's cash flows when assessing effectiveness.

Case B: Designation Based on a Specific Group of Individual Loans

In this Case, Entity B wishes to hedge its interest rate exposure to changes in the quarterly interest receipts on \$100 million principal of those LIBOR- indexed variable-rate loans by entering into a 3-

year interest rate swap that provides for quarterly net settlements based on Entity B receiving a fixed interest rate on a \$100 million notional amount and paying a variable LIBOR-based rate on a \$100 million notional amount. Entity B initially designates cash flow hedging relationships of interest rate risk and identifies as the related hedged forecasted transactions each of the variable interest receipts on a specified group of individual LIBOR-indexed variable-rate loans aggregating \$100 million principal but then some of those loans experience prepayments, are sold, or experience credit difficulties.

This Case addresses whether the original cash flow hedging relationships remain intact if the composition of the group of loans whose interest payments are the hedged forecasted transactions is changed by replacing the principal amount of the specified loans with similar variable-rate interestbearing loans. Entity B cannot conclude that the original cash flow hedging relationships have remained intact if the composition of the group of loans whose interest payments are the hedged forecasted transactions is changed by replacing the principal amount of the originally specified loans with similar variable-rate interest- bearing loans, Paragraph 815-20-25-15(a) requires that, for a cash flow hedge, the forecasted transaction be specifically identified as a single transaction or group of transactions. At inception, the entity designated cash flow hedging relationships for each of the variable interest receipts on a specified group of variable-rate loans. If a loan within the group experiences a prepayment, has been sold, or experiences an unexpected change in its expected cash flows due to credit difficulties, the remaining hedged interest payments to Entity B specifically related to that loan are now no longer probable of occurring. Pursuant to paragraphs 815-30-40-1 through 40-3, Entity B must discontinue the hedging relationships with respect to the hedged forecasted transactions that are now no longer probable of occurring. However, had the hedged forecasted transactions been designated in a manner similar to that described in Case A, the consequences of a loan's prepayment, a loan sale, or an unexpected change in a loan's expected cash flows due to credit difficulties would not have been the same. How the forecasted transaction in a cash flow hedge is designated can have a significant effect on the application of the Derivatives and Hedging Topic.

Changing the composition of the specified individual loans within the group of variable-rate interestbearing loans due to prepayment, a loan sale, or an unexpected change in a loan's expected cash flows due to credit difficulties reflects a change in the probability of the identified hedged forecasted transactions for the hedging relationships related to the individual loans removed from the group of variable-rate interest-bearing loans. Consequently, the hedging relationships for future interest payments that are no longer probable of occurring must be terminated. The provisions related to immediately reclassifying a derivative instrument's gain or loss out of accumulated other comprehensive income into earnings are based on the hedged forecasted transaction being probable that it will not occur—not no longer being probable of occurring—and includes consideration of an additional two-month period of time. After the discontinuation of the hedging relationships for interest payments related to the individual loans removed from the group of variable-rate interest-bearing loans and the reclassification into earnings of the net gain or loss in accumulated other comprehensive income related to those hedging relationships, the derivative instrument (or a proportion thereof) specifically related to the hedging relationships that have been terminated is eligible to be redesignated as the hedging instrument in a new cash flow hedging relationship. However, paragraph 815-30-40-5 warns that a pattern of determining that hedged forecasted transactions are probable of not occurring would call into question both the entity's ability to accurately predict forecasted transactions and the propriety of using hedge accounting in the future for similar forecasted transactions.

Example 3.3.2: Application of the net written option test to collar-based hedging relationships (from ASC 815-20-55-230 to 55-234)

This Example illustrates the application of paragraph 815-20-25-95.

Entity X has LIBOR-indexed floating-rate debt. To hedge its exposure to variability in expected future cash outflows attributable to changes in LIBOR swap rate (the contractually specified interest rate), it

enters into an interest rate collar with a bank when the current LIBOR swap rate is 6 percent. The collar also is indexed to LIBOR and consists of a purchased cap with the strike rate equal to 8 percent and a written floor with the strike rate equal to 5 percent. The purchased cap goes into effect when LIBOR increases above 8 percent, and the written floor goes into effect when LIBOR decreases below 5 percent. Thus, the interest collar has the effect of limiting the interest rate of the floating-rate debt to a range between 5 percent and 8 percent. On the basis of market conditions as of the collar transaction date, Entity X received a net premium from the bank.

In accordance with paragraphs 815-20-25-88 through 25-90, the combination of options in the collar in this Example is a net written option from Entity X's perspective. Therefore, the written-option test in paragraphs 815-20-25-94 through 25-95 must be applied to determine whether the hedging relationship between the debt and the collar qualifies for cash flow hedge accounting. That test requires that the combination of the hedged item and the written option provides at least as much potential for favorable cash flows as exposure to unfavorable cash flows for all possible percentage changes (from zero percent to 100 percent) in the LIBOR index.

The following table shows the calculation of the favorable cash flows and unfavorable cash flows for LIBOR changes of 50 percent.

Potential Cash Flows of the Combination of the Hedged Item and the Net Written Option if
LIBOR Movies Each Direction by the Same Percentage

LIBUR MOVIES Each	LIBOR Movies Each Direction by the Same Percentage					
	LIBOR at Inception	LIBOR Increase 50%	LIBOR Decrease 50%			
Cash outflows on LIBOR-indexed debt	6.00%	9.00%	3.00%			
Cash outflows on written floor	0.00	0.00	2.00			
Less: Cash inflows on purchased cap	0.00	1.00	0.00			
Net cash flow (outflows + / inflows -)	6.00%	8.00%	5.00%			
		Unfavorable	Favorable			
Change in cash flows of combination from basis points)	200	-100				
Percentage change in cash flows of combinception	Percentage change in cash flows of combination from					

The calculations in the table in paragraph 815-20-55-233 demonstrate that for a 50 percent fluctuation in the LIBOR rate, the collar would fail the written-option test in paragraph 815-20-25-94 because a 50 percent favorable change in LIBOR (that is, a decrease) would not provide at least as much favorable cash flows as unfavorable cash flows that would result from a 50 percent unfavorable change in LIBOR (that is, an increase). Therefore, the combination of options would not be an eligible hedging instrument.

Example 3.3.3: Cash flow hedge of variable-rate interest-bearing asset (from ASC 815-30-55-24 to 55-33)

This Example demonstrates the mechanics of accounting for an interest rate swap used as a cash flow hedge of variable interest receipts in accordance with the guidance in Subtopic 815-20 and this Subtopic. It is not intended to demonstrate how to compute the fair value of an interest rate swap. As in Example 8 (see paragraph 815-25-55-40), the zero-coupon method is used to determine the fair values. (Unlike in that Example, the yield curve in this Example is assumed to be upward sloping, that is, interest rates are higher for payments due further into the future.) In this Example, the term, notional amount, and repricing date of the interest rate swap match the term, repricing date, and principal amount of the interest-bearing asset on which the hedged interest receipts are due. The swap terms are at the market (as described in paragraphs 815-20-25-104, 815-20-25-106, and 81520-25-109), so it has a zero value at inception. Thus, the reporting entity is permitted to assume that the hedging relationship will achieve perfect offset in the variability of cash flows of the hedged item.

As discussed beginning in paragraph 815-20-25-102, a shortcut method can be used to produce the same reporting results as the method illustrated in this Example. This shortcut is appropriate only if the assumption of perfect offset applies for an interest rate swap used as a cash flow hedge of interest receipts on a variable-rate asset (or interest payments on a variable-rate liability). The steps in the shortcut method are as follows:

- a. 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 fixed rate to be received on the interest rate swap.
- c. 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.
- e. Adjust the carrying amount of the interest rate swap to its fair value and adjust other comprehensive income by an offsetting amount.

A slightly different shortcut method for interest rate swaps used as fair value hedges is illustrated in Example 8 (see paragraph 815-25-55-40).

For simplicity, commissions and most other transaction costs, initial margin, and income taxes are ignored unless otherwise stated. Assume that there are no changes in creditworthiness that would alter the effectiveness of the hedging relationship.

On July 1, 20X1, Entity XYZ invests \$10,000,000 in variable-rate corporate bonds that pay interest quarterly at a rate equal to the 3-month USD LIBOR rate plus 2.25 percent. The \$10,000,000 principal will be repaid on June 30, 20X3.

Also on July 1, 20X1, Entity XYZ enters into a two-year receive-fixed, pay-variable interest rate swap and designates it as a hedging instrument in a cash flow hedge of the variable-rate interest receipts on the corporate bonds. The risk designated as being hedged is the risk of variability in cash flows received attributable to changes in the contractually specified interest rate. The terms of the interest rate swap and the corporate bonds are shown in the following table.

	Interest Rate Swap	Corporate Bonds
Trade date and borrowing date (a)	July 1, 20X1	July 1, 20X1
Termination date	June 30, 20X3	June 30, 20X3
Notional amount	\$10,000,000	\$10,000,000
Fixed interest rate	6.65%	Not applicable
Variable interest rate (b)	3-month USD LIBOR	3-month USD LIBOR + 2.25%
Settlement dates and interest payment dates (a)	End of each calendar quarter	End of each quarter calendar
Reset dates	End of each calendar quarter through March 31, 20X3	End of each calendar quarter through March 31, 20X3

⁽a) These terms need not match for the assumption of no ineffectiveness to be appropriate. (See paragraphs 815-20-25-102 through 25-110.)

⁽b) Only the interest rate basis (for example, LIBOR) must match. The spread over LIBOR does not invalidate the assumption of no ineffectiveness.

Because the conditions described in paragraphs 815-20-25-104 and 815-20-25-106 are met, Entity XYZ is permitted to assume that there is perfect offset in the hedging relationship and to recognize in other comprehensive income the entire change in the fair value of the interest rate swap.

The three-month USD LIBOR rates in effect at the inception of the hedging relationship and at each of the quarterly reset dates are assumed to be as follows.

Reset Date	3-Month LIBOR
7/1/X1	5.56%
9/30/X1	5.63%
12/31/X1	5.56%
3/31/X2	5.47%
6/30/X2	6.75%
9/30/X2	6.86%
12/31/X2	6.97%
3/31/X3	6.57%

Entity XYZ must reclassify to earnings the amount in accumulated other comprehensive income as each interest receipt affects earnings. In determining the amounts to reclassify each quarter, it is important to recognize that the interest rate swap does not hedge the bonds. Instead, it hedges the eight variable interest payments to be received. That is, each of the eight quarterly settlements on the swap is associated with an interest payment to be received on the bonds. Under the zero-coupon method discussed in paragraph 815-30-55-24, the present value of each quarterly settlement is computed separately. Because each payment occurs at a different point on the yield curve, a different interest rate must be used to determine its present value. As each individual interest receipt on the bonds is recognized in earnings, the fair value of the related quarterly settlement on the swap is reclassified to earnings. The fair values and changes in fair values of the interest rate swap and the effects on earnings and other comprehensive income for each quarter are as follows.

	Swap Debit (Credit)	Other Comprehensive Income Debit (Credit)	Earnings Debit (Credit)	Cash Debit (Credit)
July 1, 20X1	\$ -			
Interest accrued	-			
Payment (receipt)	(27,250)			\$27,250
Effect of change in rates	52,100	(\$52,100)		
Reclassification to earnings		27,250	(\$27,250)	
September 30, 20X1	24,850	(24,850)	(\$27,250)	\$27,250
Interest accrued	330	(330)		
Payment (receipt)	(25,500)			\$25,500
Effect of change in rates	74,120	(74,120)		
Reclassification to earnings		25,500	(\$25,500)	
December 31, 20X1	73,800	(73,800)	(\$25,500)	\$25,500
Interest accrued	1,210	(1,210)		
Payment (receipt)	(27,250)			\$27,250
Effect of change in rates	38,150	(38,150)		
Reclassification to earnings		27,250	(\$27,250)	
March 31, 20X2	85,910	(85,910)	(\$27,250)	\$27,250

Α	Ш	IΤ

	Swap Debit (Credit)	Other Comprehensive Income Debit (Credit)	Earnings Debit (Credit)	Cash Debit (Credit)
Interest accrued	1,380	(1,380)		
Payment (receipt)	(29,500)			\$29,500
Effect of change in rates	(100,610)	100,610		
Reclassification to earnings		29,500	(\$29,500)	
June 30, 20X2	(42,820)	42,820	(\$29,500)	\$29,500
Interest accrued	(870)	870		
Payment (receipt)	2,500			(\$2,500)
Effect of change in rates	8,030	(8,030)		
Reclassification to earnings		(2,500)	\$2,500	
September 30, 20X2	(33,160)	33,160	\$2,500	(\$2,500)
Interest accrued	(670)	670		
Payment (receipt)	5,250			(\$5,250)
Effect of change in rates	6,730	(6,730)		
Reclassification to earnings		(5,250)	\$5,250	
December 31, 20X2	(21,850)	21,850	\$5,250	(\$5,250)
Interest accrued	(440)	440		
Payment (receipt)	8,000			(\$8,000)
Effect of change in rates	16,250	(16,250)		
Reclassification to earnings		(8,000)	\$8,000	
March 31, 20X3	1,960	(1,960)	\$8,000	(\$8,000)
Interest accrued	40	(40)		
Payment (receipt)	(2,000)			\$2,000
Reclassification to earnings		2,000	(\$2,000)	
June 30, 20X3	\$ -	\$ -	(\$2,000)	\$2,000

The preceding table shows that, in each quarter, the net cash receipt or payment on the swap equals the income or expense to be recorded. The net effect on earnings of the interest on the bonds and the reclassification of gains or losses on the interest rate swap are presented in the same income statement line item as the earnings effect of the hedged item. The net earnings effect is shown in the following table.

For the Quarter Ending	Interest on Bonds	Gains (Losses) Reclassified from Other Comprehensive Income	Net Effect
9/30/X1	\$195,250	\$27,250	\$222,500
12/31/X1	197,000	25,500	222,500
3/31/X2	195,250	27,250	222,500
6/30/X2	193,000	29,500	222,500
9/30/X2	225,000	(2,500)	222,500
12/31/X2	227,750	(5,250)	222,500
3/31/X3	230,500	(8,000)	222,500
6/30/X3	220,500	2,000	222,500
Totals	\$1,684,250	\$95,750	\$1,780,000

In this Example, the shortcut method described in paragraph 815-30-55-25 works as follows. The difference between the variable rate on the interest rate swap and the variable rate on the asset is a net receipt of 2.25 percent. That rate combined with the 6.65 percent fixed rate received on the interest rate swap is 8.9 percent. The computed interest income is \$890,000 per year or \$222,500 per quarter, which is the same as the amount in the table in the preceding paragraph.

Example 3.3.4: Changes in a cash flow hedge of forecasted interest payments with an interest rate swap (from ASC 815-30-55-52 to 55-61)

The following Cases describe the effects on earnings and other comprehensive income of certain changes in a cash flow hedging relationship:

The variability of the hedged interest payments is eliminated before the hedging derivative expires (Case A).

The interest rate index that is the basis for the hedged interest payments is changed to a different index before the hedging derivative expires (Case B).

Cases A and B share the following assumptions. For simplicity, commissions and most other transaction costs, initial margin, and income taxes are ignored unless otherwise stated. Assume that there are no changes in creditworthiness that would alter the effectiveness of the hedging relationship.

Entity MNO enters into an interest rate swap (Swap 1) and designates it as a hedge of the variable quarterly interest payments on Entity MNO's 5-year \$5 million borrowing program, initially expected to be accomplished by a series of \$5 million notes with 90-day terms. Entity MNO plans to continue issuing new 90-day notes over the next 5 years as each outstanding note matures. The interest on each note will be determined based on the contractually specified LIBOR rate at the time each note is issued. Swap 1 requires a settlement every 90 days, and the variable interest rate is reset immediately following each payment. Entity MNO pays a fixed rate of interest (6.5 percent) and receives interest at LIBOR. Entity MNO neither pays nor receives a premium at the inception of Swap 1. The notional amount of the contract is \$5 million, and it expires in 5 years.

Because Swap 1 and the hedged forecasted interest payments are based on the same notional amount, have the same reset dates, and are based on the same contractually specified interest rate (that is, the LIBOR rate) designated under paragraph 815-20-25-15(j)(2), Entity MNO may conclude that the hedging relationship will perfectly offset changes in cash flows of the hedged item attributable to the hedged risk and the hedging instrument (absent a default by the interest rate swap counterparty).

This paragraph explains why the guidance in Example 4, Case B (see paragraph 815-20-55-97) does not conflict with the guidance in this Example. In the cash flow hedge in this Example, had the hedged forecasted transaction been narrowly limited to the interest payments on specific future debt issuances rather than on the five-year borrowing program, the failure to engage in future debt issuances would cause the related derivative instrument net gain or loss in other comprehensive income to be immediately reclassified into earnings pursuant to paragraphs 815-30-40-4 through 40-5 because it would have been probable that the hedged forecasted transactions would not occur. Furthermore, if that failure is part of a pattern of hedged forecasted transactions being probable of not occurring, it would call into question both an entity's ability to accurately predict forecasted transactions and the propriety of using hedge accounting in the future for similar forecasted transactions, pursuant to paragraph 815-30-40-5. In contrast, in Example 4, Case B (see paragraph 815-20-55-97), the hedged quarterly interest payments were directly linked to Entity B's existing LIBOR- indexed floating-rate assets. When those existing assets are later prepaid or sold, the future quarterly interest payments on those specific assets are no longer probable of occurring (that is, no longer probable of being received by Entity B). Consequently, the hedging relationships for those future quarterly interest payments fail to meet the criterion in paragraph 815-20-25-15(b) and must be discontinued under paragraph 815-30-40-1. Because it is probable that the hedged quarterly interest

payments that were directly linked to assets that were prepaid or sold will not occur, the related derivative instrument net gain or loss in other comprehensive income must be immediately reclassified into earnings pursuant to paragraphs 815-30-40-4 through 40-5.

Case A: Variability of Hedged Forecasted Transactions Is Eliminated

At the end of the second year of the 5-year hedging relationship, Entity MNO discontinues its practice of issuing 90-day notes. Instead, Entity MNO issues a 3-year, \$5 million note with a fixed rate of interest (7.25 percent). Because the interest rate on the three-year note is fixed, the variability of the future interest payments has been eliminated. Thus, Swap 1 no longer qualifies for cash flow hedge accounting. However, the net gain or loss on Swap 1 in accumulated other comprehensive income is not reclassified to earnings immediately. Immediate reclassification is required (and permitted) only if it becomes probable that the hedged transactions (future interest payments) will not occur. The variability of the payments has been eliminated, but it still is probable that they will occur. Thus, those gains or losses will continue to be reclassified from accumulated other comprehensive income to earnings as the interest payments affect earnings (as required by paragraphs 815-30-35-38 through 35-41) and presented in the same income statement line item as the earnings effect of the hedged item. If the term of the fixed rate note had been longer than three years, the amounts in accumulated other comprehensive income still would have been reclassified into earnings over the next three years, which was the term of the designated hedging relationship.

Rather than liquidate the pay-fixed, receive-variable Swap 1, Entity MNO enters into a pay-floating, receive-fixed interest rate swap (Swap 2) with a 3- year term and a notional amount of \$5 million. Entity MNO neither pays nor receives a premium. Like Swap 1, Swap 2 requires a settlement every 90 days and reprices immediately following each settlement. The relationship between 90- day interest rates and longer term rates has changed since Entity MNO entered into Swap 1 (that is, the shape of the yield curve is different). As a result, Swap 2 has different terms and its settlements do not exactly offset the settlements on Swap 1. Under the terms of Swap 2, Entity MNO will receive a fixed rate of 7.25 percent and pay interest at LIBOR.

The two swaps are not designated as hedging instruments and are reported at fair value. The changes in fair value are reported immediately in earnings and offset each other to a significant degree.

Case B: Basis of Hedged Forecasted Transactions Is Changed

At the end of the second year of the 5-year hedging relationship, Entity MNO discontinues its practice of issuing 90-day notes and issues a 3-year, \$5 million note with a different contractually specified interest rate (that is, an interest rate that is not LIBOR) that adjusts every 90 days. As of this date, Entity MNO must begin performing assessments of effectiveness for the hedging relationship by comparing changes in fair value of the hedging instrument (indexed to LIBOR) with changes in the value of the hedged item based on the revised contractually specified interest rate. Because the hedged forecasted transactions (future interest payments) are still probable of occurring, Entity MNO may continue to apply hedge accounting in accordance with paragraph 815-30-35-37A if the hedging instrument (indexed to LIBOR) is highly effective at achieving offsetting cash flows attributable to the revised contractually specified interest rate.

If the revised hedging relationship is not determined to be highly effective, the hedging relationship must be discontinued. However, the net gain or loss on Swap 1 in accumulated other comprehensive income as of the date Entity MNO issues the three-year note is not reclassified into earnings immediately. Immediate reclassification would be required only if, as part of its normal process of assessing whether it remains probable that the hedged forecasted transaction will occur, Entity MNO determines that it is probable that the hedged transactions (future interest payments) will not occur. In this case, the expected amounts of those payments have changed (because they will be based on a revised contractually specified interest rate instead of LIBOR, as originally expected), but it still is probable that the payments will occur. Thus, those gains or losses will continue to be reclassified to earnings as the interest payments affect earnings and presented in the same income statement line item as the earnings effect of the hedged item.

Example 3.3.5: Impact on accumulated other comprehensive income of issuing debt with a term that is shorter than originally forecasted (from ASC 815-30-55-94 to 55-99)

This Example illustrates the effect on accumulated other comprehensive income of issuing debt with a term that is shorter than originally forecasted.

Entity A expects to borrow \$100 million over a 10-year period beginning in 6 months. Entity A initially plans to issue \$100 million of 10-year fixed- rate debt at or near par at the then-current market interest rate; consequently, Entity A will be exposed to variability in cash flows in the future quarterly interest payments on the debt due to changes in credit risk and interest rate risk that occur during this 6-month period before issuance. To hedge the risk of changes in these 40 quarterly interest payments attributable to changes in the benchmark interest rate for the 6-month period, Entity A does all of the following:

- a. It enters into a derivative instrument (for example, a forward-starting interest rate swap).
- b. It documents that it is hedging the variability in the 40 future quarterly interest payments, attributable to changes in the benchmark interest rate, over the next 10 years related to its 10-year \$100 million borrowing program that begins in 6 months.
- c. It documents that it will assess the effectiveness of the hedging relationship semimonthly on a quantitative basis.

Six months after inception of the hedging relationship, Entity A issues debt. However, due to market conditions, Entity A decides in the week before issuance that it will issue \$100 million of fixed-rate debt with a 5-year maturity and quarterly interest payments.

When Entity A decides that the term of the debt to be issued will differ from the term of the debt originally expected to be issued, Entity A should not immediately reclassify into earnings the entire net gain or loss in accumulated other comprehensive income related to the derivative instrument. Instead, Entity A must first apply the requirements of paragraph 815-30-35-3 using its originally documented hedging strategy and the newly revised best estimate of the cash flows. That is, the assessment of hedge effectiveness should be based on the most recent best estimate of the hedged forecasted transaction as of the date that a cash flow hedge is discontinued prospectively.

Entity A's strategy is a cash flow hedge of 40 individual probable quarterly interest payments. A cash flow hedge of future interest payments is a hedge of a series of forecasted transactions; consequently, Entity A must first determine the likelihood of whether and when each forecasted transaction in the series will occur. If at any time during the hedging relationship Entity A determines that it is no longer probable that any of the forecasted transactions in the series will occur by the date (or within the time period) originally specified, it must terminate the original hedging relationship for each of those specific nonprobable forecasted transactions (even if the forecasted transaction will occur within an additional two-month period of time after that originally specified date).

When Entity A performs its semimonthly assessment of effectiveness for the half-month period immediately preceding the issuance of the debt, it could also possibly conclude that the hedging relationship is no longer considered highly effective under paragraph 815-20-25-75 because the actual variability in the hedged interest payments for Years 1–5 is now based on the 5- year borrowing rate—not on 10-year rates as expected at the inception of the hedge when the entity selected the hedging derivative. In that circumstance, the hedging relationship is terminated. After the hedging relationship is terminated, Entity A must determine whether it is probable that any or all of those specific nonprobable forecasted transactions will not occur by the date (or within the time period) originally specified or within an additional two-month period of time thereafter (see paragraphs 815-30-40-4 through 40-5).

When Entity A originally documented the hedging relationship, it was hedging 40 forecasted transactions (forecasted quarterly interest payments) that would begin in 6 months' time and continue over a 10-year period. In this Example, Entity A terminates the hedging relationship no later than on the date it issues the 5-year debt (because the variability of the first 20 hedged payments ceases on that date) and must determine the amount, if any, to be reclassified into earnings from accumulated

other comprehensive income related to the net derivative gain or loss of the terminated cash flow hedge. Because Entity A issued a 5-year debt instrument, Entity A would determine that it is probable that the first 20 forecasted transactions would occur because they are now contractual obligations. Entity A must determine that it is not probable that any of the last 20 forecasted transactions will not occur to continue reporting the net derivative gain or loss related to these forecasted transactions in accumulated other comprehensive income. At issue is whether it is probable that the five-year debt will not be replaced by new borrowings that will involve the quarterly payment of interest. Provided that the entity determines that it is not probable that any of the original 40 forecasted transactions will not occur, Entity A must apply paragraph 815-30-35-3 and continue to report an amount in accumulated other comprehensive income based on the most recent best estimate of the hedged forecasted transactions related to all 40 forecasted transactions and reclassify an appropriate amount into earnings when each hedged forecasted transaction affects earnings and present those amounts in the same income statement line item as the earnings effect of the hedged item. If Entity A determines that it is probable that any of those forecasted transactions will not occur either by the end of the date (or within the time period) originally specified or within an additional two-month period of time thereafter (see paragraphs 815-30- 40-4 through 40-5), Entity A should reclassify into earnings from accumulated other comprehensive income the amount of the net derivative instrument gain or loss related to those specific nonoccuring forecasted transactions. That amount should be equivalent to the portion of the present value of the derivative instrument's cash flows intended to offset the changes in the original forecasted transactions for which Entity A has determined it is probable that they will not occur by the date (or within the time period) originally specified or within an additional two-month period of time thereafter. Thus, the nonoccurrence of one of the hedged forecasted transactions described in this Example could potentially jeopardize Entity A's ability to use cash flow hedge accounting in the future for the situation described.

Example 3.3.6: Effect on accumulated other comprehensive income from issuing debt at a date that is not the same as originally forecasted (from ASC 815-30-55-128 to 55-133)

The following Cases illustrate the application of paragraph 815-30- 40-5 in determining whether an entity should immediately reclassify into earnings the entire net gain or loss related to the derivative instrument in accumulated other comprehensive income when issuing debt at a date that is not the same as originally forecasted:

- a. Amounts are not reclassified immediately into earnings (Case A).
- b. Amounts are reclassified immediately into earnings (Case B).

Case A: Amounts Are Not Reclassified Immediately into Earnings

This Case has the following assumptions:

- a. Entity A expects to borrow \$100 million over a 10-year period beginning in 6 months.
- b. Entity A initially plans to issue \$100 million of 10-year fixed-rate debt at or near par at the thencurrent market interest rate.
- c. Entity A will be exposed to variability in cash flows for the future quarterly interest payments on the debt due to changes in credit risk and interest rate risk that occur during this six-month period before issuance.
- d. To hedge the risk of changes in these 40 quarterly interest payments attributable to changes in the benchmark interest rate for the 6-month period, Entity A does both of the following:
 - 1. Enters into a derivative instrument (for example, a forward-starting interest rate swap)
 - 2. Documents that it is hedging the variability in the 40 future quarterly interest payments, attributable to changes in the benchmark interest rate, over the next 10 years related to its 10-year \$100 million borrowing program that begins in 6 months.

- e. Entity A documents that it will assess the effectiveness of the hedging relationship semimonthly on a quantitative basis.
- f. Six months after inception of the hedging relationship, Entity A decides to delay the issuance of the 10-year debt for 3 months.

When Entity A decides to delay the issuance of the 10-year debt for 3 months, Entity A should not immediately reclassify into earnings the entire net gain or loss in accumulated other comprehensive income related to the derivative instrument. Entity A's strategy is a cash flow hedge of 40 individual probable quarterly interest payments. A cash flow hedge of future interest payments is a hedge of a series of forecasted transactions; consequently, Entity A must first determine the likelihood of whether and when each forecasted transaction in the series will occur. If at any time during the hedging relationship Entity A determines that it is no longer probable that any of the forecasted transactions in the series will occur by the date (or within the time period) originally specified, it must terminate the original hedging relationship for each of those specific nonprobable forecasted transactions—even if the forecasted transaction will occur within an additional two-month period of time after that originally specified date. Entity A need not terminate the original hedging relationship for those specific forecasted transactions that remain probable of occurring by the date or within the time period originally specified. After the hedging relationship is terminated, Entity A must determine whether it is probable that any or all of those specific nonprobable forecasted transactions will not occur either by the date (or within the time period) originally specified or within an additional two-month period of time thereafter (see paragraphs 815-30-40-4 through 40-5). Entity A should reclassify into earnings from accumulated other comprehensive income the amount of the net derivative instrument gain or loss related to those specific nonprobable forecasted transactions for which it is probable they will not occur. That amount should be equivalent to the present value of the derivative instrument's cash flows intended to offset the changes in the original forecasted transactions for which Entity A has determined it is probable that they will not occur by the date (or within the time period) originally specified or within an additional two-month period of time thereafter.

In this Case, when Entity A originally documented the hedging relationship, it was hedging 40 forecasted transactions (forecasted interest payments) that would begin in 6 months' time and continue over a 10-year period. Because Entity A did not issue the debt instrument as originally documented, Entity A would determine that it is probable that the first forecasted transaction will not occur at the time forecasted; consequently, Entity A must terminate the original hedging relationship with respect to that first forecasted transaction. However, Entity A would also determine that it is probable that the other 39 forecasted transactions will occur at the time forecasted. After the hedging relationship is terminated for the specific nonprobable first forecasted transaction, Entity A must determine whether it is probable that specific nonprobable first forecasted transaction will not occur by the forecasted date or within an additional two-month period of time thereafter. In this Case, Entity A determines that it is probable that the first hedged quarterly interest payment will not occur within two months of its specified date. The amount reclassified into earnings from accumulated other comprehensive income is the portion of the interest rate swap's net gain or loss equivalent to the present value of the cash flows from the interest rate swap intended to offset the changes in the first forecasted transaction that is probable not to occur.

Case B: Amounts Are Reclassified Immediately into Earnings

This Case has the following assumptions:

- a. Entity B expects to issue \$100 million of 10-year, 9 percent debt in 6 months.
- b. Because the debt will have a fixed interest rate of 9 percent, Entity B will not be exposed to variability in the future quarterly interest payments at 9 percent, but it will be exposed to variability in the cash flows received as proceeds on the debt due to changes in credit risk and interest rate risk that occur during the 6-month period before issuance.
- c. To hedge the risk of changes in the total proceeds attributable to changes in the benchmark interest rate, Entity B does both of the following:

- Enters into a derivative instrument (for example, a short position in U.S. Treasury note futures contracts)
- 2. Documents that it is hedging the variability in the cash proceeds attributable to changes in the benchmark interest rate to be received from the 9 percent fixed-rate debt it will issue in 6 months and that it will assess effectiveness on a quantitative basis.
- d. Because Entity B plans to issue \$100 million of 10-year, 9 percent debt regardless of the thencurrent interest rate environment, the effect of increases or decreases in interest rates will be reflected in issuing the debt at a discount or a premium, respectively.
- e. Six months after inception of the hedging relationship, Entity B decides to delay the issuance of the debt for three months.

This strategy is a cash flow hedge of the variability in proceeds attributable to changes in the benchmark interest rate to be received from the issuance of debt in six months. A cash flow hedge of the proceeds attributable to changes in the benchmark interest rate is a hedge of a single forecasted transaction specified to occur in six months; consequently, when the single forecasted transaction is no longer probable of occurring by the date (or within the time period) originally specified, Entity B must terminate the hedging relationship. After the hedging relationship is terminated, Entity B must determine whether it is probable that the specific nonprobable forecasted transaction will not occur by the date (or within the time period) originally specified or within an additional two- month period of time thereafter. Because Entity B decided to delay the issuance of the debt for a three-month period of time, Entity B concludes that it is probable that the forecasted transaction will not occur by the date (or within the time period) originally specified or within an additional two-month period of time thereafter. Consequently, Entity B should immediately reclassify into earnings the entire net gain or loss related to the derivative instrument in accumulated other comprehensive income. Given the guidance in paragraph 815-30-40-5, the nonoccurrence of the hedged forecasted transactions described in this Case could potentially jeopardize Entity B's ability to use cash flow hedge accounting in the future for the situation described.

Example 3.3.7: Hedging a portfolio of fixed-rate financial assets (from ASC 815-20-55-173 to 55-178)

This Example illustrates the application of paragraphs 815-20-25- 12(b)(1) and 815-20-25-75 to a hedge of a portfolio of fixed-rate financial assets.

Entity A has a portfolio of seasoned, one to four family, fixed-rate mortgages that it wishes to designate as the hedged item in a fair value hedge of the benchmark interest rate (LIBOR). Each loan within the portfolio has similar settlement terms, is collateralized by property in the same geographic region, and has similar scheduled maturities. The loans are all within a specified interest rate band and are prepayable at par; each of the loans contained in the portfolio is expected to react in a generally proportionate manner to changes in the benchmark interest rate based on calculations performed by Entity A.

Entity A enters into a pay-fixed, receive-LIBOR interest rate swap with a fair value of zero at the inception of the hedging relationship. The stated maturity of the interest rate swap is consistent with the stated maturities of the loans. The notional amount of the interest rate swap amortizes based on a schedule that is expected to approximate the principal repayments of the loans (excluding prepayments). There is no optionality included in the interest rate swap. As part of its documented risk management strategy associated with this hedging relationship, on a quarterly basis, Entity A intends to do both of the following:

a. Assess effectiveness of the existing hedging relationship on a quantitative basis for the past three-month period

b. Consider possible changes in value of the hedging derivative and the hedged item over the next three months in deciding whether it has an expectation that the hedging relationship will continue to be highly effective at achieving offsetting changes in fair value

Entity A's portfolio of loans satisfies the requirements of paragraph 815-20-25-12(b)(1) regarding the grouping of similar assets because the portfolio of loans has been defined in a restrictive manner and Entity A determined, by calculation, that each of the loans contained in the portfolio is expected to react in a generally proportionate manner to changes in the benchmark interest rate. Even though certain of the loans may prepay, each loan still may be considered to have the same exposure to prepayment risk because each loan has a similar prepayment option. When aggregating loans in a portfolio, an entity is permitted to consider among other things prepayment history of the loans (if seasoned) and expected prepayment performance in varying interest rate scenarios.

Entity A's documented hedging strategy meets the requirements of paragraph 815-20-25-75 for a prospective assessment of effectiveness provided the entity established that the hedging relationship is 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.

Paragraph 815-20-25-79(a) explains that a probable future change in fair value will be more heavily weighted than a reasonably possible future change. For example, Entity A could assign a probability weighting to each possible future change in value of the hedged portfolio. Depending on the level of market interest rates and the expected prepayment rates for the types of loans in the hedged portfolio, Entity A may reach a conclusion that the change in fair value of the swap will be highly effective at offsetting the change in the value of the portfolio of loans, inclusive of the prepayment option. As a result of this analysis, management would conclude that hedge accounting is permitted for the hedging relationship for the next three-month period. Management is required to assess the effectiveness of the existing hedging relationship for the past three-month period. If necessary, the notional amount of the swap in excess of the portfolio balance at the end of each three-month period must be dedesignated and a new hedging relationship designated to allow high effectiveness to continue in the future.

RSM commentary: When hedging a portfolio of prepayable fixed-rate assets for interest rate risk, it is typically advantageous in comparison to this example to structure the hedge as a *last-of-layer* hedge discussed in Section 3.2.2.1.1. When a last-of-layer designation is made in conjunction with the partial-term hedging election and an election to use only the benchmark rate component of the contractual coupon cash flows when measuring the change in the fair value of the hedged item, all assets can be assumed to have the same maturity and the same benchmark rate coupon. Such a hedge would be expected to be highly effective despite the prepayable nature of the assets as long as the designated last layer is expected to remain outstanding during the hedge period.

Example 3.3.8: Fair value hedge of U.S. Treasury bond with put options (from ASC 815-25-55-23 to 55-26)

This Example illustrates the guidance in Sections 815-20-25, 815- 20-35, and 815-25-35 for how an entity may assess hedge effectiveness in a fair value hedge of a U.S. Treasury bond with put options. Assume that the hedge satisfied all of the criteria for hedge accounting at inception.

Entity E owns a U.S. Treasury bond and wants to protect itself against the fair value exposure to declines in the price of the bond. Entity E purchases an at-the-money put option on a U.S. Treasury security with the same terms (remaining maturity, notional amount, and interest rate) as the U.S. Treasury bond held and designates the option as a hedge of the fair value exposure of the U.S. Treasury bond. Entity E plans to hold the put option until it expires.

Because Entity E plans to hold the put option (a static hedge) rather than manage the position with a delta-neutral strategy, it could assess whether it expects the hedge to be highly effective at achieving offsetting changes in fair value by calculating and comparing the changes in the intrinsic value of the

option and changes in the price (fair value) of the U.S. Treasury bond for different possible market prices. In assessing the expectation of effectiveness on an ongoing basis, Entity E also must consider the actual changes in the fair value of the U.S. Treasury bond and in the intrinsic value of the option during the hedge period.

However, because the pertinent critical terms of the option and the bond are the same in this Example, Entity E could expect the changes in value of the bond attributable to changes in interest rates and changes in the intrinsic value of the option to offset completely during the period that the option is in the money. That is, the hedging relationship will be perfectly effective because Entity E has chosen to exclude changes in the option's time value from the assessment of hedge effectiveness. Entity E may elect to account for changes in the time value of the option through an amortization approach in accordance with paragraph 815-20-25-83A or through a mark-to-market approach in accordance with paragraph 815-20-25-83B. Under either of those approaches, it should present the portion of excluded components recognized in earnings in the same income statement line item as the earnings effect of the hedged item in accordance with paragraph 815-20-45-1A.

Example 3.3.9: Fair value hedge of an embedded purchased option with a written option (from ASC 815-25-55-27 to 55-29)

This Example illustrates the guidance in Sections 815-20-25, 815-20-35, and 815-25-35 for how an entity may assess hedge effectiveness in a fair value hedge of an embedded purchased option with a written option. Assume that the hedge satisfied all of the criteria for hedge accounting at inception.

Entity F issues five-year, fixed-rate debt with an embedded (purchased) call option and, with a different counterparty, writes a call option to neutralize the call feature in the debt. The embedded call option and the written call option have the same effective notional amount, underlying fixed interest rate, and strike price. (The strike price of the option in the debt usually is referred to as the call price.) The embedded option also can be exercised at the same times as the written option. Entity F designates the written option as a fair value hedge of the embedded prepayment option component of the fixed-rate debt.

To assess whether the hedge is expected to be highly effective in achieving offsetting changes in fair value, Entity F could estimate and compare the changes in fair values of the two options for different market interest rates. Because this Subtopic does not permit derivative instruments, including embedded derivatives whether or not they are required to be accounted for separately, to be separated into components, Entity F can only designate a hedge of the entire change in fair value of the embedded purchased call option. The resulting changes in fair value will be included currently in earnings. Changes in the fair value of the written option also will be included currently in earnings and presented in the same income statement line item as the earnings effect of the hedged item. Any mismatch between the changes in fair values of the hedging instrument and the hedged item attributable to the hedged risk, thus, will be automatically reflected in earnings. (The hedge is likely to have some earnings effect because the premium for the written call option is unlikely to be the same as the premium for the embedded purchased call option.)

Example 3.3.10: Fair value hedge of fixed-rate interest-bearing debt (from ASC 815-25-55-40 to 55-52)

This Example demonstrates the guidance in Subtopic 815-20 and this Subtopic as applied to the mechanics of reporting an interest rate swap used as a fair value hedge of an interest-bearing liability. It is not intended to demonstrate how to compute the fair value of an interest rate swap or an interest- bearing liability. This Example has been 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 due at any other date (that is, the yield curve is flat). Although that is an unrealistic assumption, it makes the amounts used easier to understand without detracting from the purpose of the Example. For simplicity, commissions and most other transaction costs, initial margin, and income taxes are

ignored unless otherwise stated. Assume that there are no changes in creditworthiness that would alter the effectiveness of the hedging relationship.

The fair values of the interest rate swap in this Example are determined using the zero-coupon method. The zero-coupon method is not the only acceptable method. Explanations of other acceptable methods of determining the fair value of an interest rate swap can be obtained from various published sources. Fair values also may be available from dealers in interest rate swaps and other derivative instruments.

In this Example, the term and notional amount of the interest rate swap match the term and principal amount of the interest-bearing liability being hedged. The fixed and variable interest rates used to determine the net settlements on the interest rate swap match the current yield curve, and the sum of the present values of the expected net settlements is zero at inception. Thus, paragraphs 815- 20-25-102 through 25-106 permit the reporting entity to assume perfect effectiveness. Assessment of effectiveness at one of the interest rate swap's repricing dates would confirm the validity of that assumption.

A shortcut method (see paragraphs 815-20-25-102 through 25-106) can be used to produce the same reporting results as the method illustrated in this Example. This shortcut is only appropriate for a fair value hedge of a fixed-rate asset or liability using an interest rate swap and only if the assumption of perfect effectiveness is appropriate. The steps in the shortcut method are as follows:

- 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.
- b. Combine that difference with the variable rate to be paid 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.)
- d. 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.

Amounts determined using the shortcut method and the facts in this Example will match the amounts in paragraph 815-25-55-48 even though the shortcut does not involve explicitly amortizing the hedge accounting adjustments on the debt. That is, the quarterly adjustments of the debt and explicit amortization of previous adjustments will have the same net effect on earnings as the shortcut method.

A slightly different shortcut method for interest rate swaps used as cash flow hedges is illustrated in Example 6 (see paragraph 815-30-55-24).

On July 1, 20X1, Entity ABC borrows \$1,000,000 to be repaid on June 30, 20X3. On that same date, Entity ABC also enters into a two-year receive- fixed, pay-variable interest rate swap. Entity ABC designates the interest rate swap as a hedge of the changes in the fair value of the fixed-rate debt attributable to changes in the designated benchmark interest rate. Entity ABC designates changes in London Interbank Offered Rate (LIBOR) swap rates as the benchmark interest rate in hedging interest rate risk. The terms of the interest rate swap and the debt are as follows.

	Interest Rate Swap	Fixed-Rate Debt
Trade date and borrowing date (a)	July 1, 20X1	July 1, 20X1
Termination date and maturity date	June 30, 20X3	June 30, 20X3
Notional amount and principal amount	\$1,000,000	\$1,000,000
Fixed interest rate (a)	6.41%	6.41%
Variable interest rate	3-month USD LIBOR	Not applicable

	Interest Rate Swap	Fixed-Rate Debt
Settlement dates and interest payment dates (a)	End of each calendar quarter	End of each quarter calendar
Reset dates	End of each calendar quarter through March 31, 20X3	Not applicable

⁽a) These terms need not match for the assumption of perfect effectiveness to be appropriate. (See paragraphs 815-20-25-102 through 25-110.)

The USD LIBOR rates that are in effect at inception of the hedging relationship and at each of the quarterly reset dates are assumed to be as follows.

Reset Date	3-Month LIBOR
7/1/X1	6.41%
9/30/X1	6.48%
12/31/X1	6.41%
3/31/X2	6.32%
6/30/X2	7.60%
9/30/X2	7.71%
12/31/X2	7.82%
3/31/X3	7.42%

The following table summarizes the fair values of the debt and the interest rate swap at each quarter end, the details of the changes in the fair values during each quarter (including accrual and payment of interest, the effect of changes in rates, and level-yield amortization of hedge accounting adjustments), the expense for each quarter, and the net cash payments for each quarter. The calculations of fair value of both the debt and the interest rate swap are made using LIBOR. (A discussion of the appropriate discount rate appears in paragraph 815- 20-25-111.)

	Fixed-Rate Debt	Interest Rate Swap	Expense	Net Payment
July 1, 20X1	(\$1,000,000)	\$ -		
Interest accrued	(16,025)	-	(\$16,025)	
Payments (receipts)	16,025	-		\$16,025
Effect of change in rates	1,149	(1,149)	-	
September 30, 20X1	(998,851)	(1,149)	(\$16,025)	\$16,025
Interest accrued	(16,025)	(19)	(\$16,044)	
Payments (receipts)	16,025	175		\$16,200
Amortization of basis adjustments	(156)	-	(156)	
Effect of change in rates	(993)	993	-	
December 31, 20X1	(1,000,000)	-	(\$16,200)	\$16,200
Interest accrued	(16,025)	-	(\$16,025)	
Payments (receipts)	16,025	-		\$16,025
Amortization of basis adjustments	-	-	-	
Effect of change in rates	(1,074)	1,074	-	
March 31, 20X2	(1,001,074)	1,074	(\$16,025)	\$16,025

	Fixed-Rate Debt	Interest Rate Swap	Expense	Net Payment
Interest accrued	(16,025)	17	(\$16,008)	
Payments (receipts)	16,025	(225)		\$15,800
Amortization of basis adjustments	208	-	208	
Effect of change in rates	12,221	(12,221)	-	
June 30, 20X2	(988,645)	(11,355)	(\$15,800)	\$15,800
Interest accrued	(16,025)	(216)	(\$16,241)	
Payments (receipts)	16,025	2,975		\$19,000
Amortization of basis adjustments	(2,759)	-	(2,759)	
Effect of change in rates	789	(789)	-	
September 30, 20X2	(990,615)	(9,385)	(\$19,000)	\$19,000
Interest accrued	(16,025)	(181)	(\$16,206)	
Payments (receipts)	16,025	3,250		\$19,275
Amortization of basis adjustments	(3,069)	-	(3,069)	
Effect of change in rates	532	(532)	-	
December 31, 20X2	(993,152)	(6,848)	(\$19,275)	\$19,275
Interest accrued	(16,025)	(134)	(\$16,159)	
Payments (receipts)	16,025	3,525		\$19,550
Amortization of basis adjustments	(3,391)	-	(3,391)	
Effect of change in rates	(978)	978	-	
March 31, 20X3	(997,521)	(2,479)	(\$19,550)	\$19,550
Interest accrued	(16,025)	(46)	(\$16,071)	
Payments (receipts)	1,016,025	2,525		\$1,018,550
Amortization of basis adjustments	(2,479)	-	(\$2,479)	
June 30, 20X3	\$ -	\$ -	(\$18,550)	\$1,018,550

The preceding table demonstrates two important points that explain why the shortcut method described in paragraphs 815-25-55-43 through 55-45 produces the same results as the computation in the preceding table if the hedging relationship is perfectly effective:

- a. In every quarter, the effect of changes in rates on the interest rate swap completely offsets the effect of changes in rates on the debt. That is as expected because the hedge is perfectly effective.
- b. In every quarter except the last when the principal is repaid, the expense equals the cash payment.

The following table illustrates the computation of interest expense using the shortcut method described in paragraphs 815-25-55-43 through 55-45. The results are the same as the results computed in the preceding table.

Quarter Ended	(a) Difference between Fixed Rates	(b) Variable Rate on Swap	(c) Sum (a) + (b)	(d) Debt's Principal Amount	(e) Interest Expense ([c] × [d]) ÷ 4
September 30, 20X1	0.00%	6.41%	6.41%	\$1,000,000	\$16,025
December 31, 20X1	0.00%	6.48%	6.48%	1,000,000	16,200
March 31, 20X2	0.00%	6.41%	6.41%	1,000,000	16,025
June 30, 20X2	0.00%	6.32%	6.32%	1,000,000	15,800
September 30, 20X2	0.00%	7.60%	7.60%	1,000,000	19,000
December 31, 20X2	0.00%	7.71%	7.71%	1,000,000	19,275
March 31, 20X3	0.00%	7.82%	7.82%	1,000,000	19,550
June 30, 20X3	0.00%	7.42%	7.42%	1,000,000	18,550

As stated in the introduction to this Example, a flat yield curve is assumed for simplicity. An upwardsloping yield curve would have made the computations more complex. Paragraph 815-25-55-47 would have shown different interest rates for each quarterly repricing date, and the present value of each future payment would have been computed using a different rate (as described in paragraph 815-25-55-41). However, the basic principles are the same. As long as the hedging relationship meets the criteria for the shortcut method, perfect effectiveness can be assumed.

In this Example of a fair value hedge of fixed-rate interest-bearing debt, it is assumed that Entity ABC elects to immediately begin amortizing the adjustments of the carrying amount of the fixed-rate debt while the hedge is still in place. Because the change in fair value of the interest rate swap attributable to the passage of time is recognized as interest expense by Entity ABC, the amounts recorded as expenses in the table in paragraph 815-25-55-48 would be eligible for capitalization under Subtopic 835-20.

RSM commentary: While in this example Entity ABC elected to immediately amortize fair value hedge accounting adjustments to the carrying amount of the debt it was hedging, this is not required. As an alternative, Entity ABC could have elected to defer amortization of these basis adjustments until the termination of the hedge. Refer to Section 5.2.1 for additional discussion of this matter.

Example 3.3.11: Fair value hedge of the LIBOR swap rate in a \$100,000 BBB-quality 5-year fixedrate noncallable note (from ASC 815-25-55-53 to 55-61C)

This Example illustrates one method that could be used pursuant to paragraph 815-20-25-12(f)(2) in determining the hedged item's change in fair value attributable to changes in the benchmark interest rate. Other methods could be used in determining the hedged item's change in fair value attributable to changes in the benchmark interest rate as long as those methods meet the criteria in that paragraph. For simplicity, commissions and most other transaction costs, initial margin, and income taxes are ignored unless otherwise stated. Assume that there are no changes in creditworthiness that would alter the effectiveness of the hedging relationship.

On January 1, 20X0, Entity GHI issues at par a \$100,000 BBB- quality 5-year fixed-rate noncallable debt instrument with an annual 10 percent interest coupon. On that date, Entity GHI enters into a 5year 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, Entity GHI 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. This Example has been 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 date (that is, the yield curve is flat). During the hedge period, the gain or loss on the interest rate swap will be recorded in earnings. The Example

assumes that immediately before the interest rate on the variable leg resets on December 31, 20X0, the LIBOR swap rate increased by 50 basis points to 7.50 percent, and the change in fair value of the interest rate swap for the period from January 1 to December 31, 20X0, is a loss in value of \$1,675.

Under this method, the change in a hedged item's fair value attributable to changes in the benchmark interest rate for a specific period is determined as the difference between two present value calculations that use the remaining cash flows as of the end of the period and reflect in the discount rate the effect of the changes in the benchmark interest rate during the period.

Both present value calculations are computed using the estimated future cash flows for the hedged item, which would be either its remaining contractual coupon cash flows or the LIBOR benchmark rate component of the remaining contractual coupon cash flows determined at hedge inception as illustrated by the following Cases:

- a. Using the full contractual coupon cash flows (Case A)
- b. Using the LIBOR benchmark rate component of the contractual coupon cash flows (Case B).

This Example illustrates two approaches for computing the change in fair value of the hedged item attributable to changes in the benchmark interest rate. This Subtopic does not specify the discount rate that must be used to calculate the change in fair value of the hedged item.

In Cases A and B in this Example, Entity GHI presents the total change in the fair value of the hedging instrument (that is, the interest accruals and all other changes in fair value) in the same income statement line item (in this case, interest expense) that is used by Entity GHI to present the earnings effect of the hedged item before applying hedge accounting in accordance with paragraph 815- 20-45-1A.

Case A: Using the Full Contractual Coupon Cash Flows

In this Case, assume Entity GHI elected to calculate the change in the fair value of the hedged item attributable to interest rate risk on the basis of the full contractual coupon cash flows of the hedged item. Accordingly, both present value calculations in accordance with paragraph 815-25-55-55 are computed using the remaining contractual coupon cash flows as of the end of the period and the discount rate that reflects the change in the designated benchmark interest rate during the period. The method chosen by Entity GHI in this Case requires that the discount rate be based on the market interest rate for the hedged item at the inception of the hedging relationship. The discount rates used for those present value calculations would be, respectively:

- a. 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 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 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 fair value is being calculated.

Entity GHI elected to subsequently assess hedge effectiveness on a quantitative basis. In Entity GHI's quarterly assessments of hedge effectiveness for each of the first three quarters of year 20X0 in this Example, there was zero change in the hedged item's fair value attributable to changes in the benchmark interest rate because there was no change in the LIBOR swap rate. However, in the assessment for the fourth quarter 20X0, the discount rate for the beginning of the period is 10 percent (the hedged item's original market interest rate with an adjustment of zero), and the discount rate for the end of the period is 10.50 percent (the hedged item's original market interest rate adjusted for the change during the period in the LIBOR swap rate [+ 0.50 percent]).

December 31, 20X0						
Calculate the present value using the beginning-of-period discount rate of 10 percent:						
\$10,000pmt, 10%i, 4n, PV =	\$31,699	(interest payments)				
\$100,000fv, 10%i, 4n, PV =	\$68,301	(principal payment)				
Total present value	\$100,000					

Calculate the present value using the end-of-period discount rate of 10.50 percent (that is, the beginning-of-period discount rate adjusted for the change during the period in the LIBOR swap rate of 50 basis points).

\$10,000pmt, 10.50%i, 4n, PV =	\$31,359	(interest payments)
\$100,000fv, 10.50%i, 4n, PV =	\$67,073	(principal payment)
Total present value	\$98,432	

The change in fair value of the hedged item attributable to the change in the benchmark interest rate is \$100,000 - \$98,432 = \$1,568 (the fair value decrease in the liability is a gain on debt).

When the change in fair value of the hedged item (\$1,568 gain) attributable to the risk being hedged is compared with the change in fair value of the hedging instrument (\$1,675 loss), a mismatch of \$107 results that will be reported in earnings, because both changes in fair value are recorded in earnings. The change in the fair value of the hedging instrument will be presented in the same income statement line item as the earnings effect of the hedged item in accordance with paragraph 815-20-45-1A.

Case B: Using the LIBOR Benchmark Rate Component of the Contractual Coupon Cash Flows

In this Case, assume Entity GHI elected to calculate the change in the fair value of the hedged item attributable to interest rate risk on the basis of the benchmark rate component of the contractual coupon cash flows determined at hedge inception. Accordingly, both present value calculations in accordance with paragraph 815-25-55-55 are computed using the remaining benchmark rate component of contractual coupon cash flows as of the end period and the discount rate that reflects the change in the designated benchmark rate during the period. The discount rates used by Entity GHI in this Case would be, respectively:

- The benchmark rate (designated as the interest rate risk being hedged) as of the beginning date of the period for which the change in fair value is being calculated
- The designated benchmark rate as of the ending date of the period for which the change in fair value is being calculated.

Entity GHI elected to subsequently assess hedge effectiveness on a quantitative basis. In Entity GHI's quarterly assessments of hedge effectiveness for each of the first three quarters of year 20X0, there was no change in the hedged item's fair value attributable to changes in the benchmark interest rate because there was no change in the LIBOR swap rate. However, in the assessment for the fourth quarter 20X0, the discount rate for the beginning of the period is 7 percent, and the discount rate for the end of the period is 7.50 percent reflecting the change during the period in the LIBOR swap rate. The change in fair value of the hedged item attributable to the change in the benchmark interest risk for the period January 1, 20X0, to December 31, 20X0, is a gain of \$1,675, calculated as follows.

December 31, 20X0					
Calculate the present value using the beginning-of-period benchmark interest rate:					
\$7,000pmt, 7%i, 4n, PV =	\$23,710	(benchmark component of coupon payments)			
\$100,000fv, 7%i, 4n, PV =	76,290	(principal payment)			
Total present value	100,000				

Calculate the present value using the end-of-period benchmark interest rate:						
\$7,000pmt, 7.50%i, 4n, PV =	23,445	(benchmark component of coupon payments)				
\$100,000fv, 7.50%i, 4n, PV =	74,880	(principal payment)				
Total present value	98,325					
Change in value	\$1,675					

Because the change in fair value of the hedged item (\$1,675 gain) attributable to the risk being hedged is the same as the change in fair value of the hedging instrument (\$1,675 loss), there is perfect offset and, therefore, a zero net earnings effect.

Example 3.3.12: Interaction with loan impairment (before adoption of ASU 2016-13) and interaction with measurement of credit losses (after adoption of ASU 2016-13) (from ASC 815-25-55-85 to 55-93)

The tracked changes in this example (additions are presented as underlined content and deletions are presented as struck-through content) show pending content that is in effect upon the adoption of ASU 2016-13).

This Example illustrates the application of paragraph 815-25-35-11 involving the interaction of hedge accounting and loan impairment accounting measurement of credit losses in Subtopic 326-20 on financial instruments measured at amortized cost. The following Cases also illustrate the effect of the two approaches to calculate the change in the fair value of the hedged item attributable to interest rate risk discussed in paragraph 815-25-35-13 on that interaction, as follows:

- a. Using the full contractual coupon cash flows (Case A)
- b. Using the benchmark rate component of the contractual coupon cash flows (Case B).

Entity A formally documents a qualifying fair value hedge (for fair value changes attributable to changes in the designated benchmark interest rate) between a fixed-rate loan receivable from Entity B and an interest rate swap. The 5-year, fixed-rate loan to Entity B has a principal amount of \$1,000,000 payable at maturity and interest payable annually at a 10 percent rate. For simplicity, commissions and most other transaction costs, initial margin, and income taxes are ignored unless otherwise stated. Assume that there are no changes in creditworthiness that would alter the effectiveness of the hedging relationship.

One year after inception of the hedging relationship, the following conditions exist:

- a. Subparagraph superseded by Accounting Standards Update No 2017-12.
- b. There has been an adverse change to Entity B's creditworthiness.
- The LIBOR swap rate (the designated benchmark interest rate) has decreased from 6 percent to 5.5 percent.

Assume that the repayment of the loan is not dependent on the underlying collateral. In applying the requirements of Subtopic 310-10 326-20 to the loan, Entity A evaluates the loan for credit losses on an individual basis because it does not have similar risk characteristics with other loans in the portfolio and uses a discounted cash flow approach. Entity A determines that the loan is impaired and that the present value of expected future cash flows discounted at the loan's effective interest rate at inception of the loan is \$930,000. (See row C in the table in paragraph 815-25-55-90, which presents calculations—at the end of the first year of the loan's term—of the net present value of current estimates of expected future cash flows based on the loan's original effective interest rate.)

Case A: Using the Full Contractual Coupon Cash Flows

In this Case, assume that the entity elected to calculate fair value changes in the hedged item attributable to interest rate risk using the full contractual coupon cash flows of the hedged item. One year after inception of the hedging relationship, the change in the hedged item's fair value attributable to changes in the LIBOR swap rate (the designated benchmark interest rate) is a gain of \$16,022. (See row B in the table in paragraph 815-25-55-90, which presents calculations—at the end of the first year of the loan's term—of the net present value of contractual cash flows based on the loan's original effective interest rate adjusted for a 50 basis point decrease in the LIBOR swap rate.)

After adjusting the carrying amount amortized cost basis of the hedged loan by \$16,022 (pursuant to paragraph 815-25-35-1(b)) for the increase in the hedged item's fair value attributable to changes in the benchmark interest rate, Entity A should apply the guidance in Section 310-10-35 Subtopic 326-20 by doing both of the following:

- a. Comparing the recorded investment amortized cost basis of the loan after the effect of the fair value hedge, or \$1,016,022, to the \$944,901 present value of expected future cash flows discounted using the rate that reflects the rate of return implicit in the loan after adjusting the carrying amount amortized cost basis of the hedged loan pursuant to paragraph 815-25-35-1(b) (that is, 9.5 percent)
- b. Recognizing an impairment by creating a valuation allowance for credit losses (with the offsetting entry charged to expense) for the difference of \$71,121 (\$1,016,022 \$944,901).

Following are calculations (at the end of the first year of the loan's term) of the net present value of the contractual cash flows and the creditor's best estimate of expected future cash flows based on the loan's original effective interest rate and the new implicit rate.

		Net Present	A:	ssumed Cas	h Flow in Y	ear
	Rate	Value at End of Year 1	2	3	4	5
A. Original cash flows and original effective	40.00/	# 4 000 000	# 400,000	# 400,000	# 400.000	#4 400 000
rate	10.0%	\$1,000,000	\$100,000	\$100,000	\$100,000	\$1,100,000
B. Original cash flows and new implicit rate	9.5%	\$1,016,022	\$100,000	\$100,000	\$100,000	\$1,100,000
C. Expected future cash flows and original effective rate	10.0%	\$930,000	\$93,000	\$93,000	\$93,000	\$1,023,000
D. Expected future cash flows and new implicit rate	9.5%	\$944,901	\$93,000	\$93,000	\$93,000	\$1,023,000

Case B: Using the Benchmark Rate Component of the Contractual Coupon Cash Flows

In this Case, assume that Entity A elected to calculate fair value changes in the hedged item attributable to interest rate risk using the benchmark rate component of the contractual coupon cash flows of the hedged item determined at hedge inception. One year after inception of the hedging relationship, the change in the hedged item's fair value attributable to changes in the LIBOR swap rate (the designated benchmark interest rate) is a gain of \$17,526, which is calculated as follows.

At the beginning of the loan's term	
\$60,000pmt, 6%i, 5n, 1,000,000fv, PV =	\$1,000,000
At the end of the first year of the loan's term	
\$60,000pmt, 5.5%i, 4n, 1,000,000fv, PV =	1,017,526
Change in value	(\$17,526)

After adjusting the carrying amount amortized cost basis of the hedged loan by \$17,526 (in accordance with paragraph 815-25-35-1(b)) for the increase in the hedged item's fair value attributable to changes in the benchmark interest rate, Entity A should apply the guidance in Section 310-10-35 Subtopic 326-20 by doing both of the following:

- a. Comparing the recorded investment amortized cost basis of the loan after the effect of the fair value hedge, or \$1,017,526, to the \$946,299 present value of expected future cash flows discounted using the rate that reflects the rate of return implicit in the loan after adjusting the carrying amount amortized cost basis of the hedged loan in accordance with paragraph 815-25-35-1(b) (that is, 9.45 percent that equates the adjusted carrying amount amortized cost basis of the loan with the present value of the contractual cash flows of the loan)
- b. Recognizing an impairment by creating a valuation allowance for credit losses (with the offsetting entry charged to expense) for the difference of \$71,227 (\$1,017,526 \$946,299).

Following are calculations (at the end of the first year of the loan's term) of the net present value of the benchmark rate component of the contractual cash flows and the creditor's best estimate of expected future cash flows based on the loan's original effective interest rate and the new implicit rate. In row B, the net present value at the end of the first year is equal to the net present value of the benchmark rate component of the contractual coupon cash flows discounted at the 5.5 percent benchmark rate.

			Net Present	Α	ssumed Cas	h Flow in Ye	ear
		Rate	Value at End of Year 1	2	3	4	5
A.	Original cash flows and original effective rate	10.00%	\$1,000,000	\$100,000	\$100,000	\$100,000	\$1,100,000
B.	Original cash flows and new implicit rate	9.45%	\$1,017,526	\$100,000	\$100,000	\$100,000	\$1,100,000
C.	Expected future cash flows and original effective rate	10.00%	\$930,000	\$93,000	\$93,000	\$93,000	\$1,023,000
D.	Expected future cash flows and new implicit rate	9.45%	\$946,299	\$93,000	\$93,000	\$93,000	\$1,023,000

Example 3.3.13: Fair value hedge of interest rate risk using the partial-term approach (from ASC 815-25-55-94 to 55-99)

This Example illustrates the application of paragraphs 815-20-25- 12(b)(2)(ii) and 815-25-35-13B to the designation and measurement of a hedged item as a portion of the term of a financial instrument in a hedge of interest rate risk. Assume that Entity S elected to calculate fair value changes in the hedged item attributable to interest rate risk on the basis of the benchmark rate component of the contractual coupon cash flows of the hedged item determined at hedge inception.

On January 1, 20X1, Entity S issues a noncallable, 5-year, \$100 million debt instrument with a 3 percent semiannual interest coupon. On that date, the issuer also enters into a 2-year interest rate swap with a notional amount of \$100 million. Entity S designates the swap as a fair value hedge of the fixed-rate debt attributable to interest rate risk for the first two years of its term in accordance with the guidance in paragraph 815-20-25-12(b)(2)(ii). The swap pays LIBOR and receives a fixed rate of 2 percent, with semiannual payments. The swap has a fair value of zero at inception. The designated

benchmark interest rate is the LIBOR swap rate. For ease of calculation, the yield curve is assumed to be flat at the level of the current benchmark interest rate. For simplicity, commissions and most other transaction costs, initial margin, and income taxes are ignored unless otherwise stated. Assume that there are no changes in creditworthiness that would alter the effectiveness of the hedging relationship.

This Example assumes that the LIBOR swap rate increased by 50 basis points to 2.5 percent on June 30, 20X1. The change in fair value of the interest rate swap for the period January 1, 20X1, to June 30, 20X1, is a loss in value of \$731,633.

In calculating the change in fair value of the debt attributable to changes in the benchmark interest rate in accordance with paragraph 815-25-35-13B, Entity S determines that the assumed term of the hedged item is two years because it is hedging only the cash flows associated with the first two years of its debt issuance. The change in fair value of the debt attributable to changes in the benchmark interest rate for the period January 1, 20X1, to June 30, 20X1, is a gain of \$731,633, calculated as follows.

January 1, 20X1—beginning balance	
\$1,000,000pmt, 1.00%i, 4n, 100,000,000fv, PV =	\$100,000,000
June 30, 20X1—ending balance	
\$1,000,000pmt, 1.25%i, 3n, 100,000,000fv, PV =	99,268,367
Change in value	\$731,633

As of June 30, 20X1, the change in fair value of the debt attributable to the benchmark interest rate is calculated by discounting the benchmark rate component of the contractual coupon cash flows using the benchmark interest rate at June 30, 20X1 (2.5 percent annual rate and 1.25 percent for each semiannual period). The change in fair value of the debt and the change in fair value of the swap result in perfect offset in current-period earnings. In accordance with paragraph 815-20-45-1A, Entity S presents the total change in the fair value of the hedging instrument (that is, the interest accruals and all other changes in fair value) in the same income statement line item (in this case, interest expense) that is used by Entity S to present the earnings effect of the hedged item before applying hedge accounting.

Although this Example illustrates the hedged item as the first two years of interest payments associated with an existing debt instrument, paragraph 815-20-25-12(b)(2)(ii) permits one interest payment or any consecutive interest payments associated with an existing debt instrument to be designated as the hedged item. An entity also may have one or more separately designated partial-term hedging relationships outstanding at the same time for the same debt instrument. For example, an entity may have 2 outstanding hedging relationships for consecutive interest cash flows in Years 1 and 2 and consecutive interest cash flows in Years 4 and 5 of the 5-year debt instrument.

RSM commentary: While this example indicates it is permissible to hedge multiple partial-terms within a single debt instrument, the ability to hedge multiple layers does not at this time extend to the last-of-layer method discussed at Section 3.2.2.1.1. This will be considered as part of a separate project.

Example 3.3.14: Fair value hedge of the LIBOR swap rate in a \$100 million A1-quality 5-year fixed-rate noncallable debt (from ASC 815-25-55-100 to 55-108)

The following Cases illustrate application of the guidance in Sections 815-20-25, 815-20-35, and 815-25-35 to a fair value hedge of the LIBOR swap rate in a \$100 million A1-quality 5-year fixed-rate noncallable debt:

- a. Using the full contractual coupon cash flows (Case A)
- b. Using the benchmark rate component of the contractual coupon cash flows (Case B).

On July 2, 20X0, Entity XYZ issues at par a \$100 million A1-quality 5-year fixed-rate noncallable debt instrument with an annual 8 percent interest coupon payable semiannually. On that date, Entity XYZ enters into a 5-year interest rate swap based on the LIBOR swap rate and designates it as the hedging instrument in a fair value hedge of interest rate risk of the \$100 million liability. Under the terms of the interest rate swap, Entity XYZ will receive a fixed interest rate at 8 percent and pay variable interest at LIBOR plus 200 basis points (current LIBOR 6 percent) on a notional amount of \$100 million (semiannual settlement and interest reset dates). For simplicity, commissions and most other transaction costs, initial margin, and income taxes are ignored unless otherwise stated. Assume that there are no changes in creditworthiness that would alter the effectiveness of the hedging relationship. The Example also assumes that the yield curve is flat and that the LIBOR swap rate increased 100 basis points to 7 percent on December 31, 20X0. The change in fair value of the interest rate swap for the period from July 2, 20X0, to December 31, 20X0, is a loss of \$3,803,843.

In both Cases A and B in this Example, Entity XYZ presents the total change in the fair value of the hedging instrument (that is, the interest accruals and all other changes in fair value) in the same income statement line item (in this case, interest expense) that is used by Entity XYZ to present the earnings effect of the hedged item before applying hedge accounting in accordance with paragraph 815-20-45-1A.

Case A: Using the Full Contractual Coupon Cash Flows

In this Case, assume that Entity XYZ elected to calculate fair value changes in the hedged item attributable to interest rate risk using the full contractual coupon cash flows of the hedged item. The change in fair value of the debt attributable to changes in the benchmark interest rate for the period July 2, 20X0, to December 31, 20X0, is a gain of \$3,634,395, calculated as follows.

July 2, 20X0—beginning balance	
\$4,000,000pmt, 4.00%i, 10n, 100,000,000fv, PV =	\$100,000,000
December 31, 20X0—ending balance	
\$1,000,000pmt, 4.5%i, 9n, 100,000,000fv, PV =	96,365,605
Change in value	\$3,634,395

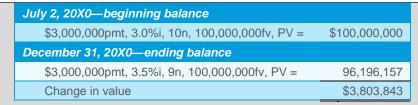
As of December 31, 20X0, the fair value of the debt attributable to interest rate risk is calculated by discounting the full contractual coupon cash flows at the debt's original market rate with a 100 basis point adjustment related to the increase in the LIBOR swap rate (50 basis point adjustment on a semiannual basis). The following journal entries illustrate the interest rate swap and debt fair value changes attributable to changes in the LIBOR swap rate.

Debt	\$3,634,395	
Interest expense		\$3,634,395
Interest expense	3,803,843	
Swap liability		3,803,843

The net earnings effect of the hedge is \$169,448 due to the mismatch between the changes in fair value of the hedging instrument and the hedged item attributable to the changes in the benchmark interest rate.

Case B: Using the Benchmark Rate Component of the Contractual Coupon Cash Flows

In this Case, assume that Entity XYZ elected to calculate fair value changes in the hedged item attributable to interest rate risk using the benchmark rate component of the contractual coupon cash flows of the hedged item determined at hedge inception. The change in fair value of the debt attributable to changes in the benchmark interest rate for the period July 2, 20X0, to December 31, 20X0, is a gain of \$3,803,843, calculated as follows.



As of December 31, 20X0, the fair value of the debt attributable to interest rate risk is calculated by discounting the benchmark rate component of the contractual coupon cash flows using the benchmark interest rate at December 31, 20X0 (7 percent annual rate; 3.5 percent for each semiannual period). The following journal entries illustrate the interest rate swap and debt fair value changes attributable to changes in the LIBOR swap rate.

Debt	\$3,803,843	
Interest expense		\$3,803,843
Interest expense	3,803,843	
Swap liability		3,803,843

The net earnings effect of the hedge is zero due to the perfect offset in fair value changes between the hedging instrument and the hedged item attributable to the changes in the benchmark interest rate.

Chapter 4: Foreign currency hedges

4.1 Overview

When hedging foreign currency exposure, entities most commonly elect hedge accounting when entering into derivatives to hedge forecasted purchases or sales that will be denominated in a foreign currency. As indicated in ASC 815-20-25-28 and elaborated on at Section 1.2.2, the following types of hedges of foreign currency exposure are permissible, assuming all relevant requirements are met:

- A fair value hedge of an unrecognized firm commitment or a recognized asset or liability, or portions thereof
- b. A cash flow hedge of any of the following:
 - 1. A forecasted transaction
 - 2. An unrecognized firm commitment
 - 3. The forecasted functional-currency-equivalent cash flows associated with a recognized asset or liability
 - 4. A forecasted intra-entity transaction.
- c. A hedge of a net investment in a foreign operation.

ASC 815-20-25-58 permits both derivative instruments and nonderivative financial instruments that may give rise to a foreign currency transaction gain or loss under ASC 830 to be designated as hedging changes in the fair value of an unrecognized firm commitment (or portion thereof) attributable to foreign currency exchange rates. Additionally, as noted at ASC 815-20-25-60, an intra-entity loan or other payable can be the designated hedging instrument in the consolidated financial statements if the member of the consolidated entity that is the counterparty to the loan enters into a third party contract that offsets the foreign exchange exposure associated with the receivable. (This is illustrated through the example at Section 4.5.5.)

4.2 Incremental requirements relevant to hedges of foreign currency exposure

In addition to the general requirements within Section 1.2 that need to be met for hedge accounting to be applied, ASC 815-20-25-30 outlines additional conditions (both [a] and [b]) that must be met for foreign currency hedges:

- a. For consolidated financial statements, either of the following conditions is met:
 - 1. The operating unit that has the foreign currency exposure is a party to the hedging instrument.
 - 2. Another member of the consolidated group that has the same functional currency as that operating unit is a party to the hedging instrument and there is no intervening subsidiary with a different functional currency. See guidance beginning in paragraph 815-20- 25-52 for conditions under which an intra-entity foreign currency derivative can be the hedging instrument in a cash flow hedge of foreign exchange risk.
- b. The hedged transaction is denominated in a currency other than the hedging unit's functional currency.

For hedge accounting purposes, foreign currency exposure is assessed at the operating unit level to be consistent with the functional currency concept of ASC 830. ASC 830 requires assets and liabilities that are denominated in a foreign currency to be remeasured in the operating unit's functional currency, resulting in exchange gains and losses, and therefore foreign currency exposure, for the unit, but not for the parent entity, if the parent entity has a different functional currency than the unit.

While (as previously mentioned) the operating unit with the foreign currency exposure is required to be a party to the hedging instrument, it is permissible to use an intra-entity hedging instrument between the

subsidiary and the parent entity, as the designated hedging instrument in the consolidated financial statements as long as the parent entity enters into an offsetting contract with an unrelated third party pursuant to ASC 815-20-25-52 to hedge the exposure it acquired from the intra-entity derivative instrument. This is illustrated through the example at Section 4.5.5.

Additionally, as is more fully elaborated on at ASC 815-20-25-32, a parent or other member of a consolidated group that has the same functional currency as the subsidiary with the foreign currency exposure is permitted, subject to certain restrictions, to enter into a derivative or nonderivative instrument that is designated as the hedging instrument in a hedge of the subsidiary's foreign exchange risk in the consolidated financial statements.

4.2.1 Additional requirements for cash flow hedge of foreign exchange risk

4.2.1.1 Hedging a group of forecasted transactions

It is not uncommon to hedge a group of forecasted foreign-currency-denominated transactions, such as a stated amount of sales denominated in a specific currency. As indicated at ASC 815-20-25-39, the group of hedged transactions cannot include both forecasted inflows (e.g., sales) and forecasted outflows (e.g., purchases) of a foreign currency.

4.2.1.2 Hedging all variability in functional-currency-equivalent cash flows

When 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 needs to be eliminated by the hedge. This does not mean that the hedge needs to be perfectly effective, but rather, be structured to eliminate all risks associated with variability in functional-currency-equivalent cash flows (e.g., changes attributable to both changes in foreign currency rates and interest rates) and be highly effective. This concept is further illustrated through Examples 4.5.2 and 4.5.9.

If this and other relevant requirements are met, ASC 815-20-25-41 indicates that when hedging the variability in the functional-currency-equivalent cash flows associated with a foreign-currency-denominated asset or liability, the hedged item can be designated as all or any fixed portion of principal or interest, or select payments of both principal and interest. Hedging portions of a foreign-currency-denominated asset or liability is illustrated through the example at Section 4.5.4.

In light of the requirement to hedge all the variability in functional-currency-equivalent cash flows, if a hedged foreign-currency-denominated asset or liability pays interest at a variable rate and the hedged transactions include interest payments, the hedging instrument would need to be a cross-currency interest rate swap to eliminate the variability in functional-currency-equivalent cash flows attributable to both changes in foreign currency rates and interest rates. (In other words, a simple foreign currency derivative contract would not suffice as it would not eliminate the variability in functional-currency-equivalent cash flows associated with changes in interest rates.)

4.2.1.3 Hedging foreign exchange risk associated with a firm commitment

As indicated previously, forecasted transactions can be designated as the hedged item in a cash flow hedge of foreign exchange risk. While a forecasted transaction is defined in the Master Glossary of the ASC as a "transaction that is expected to occur for which there is no firm commitment," a firm commitment that is denominated in a foreign currency presents exposure to variability in functional-currency-equivalent cash flows and is therefore eligible to be designated as the hedged item in a cash flow hedge of foreign exchange risk. This is elaborated on at ASC 815-20-25-42 and illustrated at Example 4.5.3.

4.3 Hedging foreign currency exposure associated with receivables or payables resulting from hedged forecasted sales or purchases

As noted in ASC 815-20-25-28, foreign-currency-denominated receivables and payables are eligible hedged items, including those that result from a hedged forecasted purchase or sale. ASC 815-20-25-34 outlines two different alternatives to structure a hedge or hedges to address the exposure related to both a forecasted purchase or sale and its associated payable or receivable as follows:

- a. 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 or payable resulting from a forecasted sale or purchase on credit
- b. Both of the following separate hedges:
 - A cash flow hedge of the variability of functional currency cash flows attributable to foreign exchange risk related to a forecasted foreign-currency-denominated sale or purchase on credit
 - 2. A foreign currency fair value hedge of the resulting recognized foreign-currency-denominated receivable or payable.

If alternative (b) is selected, the cash flow hedge would be dedesignated and terminated when the hedged sale or purchase occurs. The same derivative could potentially be used for both the cash flow and fair value hedge if the criteria for high effectiveness are met.

ASC 815-30-35-9 elaborates on how the preceding guidance is applied in the context of a single cash flow hedge as follows:

- a. The gain or loss on the derivative instrument that is included in the assessment of hedge effectiveness is reported in other comprehensive income during the period before the forecasted purchase or sale.
- b. The functional currency interest rate implicit in the hedging relationship as a result of entering into the forward contract is used to determine the amount of cost or income to be ascribed to each period of the hedging relationship. The cash flow hedging model for recognized foreign-currencydenominated assets and liabilities requires use of the interest method at the inception of the hedging relationship to determine the amount of cost or income to be ascribed to each relevant period of the hedging relationship. However, for simplicity, in hedging relationships in which the hedged item is a short-term non-interest-bearing account receivable or account payable, the amount of cost or income to be ascribed each period can also be determined using a pro rata method based on the number of days or months of the hedging relationship. In addition, in a shortterm single cash flow hedging relationship that encompasses the variability of functional-currencyequivalent cash flows attributable to foreign exchange risk related to the settlement of a foreigncurrency-denominated receivable or payable resulting from a forecasted sale or purchase on credit, the amount of cost or income to be ascribed each period can also be determined using a pro rata method or a method that uses two foreign currency forward exchange rates. The first foreign currency forward exchange rate would be based on the maturity date of the forecasted purchase or sale transaction. The second foreign currency forward exchange rate would be based on the settlement date of the resulting account receivable or account payable.
- c. For forecasted sales on credit, the amount of cost or income ascribed to each forecasted period is reclassified from other comprehensive income to earnings on the date of the sale. For forecasted purchases on credit, the amount of cost or income ascribed to each forecasted period is reclassified from other comprehensive income to earnings in the same period or periods during which the asset acquired affects earnings. The reclassification from other comprehensive income to earnings of the amount of cost or income ascribed to each forecasted period is based on the guidance in paragraphs 815-30-35-38 through 35-41.

d. The income or cost ascribed to each period encompassed within the periods of the recognized foreign-currency-denominated receivable or payable is reclassified from other comprehensive income to earnings at the end of each reporting period.

This guidance is illustrated through Example 4.5.11.

4.4 Accounting for net investment hedges

Similar to a cash flow hedge, hedge accounting for a net investment hedge minimizes earnings volatility because changes in the fair value of the derivative or other hedging instrument are recognized in other comprehensive income and reclassified into earnings when the hedged transaction impacts earnings.

Specifically, the accounting for a net investment hedge is outlined in ASC 815-35 and summarized as follows:

- All changes in the fair value of a derivative that are included in the assessment of hedge
 effectiveness are recognized in other comprehensive income as part of the cumulative translation
 adjustment.
- If an election was made to assess effectiveness on an after-tax basis, the portion of the gain or loss on the hedging instrument in excess of the loss or gain on the hedged item is recognized as an offset to the related tax effects when recognized.
- Any components that are excluded from the assessment of effectiveness are recognized in earnings (in the same income statement line item in which the income statement effects of the hedged item are reported), either through an amortization or mark-to-market approach. When a hedge is discontinued, any amounts that have not yet been recognized in earnings should remain in the cumulative translation adjustment section of accumulated other comprehensive income until the hedged net investment is sold or liquidated. Any difference between the change in fair value of the excluded component and amounts recognized in earnings under a systematic and rational method is also reported in the cumulative translation adjustment section of other comprehensive income.
- The gain or loss in other comprehensive income associated with amounts included in the assessment
 of hedge effectiveness is reclassified into earnings (in the same income statement line item as the
 effect of the hedged item) in the same period or periods during which the hedged forecasted
 transaction affects earnings.
- The hedged net investment should be accounted for in accordance with ASC 830.

When a method based on changes in spot rates is used to assess effectiveness, the change in fair value of the derivative instrument attributable to changes in the spot rate is reported in the cumulative translation adjustment section of other comprehensive income on an undiscounted basis. When a method based on changes in forward exchange rates is used, all changes in the fair value of the derivative instrument (including the time value component of purchased options) are reported in the cumulative translation adjustment section of other comprehensive income.

The interest accrual (periodic cash settlement) components of qualifying receive-variable-rate, pay-variable-rate and receive-fixed-rate, pay-fixed-rate cross-currency interest rate swaps are also reported directly in earnings.

When the hedging instrument is not a derivative, the translation gain or loss is determined in accordance with ASC 830-30, with reference to the spot exchange rate between the transaction currency of the debt and the functional currency of the investor (after tax effects, if appropriate) and reported in the cumulative translation adjustment section of other comprehensive income.

Example 4.5.1 illustrates hedging a net investment with a foreign-currency-denominated debt instrument.

4.5 Foreign currency hedge examples

The following select examples related to foreign currency hedges are from the implementation guidance in ASC 815.

Index of examples

- 4.5.1 Foreign-currency-denominated debt instrument as both hedging instrument and hedged item
- 4.5.2 Eliminating all variability in cash flows
- 4.5.3 Hedging a firm commitment or fixed-price agreement denominated in a foreign currency
- 4.5.4 Portions of a foreign-currency-denominated financial asset or liability as a hedged item
- 4.5.5 Designation of an intra-entity loan or other payable as the hedging instrument in a fair value hedge of an unrecognized firm commitment
- 4.5.6 Fair value hedge of a firm commitment denominated in a foreign currency with a forward to purchase a different foreign currency
- 4.5.7 Effectiveness of cash flow hedge of forecasted sale with a forward contract
- 4.5.8 Cash flow hedge of the foreign currency exposure in a royalty arrangement
- 4.5.9 Cash flow hedge of a fixed-rate foreign-currency-denominated loan eliminating variability in the functional-currency-equivalent cash flows (fixed-to-fixed scenario)
- 4.5.10 Reclassifying amounts from a cash flow hedge of a forecasted foreign-currency-denominated intra-entity sale
- 4.5.11 Cash flow hedge of forecasted sale or purchase on credit
- 4.5.12 Hedge accounting in the consolidated financial statements applied to internal derivatives that are offset on a net basis by third-party contracts

Example 4.5.1: Foreign-currency-denominated debt instrument as both hedging instrument and hedged item (from ASC 815-20-55-127 to 55-129)

This Example illustrates the application of paragraph 815-20-55-38. A U.S. parent entity (Parent A) with a U.S. dollar (USD) functional currency has a German subsidiary that has the Euro (EUR) as its functional currency. On January 1, 2001, Parent A issues a five-year, fixed-rate EUR-denominated debt instrument and designates that EUR-denominated debt instrument as a hedge of its net investment in the German subsidiary. On the same date, Parent A enters into a five-year EUR-denominated receive-fixed, pay-Euribor-interest rate swap. Parent A designates the interest rate swap as a hedge of the foreign-currency-denominated fair value of the fixed-rate EUR-denominated debt instrument attributable to changes in Euribor interest rates, which is considered the benchmark interest rate for a hedge of the EUR-denominated fair value of that instrument.

As permitted by paragraph 815-20-55-38, Parent A may designate the EUR-denominated debt instrument as a hedge of its net investment in the German subsidiary and also as the hedged item in a fair value hedge of the debt instrument's foreign-currency-denominated fair value attributable to changes in the designated benchmark interest rate. As a result of applying fair value hedge accounting, the debt's carrying amount will be adjusted to reflect changes in its foreign-currency-denominated fair value attributable to interest rate risk. The notional amount of the debt that is designated as the hedging instrument in the net investment hedge will change over time such that it may not match the notional amount of the hedged net investment. The entity then applies the net investment hedge guidance in Subtopic 815-25. As discussed in paragraphs 815-35-35-13 through 35-14, because the notional amount of the nonderivative instrument designated as a hedge of the net investment does not match the portion of

the net investment designated as being hedged, hedge effectiveness is assessed by comparing the following two values:

- a. The foreign currency transaction gain or loss based on the spot rate change (after tax effects, if appropriate) of that nonderivative hedging instrument
- b. The transaction gain or loss based on the spot rate change (after tax effects, if appropriate) that would result from the appropriate hypothetical nonderivative instrument that has a notional amount that matches the portion of the net investment being hedged. The hypothetical nonderivative instrument also would have a maturity that matches the maturity of the actual nonderivative instrument designated as the net investment hedge.

Example 4.5.2: Eliminating all variability in cash flows (from ASC 815-20-55-132 to 55-135)

The following Cases illustrate the application of paragraph 815-20-25-39(d) regarding whether all the variability in a hedged item's functional-currency-equivalent cash flows are eliminated by the effect of the hedge:

- a. Difference in optionality (Case A)
- b. Difference in reset dates (Case B)
- c. Difference in notional amounts (Case C).

Case A: Difference in Optionality

An entity has issued a fixed-rate foreign-currency-denominated debt obligation that is callable (that is, by that entity) and desires to hedge its foreign currency exposure related to that obligation with a fixed-to-fixed cross-currency swap. A fixed-to-fixed currency swap could be used to hedge the fixed-rate foreign-currency-denominated debt instrument that is callable even though the swap does not contain a mirror-image call option as long as the terms of the swap and the debt instrument are such that they would be highly effective at providing offsetting cash flows and as long as it was probable that the debt instrument would not be called and would remain outstanding.

Case B: Difference in Reset Dates

An entity has issued a variable-rate foreign-currency-denominated debt obligation and desires to hedge its foreign currency exposure related to that obligation. The entity uses a variable-to-fixed cross-currency interest rate swap in which it receives the same foreign currency based on the variable rate index contained in the debt obligation and pays a fixed amount in its functional currency. If the swap would otherwise meet this Subtopic's definition of providing high effectiveness in hedging the foreign currency exposure of the debt instrument, but there is a one day difference between the reset dates in the debt obligation and the swap (that is, the one day difference in reset dates results in the hedge being highly effective, but not perfectly effective), the variable-to-fixed cross-currency interest rate swap could be used to hedge the variable-rate foreign-currency-denominated debt instrument even though there is a one-day difference between the reset dates or a slight difference in the notional amounts in the debt instrument and the swap. This would be true as long as the difference in reset dates or notional amounts is not significant enough to cause the hedge to fail to be highly effective at providing offsetting cash flows.

Case C: Difference in Notional Amounts

This Case involves the same facts as in Case B, except that there is no difference in the reset dates. However, there is a slight difference in the notional amount of the swap and the hedged item. If the swap would otherwise meet this Subtopic's definition of providing high effectiveness in hedging the foreign currency exposure of the debt instrument, paragraph 815-20-25-39(d) does not preclude the swap from qualifying for hedge accounting simply because the notional amounts do not exactly match. The mismatch attributable to the slight difference in the notional amount of the swap and the

hedged item could be eliminated by designating only a portion of the contract with the larger notional amount as either the hedging instrument or hedged item, as appropriate.

Example 4.5.3: Hedging a firm commitment or fixed-price agreement denominated in a foreign currency (from ASC 815-20-55-136 to 55-140)

The following Cases illustrate hedging foreign exchange risk under the cash flow hedging model as discussed in paragraph 815-20-25-42 and others:

- a. Difference in optionality (Case A)
- b. Difference in reset dates (Case B)

Case A: Firm Commitment

On January 1, an entity enters into an agreement to sell 1,000 tons of a nonfinancial asset to an unrelated party on June 30. The agreement meets the definition of a firm commitment. The firm commitment is denominated in the buyer's functional currency, which is not the seller's functional currency. Accordingly, the firm commitment exposes the seller to foreign currency risk. The seller may hedge the foreign currency exposure arising from the firm commitment under the fair value hedging model.

The seller may hedge its exposure to foreign currency risk under the cash flow hedging model even though the agreement meets the definition of a firm commitment. Accordingly, the seller may hedge the foreign currency exposure arising from the firm commitment to sell 1,000 tons of the nonfinancial asset under the cash flow hedging model, even though the seller has previously hedged its foreign currency exposure arising from another similar firm commitment under the fair value hedging model.

Case B: Fixed-Price Agreement

On January 1, an entity enters into an agreement to sell 1,000 tons of a nonfinancial asset to an unrelated party on June 30. Although the agreement in this Case does not meet the definition of a firm commitment, the seller's assessment of the observable facts and circumstances is that performance under the agreement is probable. The agreement is denominated in the buyer's functional currency, which is not the seller's functional currency. Accordingly, the foreign-currency-denominated fixed-price agreement exposes the seller to foreign currency risk.

If the agreement does not meet the definition of a firm commitment, but contains a fixed foreign-currency-denominated price, the seller may not hedge the foreign currency risk relating to the agreement to sell the nonfinancial asset under the fair value hedging model because the agreement is not a recognized asset, a recognized liability, or a firm commitment, which are the only items that can be designated as the hedged item in a fair value hedge. However, the seller may hedge the foreign currency risk relating to the agreement under the cash flow hedging model. The agreement is by definition a forecasted transaction because the sale of the nonfinancial assets will occur at the prevailing market price, that is, the fixed foreign-currency-denominated market price converted into the seller's functional currency at the prevailing exchange rate when the transaction occurs. Therefore, because the agreement includes a fixed foreign-currency-denominated price, the agreement exposes the seller to variability in the functional-currency-equivalent cash flows. Accordingly, the seller may not hedge the foreign currency risk relating to the agreement to sell 1,000 tons of the nonfinancial asset under the fair value hedging model but may hedge the foreign currency risk under the cash flow hedging model.

Example 4.5.4: Portions of a foreign-currency-denominated financial asset or liability as a hedged item (from ASC 815-20-55-141 to 55-155)

The following Cases illustrate the application of paragraph 815-20-25-41 to fixed-rate and variable-rate foreign-currency-denominated debt:

- a. Foreign-currency-denominated fixed-rate debt (Case A)
- b. Foreign-currency-denominated variable-rate debt (Case B).

Specifically, for each of the eight situations presented collectively in Cases A (see paragraph 815-20-55-143) and B (see paragraph 815-20-55-153), an entity can use cash flow hedge accounting to hedge the variability in the specific principal repayments, interest cash flows, or both by applying the guidance in paragraph 815-30-35-3(d) to the specifically identified hedged cash flows. Only an amount that would offset the transaction gain or loss arising from the remeasurement of a hedged cash flow would be reclassified each period from other comprehensive income to earnings. Also, the change in the fair value of the forward points (time value) attributable to the hedged future cash flows would be reported in other comprehensive income, while the change in the fair value of the forward points (time value) attributable to the unhedged future cash flows would be reported in earnings.

Case A: Foreign-Currency-Denominated Fixed-Rate Debt

Entity ABC, a U.S. dollar (USD) functional entity, issues a five-year foreign-currency-denominated fixed-rate debt obligation that requires interest payments and partial principal payments annually in the foreign currency with the remaining principal due at the end of five years (maturity) in the foreign currency. More specifically, Entity ABC issues an FC 45 million debt obligation on December 31, 20X0, with FC 5 million due on December 31 of each of the next 4 years and FC 25 million due on December 31, 20X5. Interest payments at 10 percent are paid annually.

In this Case, Entity ABC can use cash flow hedge accounting to hedge the variability in its functional-currency-equivalent cash flows associated with any of the following:

- a. All of the payments of both principal and interest of the debt
- b. All of the payments of principal of the debt
- c. All or a fixed portion of selected payments of either principal or interest of the debt (such as either principal or interest payments on December 31, 2001, and December 31, 2003)
- d. Selected payments of both principal and interest of the debt (such as principal and interest payments on December 31, 2001, and December 31, 2003).

For instance, Entity ABC could use a receive-fixed-rate, pay-fixed-rate cross-currency interest rate swap or a series of forward contracts to eliminate variability attributable to foreign exchange rates.

The following illustrates the second option, hedging the variability in all principal cash flows attributable to foreign exchange risk.

Entity ABC enters into the following five forward contracts to hedge all principal cash flows:

- a. Forward contract to purchase FC 5,000 on December 31, 20X1, at a forward rate of 1.05061019
- b. Forward contract to purchase FC 5,000 on December 31, 20X2, at a forward rate of 1.06061601
- c. Forward contract to purchase FC 5,000 on December 31, 20X3, at a forward rate of 1.07066924
- d. Forward contract to purchase FC 5,000 on December 31, 20X4, at a forward rate of 1.08076989
- e. Forward contract to purchase FC 25,000 December 31, 20X5, at a forward rate of 1.090871.

Exchange rates are as follows.

		12/31/X1	12/31/X2	12/31/X3	12/31/X4	12/31/X5
Period	Spot	Forward	Forward	Forward	Forward	Forward
12/31/X0	1.04060438	1.05061019	1.06061601	1.07066924	1.08076989	1.090871
12/31/X1	1.1		1.12125604	1.14271548	1.16448149	1.18655697
12/31/X2	1.1			1.12125604	1.14272548	1.16448149
12/31/X3	1.1				1.12125604	1.14272548
12/31/X4	1.1					1.12125604
12/31/X5	1.1					

	Debit (Credit)							
	Cash	Forward Contracts	Note Payable	Income or Expense	Accum. Other Comprehensive Income			
Inception 12/31/X0	46,827		(46,827)					
December 31, 20X1 entries:								
Repayment of principal	(5,500)		5,203	297				
Payment of interest	(4,950)			4,950				
Transaction loss on note payable			(2,376)	2,376				
Fair value of forward contract #1		247			(247)			
Settlement of forward #1	247	(247)						
Offset \$247 of loss on principal (\$50 related to cost of hedge remains in earnings)				(247)	247			
Fair value of forward contracts #2–5 (based on 6% discount rate)		2,853			(2,853)			
Paragraph 815-30-35-3(d) adjustment—offset the transaction loss related to principal				(1,734)	1,734			
Paragraph 815-30-35-3(d) adjustment—effect of hedge				396	(396)			
December 31, 20X2 entries:								
Repayment of principal	(5,500)		5,203	297				
Payment of interest	(4,400)			4,400				
Fair value of forward contract #2		(89)			89			
Settlement of forward #2	197	(197)						
Offset \$197 of loss on principal (\$100 related to cost of hedge remains in earnings)				(197)	197			
Fair value of forward contracts #3–5 (based on 6% discount rate)		(507)			507			
Paragraph 815-30-35-3(d) adjustment—effect of hedge				299	(299)			
Change in time value related to principal goes to other comprehensive			297	(180)	(117)			

income or change in time value related to interest					
goes to earnings ^(a)					
December 31, 20X3 entries:					
Repayment of principal	(5,500)		5,203	297	
Payment of interest	(3,850)		,	(3,850)	
Fair value of forward	(-,,			(-,)	
contract #3		(92)			92
Settlement of forward #3	147	(147)			
Offset \$147 of loss on principal (\$150 related to cost of hedge remains in earnings)				(147)	147
Fair value of forward contracts #4–5 (based on 6% discount rate)		(477)			477
Paragraph 815-30-35-3(d) adjustment—effect of hedge				202	(202)
Change in time value related to principal goes to other comprehensive income or change in time value related to interest goes to earnings			297	(168)	(129)
December 31, 20X4 entries:					
Repayment of principal	(5,500)		5,203	297	
Payment of interest	(3,300)			3,300	
Fair value of forward contract #4		(95)			95
Settlement of forward #4	96	(96)			
Offset \$96 of loss on principal (\$201 related to cost of hedge remains in earnings)				(96)	96
Fair value of forward contract #5 (based on 6% discount rate)		(437)			437
Paragraph 815-30-35-3(d) adjustment—effect of hedge				104	(104)
Change in time value related to principal goes to other comprehensive income or change in time					
value related to interest			297	(154)	(143)
goes to earnings				()	
goes to earnings December 31, 20X5 entries:			20.		

Payment of interest	(2,750)			2,750	
Fair value of forward contract #5		(488)			488
Settlement of forward #5	228	(228)			
Offset \$228 of loss on principal				(228)	228
Paragraph 815-30-35-3(d) adjustment—effect of hedge			1,485	(1,001)	(484)
Change in time value related to principal goes to other comprehensive income or change in time value related to interest goes to earnings				(140)	140
	(21,008)	•	-	(b)	-

⁽a) The entry recording the \$297 gain for the period ended December 31, 20X2, results from the spot exchange rate remaining unchanged from December 31, 20X1, and one less period remaining on the loan payable. The \$117 principal portion of the gain goes to other comprehensive income because only principal is being hedged. The \$180 interest portion of the gain goes to earnings because interest is not being hedged.

The following schedules support the preceding entries.

Schedule 1	Foreign Currency	Functional Currency at 12/31/X0 Spot Rate (1)	Functional Currency at Current Spot rate (2)	Transaction Gain or Loss	(2) – (1)	Change in Time Value
12/31/X0						
Principal	30,976 ^(a)	32,234				
Interest	14,024 ^(a)	14,593				
Loan value	45,000	46,827				
12/31/X1						
Principal	29,192	30,377	32,111	1,734		
Interest	10,808	11,247	11,889	642		
Loan value	40,000	41,624	44,000			
12/31/X2						
Principal	27,222	28,328	29,945		1,617	117 = (1,734 - 1,617)
Interest	7,778	8,093	8,555		462	180 = (642 – 462)
Loan value	35,000	36,421	38,500			
12/31/X3						
Principal	25,048	26,065	27,553		1,488	129 = (1,617 - 1,488)
Interest	4,952	5,153	5,447		294	168 = (462 – 294)
Loan value	30,000	31,218	33,000			
12/31/X4						
Principal	22,649	23,568	24,913		1,345	143
Interest	2,351	2,447	2,586		140	154
Loan value	25,000	26,015	27,500			

⁽b) See schedule 3 (paragraph 815-20-55-152) for income or expense for each period.

12/31/X5 (before final principal payment is made)										
Principal	25,000	26,015	27,500		1,485	(140)				
Interest	-	-	-			140				
Loan value	25,000	26,015	27,500							

⁽a) The value ascribed to the principal portion was determined by discounting the future principal payments at an annual rate of 10% compounded quarterly. The value ascribed to the portion was determined by discounting future quarterly interest accruals at an annual rate of 10%.

Schedule 2 provides the amount of cost attributed to each period for each forward contract. Each period's cost is determined based on applying the interest method to each forward contract.

Schedule 2	Forward Contract #1	Forward Contract #2	Forward Contract #3	Forward Contract #4	Forward Contract #5	Total
12/31/X1	\$50.03	\$49.79	\$49.63	\$49.50	\$246.61	\$445.56
12/31/X2		50.27	50.11	49.97	248.95	399.30
12/31/X3			50.59	50.44	251.31	352.34
12/31/X4				50.92	253.69	304.61
12/31/X5					256.11	256.11
Total	\$50.03	\$100.06	\$150.33	\$200.83	\$1,256.67	\$1,757.92

Schedule 3 provides a breakdown for each year-end reporting period.

Schedule 3	
12/31/X1	
\$4,950	Interest expense
446	Cost of hedge (396 + (297 – 247))
642	Transaction loss related to unhedged interest (2,376 – 1,734)
\$6,038	Total expense
12/31/X2	
\$4,400	Interest expense
399	Cost of hedge (299 + (297 - 197))
(180)	Time value related to unhedged interest
\$4,619	Total expense
12/31/X3	
\$3,850	Interest expense
352	Cost of hedge (202 + (297 - 147))
(168)	Time value related to unhedged interest
\$4,034	Total expense
12/31/X4	
\$3,300	Interest expense
305	Cost of hedge (104 + (297 – 96))
(154)	Time value related to unhedged interest
\$3,451	Total expense
12/31/X5	
\$2,750	Interest expense
256	Cost of hedge (1,485 – (1,001 + 228))
(140)	Time value related to unhedged interest
\$2,866	Total expense

Case B: Foreign-Currency-Denominated Variable-Rate Debt

Entity XYZ, a U.S. dollar (USD) functional entity issues a five-year foreign-currency-denominated variable-rate debt obligation that requires interest payments and partial principal payments annually in the foreign currency with the remaining principal due at the end of five years (maturity) in the foreign currency. More specifically, Entity XYZ issues an FC 45 million debt obligation on December 31, 20X0, with FC 5 million due on December 31 of each of the next 4 years and FC 25 million due on December 31, 20X5. Interest payments are paid annually based on LIBOR.

In this Case the guidance in paragraph 815-20-25-41 provides that Entity XYZ can use cash flow hedge accounting to hedge the variability in its functional-currency-equivalent cash flows associated with any the following:

- a. All of the payments of both principal and interest of the debt
- b. All of the payments of principal of the debt
- c. All or a fixed portion of selected payments of either principal or interest of the debt
- d. Selected payments of both principal and interest of the debt (such as principal and interest payments on December 31, 2001, and December 31, 2003).

An entity could use a receive-variable-rate, pay-fixed-rate cross-currency interest rate swap to eliminate variability attributable to interest rates and foreign exchange rates. In cash flow hedges of recognized foreign-currency-denominated assets and liabilities, the entity must assess whether the changes in cash flows attributable to the risk being hedged are expected to offset at the inception of the hedging relationship and on an ongoing basis. In a manner similar to that described beginning in paragraph 815-30-35-25, the entity would assess the effectiveness of the hedge using the hypothetical derivative method. After the initial quantitative assessment of hedge effectiveness, the entity may elect to assess hedge effectiveness on a qualitative or quantitative basis.

Example 4.5.5: Designation of an intra-entity loan or other payable as the hedging instrument in a fair value hedge of an unrecognized firm commitment (from ASC 815-20-55-167 to 55-170)

This Example illustrates the application of paragraph 815-20-25-60. A parent entity (Parent A) with the U.S. dollar (USD) as both its functional currency and reporting currency has a subsidiary with a Euro (EUR) functional currency (Subsidiary B). Subsidiary B enters into an unrecognized firm commitment with a third party that will result in Japanese yen (JPY) cash inflows. Concurrent with Subsidiary B entering into the firmly committed contract, Parent A extends a loan to Subsidiary B denominated in JPY, which is funded by a third-party, JPY-denominated borrowing by Parent A. Subsidiary B wishes to designate its JPY-denominated intra-entity loan payable as the hedging instrument in consolidated financial statements in a fair value hedge of foreign currency exposure related to its JPY-denominated unrecognized firm commitment to a third party.

In accordance with paragraph 830-20-35-1, at each balance sheet date, Subsidiary B's JPY-denominated intra-entity loan payable would be remeasured from the foreign currency (JPY) into Subsidiary B's functional currency (EUR) at the current EUR/JPY spot rate. Similarly, Parent A's intra-entity JPY-denominated receivable and its third-party JPY-denominated loan payable are remeasured from the foreign currency (JPY) into Parent A's functional currency (USD) at the current USD/JPY spot rate. The transaction gains or losses that are generated from remeasurement into functional currency are recorded in net income. If Subsidiary B designates its JPY-denominated intra-entity loan payable as the hedging instrument in consolidated financial statements, the transaction gains and losses related to the intra-entity loan payable would offset the change in fair value of the firm commitment attributable to changes in foreign exchange rates in the consolidated income statement.

In this Example, Subsidiary B's JPY-denominated intra-entity payable may be designated as a fair value hedge of the foreign exchange exposure arising from the third-party JPY-denominated firm

commitment. Parent A has in place a third-party JPY-denominated borrowing that offsets the exposure of its JPY-denominated intra-entity receivable from Subsidiary B during the period the intra-entity loan receives hedge accounting.

Example 4.5.6: Fair value hedge of a firm commitment denominated in a foreign currency with a forward to purchase a different foreign currency (from ASC 815-25-55-62 to 55-71)

This Example illustrates application of the guidance in Sections 815-20-25, 815-20-35, and 815-25-35 to a fair value hedge of a firm commitment to purchase an asset for a price denominated in a foreign currency. In this Example, the hedging instrument and the firm commitment are denominated in different foreign currencies. Consequently, although the hedge is highly effective at achieving offsetting changes in fair value, the hedge is not perfectly effective, and there will be an earnings effect. (The entity in the Example could have designed a perfectly effective hedge by using a hedging instrument denominated in the same foreign currency as the firm commitment with terms that match the appropriate terms in the firm commitment.) For simplicity, commissions and most other transaction costs, initial margin, and income taxes are ignored unless otherwise stated. Assume that there are no changes in creditworthiness that would alter the effectiveness of the hedging relationship.

Entity MNO's functional currency is the U.S. dollar (USD). On February 3, 20X7, Entity MNO enters into a firm commitment to purchase a machine for delivery on May 1, 20X7. The price of the machine will be 270,000 Swiss francs (CHF 270,000). Also on February 3, 20X7, Entity MNO enters into a forward contract to purchase 240,000 Euros (EUR 240,000) on May 1, 20X7. Entity MNO will pay USD 0.6125 per EUR 1 (a total of USD 147,000), which is the current forward rate for an exchange on May 1, 20X7. Entity MNO designates the forward contract as a hedge of its risk of changes in the fair value of the firm commitment resulting from changes in the USD–CHF forward exchange rate.

Entity MNO will assess effectiveness by comparing the overall changes in the fair value of the forward contract to the changes in fair value in USD of the firm commitment due to changes in USD–CHF forward exchange rates. Entity MNO expects the forward contract to be highly effective as a hedge because all of the following conditions exist:

- a. EUR 240,000 is approximately equal to CHF 270,000 at the May 1, 20X1, forward exchange rate in effect on February 3, 20X7.
- b. Settlement of the forward contract and the firm commitment will occur on the same date.
- c. In recent years, changes in the value in USD of EUR over three-month periods have been highly correlated with changes in the value in USD of CHF over those same periods.

Although the hedging relationship has been determined to be highly effective at achieving offsetting changes in fair value, the hedge will not be perfectly effective and the difference between changes in the USD equivalent of EUR 240,000 (the notional amount of the forward contract) and changes in the USD equivalent of CHF 270,000 (the amount to be paid for the machine) will affect earnings. The difference between the spot rate and the forward exchange rate is not excluded from the assessment of hedge effectiveness because changes in the fair value of the firm commitment are being measured using forward exchange rates. Therefore, the entire change in the fair value of the hedging instrument will be presented in earnings in the same income statement line item as the earnings effect of the hedged item. If the hedged item were a foreign-currency-denominated available-for-sale debt security instead of a firm commitment, Topic 830 would have required its carrying value to be measured using the spot exchange rate. In that case, the spot-forward difference would have been recognized currently in earnings in the same income statement line item as the earnings effect of the hedged item if it was included in the assessment of effectiveness. The spot-forward difference also may be excluded from the assessment of effectiveness and accounted for through either an amortization approach or a mark-to-market approach in accordance with paragraph 815-20-25-83A or paragraph 815-20-25-83B.

The forward exchange rates in effect on certain key dates are assumed to be as follows.

Date	USD-EUR Forward Exchange Rate for Settlement on 5/1/X7	USD-CHF Forward Exchange Rate for Settlement on 5/1/X7
Inception of the hedge—2/3/X7	USD 0.6125 = EUR 1	USD 0.5454 = CHF 1
Quarter end—3/31/X7	USD 0.5983 = EUR 1	USD 0.5317 = CHF 1
Machine purchase—5/1/X7	USD 0.5777 = EUR 1	USD 0.5137 = CHF 1

The USD equivalent and changes in the USD equivalent of the forward contract and the firm commitment, the changes in fair value of the forward contract and the firm commitment, and the earnings effect of the hedge on those same key dates are shown in the following table. A 6 percent discount rate is used in this Example.

		2/3/X7		3/31/X7		5/1/X7			
Forward contract									
USD-EUR forward exchange rate for settlement on May, 20X7	USD	0.61	USD	0.60	USD	0.58			
Units of currency (EUR)		× 240,000		× 240,000		× 240,000			
Forward price of EUR 240,000 in USD		147,000		143,592		138,648			
Contract price in USD		(147,000)		(147,000)		(147,000)			
Difference	USD	-	USD	(3,408.00)	USD	(8,352.00)			
Fair value (present value of the difference)	USD	-	USD	(3,391.00)	USD	(8,352.00)			
Change in fair value during the period			USD	(3,391.00)	USD	(4,961.00)			

		2/3/X7		3/31/X7		5/1/X7
Firm commitment						
USD-CHF forward exchange rate for settlement on May 1, 20X7	USD	0.55	USD	0.53	USD	0.51
Units of currency (CHF)		× 270,000		× 270,000		× 270,000
Forward price of CHF 270,000 in USD		(147,258)		(143,559)		(138,699)
Initial forward price in USD		147,258		147,258		147,258
Difference	USD	-	USD	3,699.00	USD	8,559.00
Fair value (present value of the difference)	USD	-	USD	3,681.00	USD	8,559.00
Change in fair value during period			USD	3,681.00	USD	4,878.00
Difference between changes in the fair values of the forward contract denominated in EUR and the firm commitment denominated in CHF			USD	290.00	USD	(83.00)

This Subtopic requires that Entity MNO recognize currently in earnings all changes in fair values of the forward contract. Because Entity MNO is hedging the risk of changes in fair value of the firm commitment attributable to changes in the forward exchange rates, this Subtopic also requires recognizing those changes currently in earnings. Section 815-20-45 requires that those changes be presented in earnings in the same income statement line item as the earnings effect of the hedged

On May 1, 20X7, Entity MNO fulfills the firm commitment to purchase the machine and settles the forward contract. The entries illustrating fair value hedge accounting for the hedging relationship and the purchase of the machine are summarized in the following table.

		Debit (Credit)								
		Cash		irm nitment		rward ntract	Ma	achine	Ear	nings
March 31, 20X7										
Recognize change in fair value of firm commitment			USD	3,681					USD	(3,681)
Recognize change in fair value of forward contract					USD	(3,391)				3,391
Contract					000	(5,591)				(290)
April 30, 20X7										(290)
Recognize change in fair value of firm commitment				4,878						(4,878)
Recognize change in fair value of forward contract						(4,961)				4,961
						, ,				83
May 1, 20X7										
Recognize settlement of forward contract	USD	(8,352)				8,352				
Recognize purchase of machine		(138,699)		(8,559)			USD	147,258		
Total	USD	(147,051)	USD	-	USD	-	USD	147,258	USD	(207)

To simplify this Example and focus on the effects of the hedging relationship, other amounts that would be involved in the purchase of the machine by Entity MNO (for example, shipping costs and installation costs) have been ignored.

The effect of the hedge is to recognize the machine at its price in CHF (CHF 270,000) translated at the forward rate in effect at the inception of the hedge (USD 0.5454 per CHF 1).

Example 4.5.7: Effectiveness of cash flow hedge of forecasted sale with a forward contract (from ASC 815-30-55-13 to 55-16)

This Example illustrates the application of the guidance in Subtopic 815-20 and this Subtopic to assessing effectiveness for a cash flow hedge of a forecasted sale with a forward contract. Assume that the hedge satisfied all of the criteria for hedge accounting at inception.

Entity I, a U.S. dollar (USD) functional currency entity, forecasts the sale of 10,000 units in Euros (EUR) of its principal product in 6 months to French customers for EUR 500,000. Entity I wants to hedge the cash flow exposure of the EUR sale related to changes in the USD-EUR exchange rate. It enters into a 6-month forward contract to exchange the EUR 500,000 it expects to receive in the forecasted sale for the USD equivalent specified in the forward contract and designates the forward contract as a cash flow hedge of the forecasted sale.

Entity I chooses to assess hedge effectiveness at inception and during the term of the hedge based on the following amounts:

- a. Changes in the fair value of the forward contract attributable to changes in the USD-EUR spot
- b. Changes in the present value of the current USD equivalent of the forecasted receipt of EUR 500,000.

Because the critical terms of the forward contract and the forecasted transaction are the same, presumably there would be perfect offset unless there is a reduction in the expected sales proceeds from the forecasted sales. Because Entity I is assessing effectiveness based on spot rates, it would exclude the change in the fair value of the forward contract attributable to changes in the difference between the forward rate and spot rate from the assessment of effectiveness and account for it through an amortization approach in accordance with paragraph 815-20-25-83A or a mark-to-market approach in accordance with paragraph 815-20-25-83B. Under either approach, the portion of the excluded component recognized in earnings should be presented in the same income statement line item as the earnings effect of the hedged item in accordance with paragraph 815-20-45-1A.

Example 4.5.8: Cash flow hedge of the foreign currency exposure in a royalty arrangement (from ASC 815-30-55-67 to 55-76)

This Example illustrates the application of the guidance in Subtopic 815-20 and this Subtopic to a hedging relationship involving a single hedging derivative and three separate forecasted transactions. The three transactions occur on three separate dates, but the payment on receivables related to all three occurs on the same date. The settlement of the hedging derivative will occur on the date the receivable is paid. For simplicity, commissions and most other transaction costs, initial margin, and income taxes are ignored unless otherwise stated. Assume that there are no changes in creditworthiness that would alter the effectiveness of the hedging relationship.

Entity DEF's functional currency is the U.S. dollar (USD). Entity ZYX's functional currency is the euro (EUR). Effective January 1, 20X1, Entity DEF enters into a royalty agreement with Entity ZYX that gives Entity ZYX the right to use Entity DEF's technology in manufacturing Product X. On April 30, 20X1, Entity ZYX will pay Entity DEF a royalty of EUR 1 million for each unit of Product X sold by that date. Entity DEF expects Entity ZYX to sell one unit of Product X on January 31, one on February 28, and one on March 31. The forecasted royalty is probable because Entity ZYX has identified a demand for Product X and no other supplier has the capacity to fill that demand.

Also on January 1, 20X1, Entity DEF enters into a forward contract to sell EUR 3 million on April 30, 20X1, for a price equal to the forward price of USD 0.6057 per EUR. Entity DEF designates the forward contract as a hedge of the risk of changes in its functional-currency-equivalent cash flows attributable to changes in the EUR-USD exchange rates related to the forecasted receipt of EUR 3

million from the royalty agreement. The spot price and forward price of EUR at January 1, 20X1, and the USD equivalent of EUR 3 million at those prices are assumed to be as follows.

Prices at January 1, 20X1	USD per EUR	USD Equivalent of EUR 3 Million
Spot price	USD 0.6019	USD 1,805,700
4-month forward price	0.6057	1,817,100

Entity DEF will exclude from its assessment of effectiveness the portion of the fair value of the forward contract attributable to the spot-forward difference (the difference between the spot exchange rate and the forward exchange rate). Entity DEF elects to recognize changes in that portion of the derivative instrument's fair value currently in earnings in accordance with paragraph 815-20-25-83B. Entity DEF will estimate the cash flows on the forecasted transactions based on the current spot exchange rate and will discount that amount. Thus, Entity DEF will assess effectiveness by comparing the following amounts:

- a. Changes in the fair value of the forward contract attributable to changes in the USD spot price of FUR
- b. Changes in the present value of the forecasted cash flows based on the current spot exchange

Those two changes will exactly offset because the currency and the notional amount of the forward contract match the currency and the total of the expected foreign currency amounts of the forecasted transactions. Thus, if Entity DEF dedesignates a proportion of the forward contract each time a royalty is recognized (as described in the following paragraph), the hedging relationship will meet the highly effective criterion.

As each royalty is recognized, Entity DEF recognizes a receivable and royalty income. The forecasted transaction (the recognition of royalty income) has occurred. The receivable is an asset, not a forecasted transaction, and would separately be eligible to be designated as a fair value hedge of foreign exchange risk or continue to be eligible as a cash flow hedge of foreign exchange risk. Consequently, if the variability of the functional currency cash flows related to the royalty receivable is not being hedged, Entity DEF will dedesignate a proportion of the hedging instrument in the original hedge relationship with respect to the proportion of the forward contract corresponding to the recognized royalty. As the royalty is recognized in earnings and each proportion of the derivative instrument is dedesignated, the related derivative instrument gain or loss in accumulated other comprehensive income is reclassified into earnings. After that date, any gain or loss on the dedesignated proportion of the derivative instrument and any transaction loss or gain on the royalty receivable will be recognized in earnings and may substantially offset each other.

Subtopic 830-20 requires immediate recognition in earnings of any foreign currency transaction gain or loss on a foreign-currency-denominated receivable that is not designated as a hedging instrument. Therefore, the effect of changes in spot prices on the royalty receivable must be recognized immediately in earnings.

The spot prices and forward prices for settlement on April 30, 20X1, in effect at inception of the hedge (January 1, 20X1) and at the end of each month between inception and April 30, 20X1, are assumed to be as follows.

	USD	per EUR
	Spot Price	Forward Price for Settlement on 4/30/X1
January 1	USD 0.6019	USD 0.6057
January 31	0.5970	0.6000
February 28	0.5909	0.5926
March 31	0.5847	0.5855
April 30	0.5729	0.5729

The changes in fair value of the forward contract that are recognized each month in earnings and other comprehensive income are shown in the following table. Amounts reclassified from accumulated other comprehensive income to earnings and amounts excluded from the assessment of hedge effectiveness are presented in the same income statement line item as the earnings effect of the hedged item. The fair value of the forward is the present value of the difference between the USD to be received on the forward (USD 1,817,100) and the USD equivalent of EUR 3 million based on the current forward rate. A 6 percent discount rate is used in this Example.

	Debit (Credit)			
	Forward Contract	Earnings	Other Comprehensive Income	
Fair value on January 1	\$ -			
Period ended January 31:				
Change in spot-forward difference	2,364	(\$2,364)		
Change in fair value of dedesignated proportion	-	-		
Change in fair value of designated proportion	14,482		(\$14,482)	
Reclassification of gain	-	(4,827)	4,827	
Fair Value on January 31	16,846			
Period ended February 28:				
Change in spot-forward difference	3,873	(3,873)		
Change in fair value of dedesignated proportion	6,063	(6,063)		
Change in fair value of designated proportion	12,127		(12,127)	
Reclassification of gain	-	(10,891)	10,891	
Fair Value on February 28	38,909			
Period ended March 31:				
Change in spot-forward difference	2,718	(\$2,718)		
Change in fair value of dedesignated proportion	12,448	(12,448)		
Change in fair value of designated proportion	6,223		(6,223)	
Reclassification of gain	-	(17,114)	17,114	
Fair Value on March 31	60,298			
Period ended April 30:				
Change in spot-forward difference	2,445	(2,445)		
Change in fair value of dedesignated proportion	35,657	(35,657)		
Change in fair value of designated proportion	-		-	
Fair Value on April 30	\$98,400			
Cumulative effect		(\$98,400)	-	

The effect on earnings of the royalty agreement and hedging relationship illustrated in this Example is summarized by month in the following table.

		Amounts R	ecognized in Ear	nings Related to			
	Receivable			Forward Contract			
Period Ended	USD Equivalent of EUR 1 Million Royalty	Foreign Currency Transaction Gain (Loss)	Amount Attributable to the Dedesignated Proportion	Reclassification from Other Comprehensive Income	Amount Attributable to the Difference between the Spot and Forward rates	Total Amount Reported in Earnings	
January 31	\$597,000	\$ -	\$ -	\$4,827	\$2,364	\$604,191	
February 28	590,900	(6,100)	6,063	10,891	3,873	605,627	
March 31	584,700	(12,400)	12,458	17,104	2,718	604,580	
April 30	-	(35,400)	35,657	-	2,445	2,702	
	\$1,772,600	(\$53,900)	\$54,178	\$38,822	\$11,400	\$1,817,100	
				\$98,400			

Example 4.5.9: Cash flow hedge of a fixed-rate foreign-currency-denominated loan eliminating variability in the functional-currency-equivalent cash flows (fixed-to-fixed scenario) (from ASC 815-30-55-81 to 55- 85)

This Example illustrates the application of the guidance in Subtopic 815-20 and this Subtopic to accounting for a cash flow hedge of a fixed-rate foreign-currency-denominated debt in which all of the variability in the functional-currency-equivalent cash flows are eliminated by the effect of the hedge.

On July 1, 20X1, Entity DEF, a U.S. dollar (USD) functional currency entity, issues a zero-coupon debt instrument with a notional amount of FC 154,766.79 for FC 96,098.00. The interest rate implicit in the debt is 10 percent. The debt will mature on June 30, 20X6. Entity DEF enters into a forward contract to buy FC 154,766.79 in 5 years at the forward rate of 1.090148194 (USD 168,718.74) and designates the forward contract as a hedge of the variability of the USD functional currency equivalent cash flows on the debt. Because the currency, notional amount, and maturity of the debt and the forward contract match, the entity concludes that the hedging relationship will achieve perfect offset. The USD interest rate implicit in the forward contract is 11.028 percent. The market data, period end balances, and journal entries from cash flow hedge accounting are as follows.

Period	Spot Rate USD/ Functional Currency	Forward Rate USD/ Functional Currency	Forward Rate Difference	Foreign Currency Present Value	USD Spot Amounts	USD Debt (@11.028%)	Fair Value Forward USD
0	1.040604383	1.090148194	0	\$96,098.00	\$100,000.00	\$100,000.00	\$ -
1	1.1	1.184985966	0.094837771	105,707.80	116,278.58	111,028.04	9,327.97
2	1.1	1.163142906	0.072994712	116,278.58	127,906.44	123,272.25	8,041.09
3	1.1	1.141702484	0.051554290	127,906.44	140,697.08	136,866.76	6,360.72
4	1.1	1.120657277	0.030509083	140,697.08	154,766.79	151,960.48	4,215.89
5	1.1	1.1	0.009851806	154,766.79	170,243.47	168,718.74	1,524.73

		Cash	Forward	Debt	Other Comprehen- sive Income	Interest Expense	Transaction Loss
7/1/20X1	Borrow money	\$100,000.00		(\$100,000.00)			
6/30/20X2	Accrue interest on debt			(10,570.78)		\$10,570.78	
6/30/20X2	Mark debt to spot			(5,707.80)			(\$5,707.80)
6/30/20X2	Mark forward to fair value		\$9,327.97		(\$4,077.43)	457.26	(5,707.80)
6/30/20X2	Balances	100,000.00	9,327.97	(116,278.58)	(4,077.43)	11,028.04	
6/30/20X3	Accrue interest on debt			(11,627.86)		11,627.86	
6/30/20X3	Mark forward to fair value		(1,286.88)		670.53	616.35	
6/30/20X3	Balances	100,000.00	8,041.08	(127,906.44)	(3,406.90)	23,272.25	
6/30/20X4	Accrue interest on debt			(12,790.64)		12,790.64	-
6/30/20X4	Mark forward to fair value		(1,680.37)		876.50	803.87	
6/30/20X4	Balances	100,000.00	6,360.71	(140,697.08)	(2,530.40)	36,866.76	
6/30/20X5	Accrue interest on debt			(14,069.71)		14,069.71	
6/30/20X5	Mark forward to fair value		(2,144.84)		1,120.83	1,024.01	
6/30/20X5	Balances	100,000.00	4,215.88	(154,766.79)	(1,409.57)	51,960.48	
6/30/20X6	Accrue interest on debt			(15,476.68)		15,476.68	
6/30/20X6	Mark forward to fair value		(2,691.15)		1,409.57	1,281.58	
6/30/20X6	Balances	\$100,000.00	\$1,524.72	(\$170,243.47)	\$ -	\$68,718.74	-

Following are journal entries at inception of the loan and at the end of the first year.

7/1/20X1	Debit	Credit
Cash	\$100,000.00	
Functional currency debt at spot		\$100,000.00
To record FC borrowing in USD.		

6/30/20X2	Debit	Credit		
Interest expense	\$10,570.78			
Debt		\$10,570.78		
To accrue interest. Period end spot rate used for si	mplicity.			
Transaction loss	\$5,707.80			
Debt		\$5,707.80		
To record a transaction loss on the debt.				
Derivative asset	\$9,327.97			
Other comprehensive Income		\$9,327.97		
To record a derivative instrument at fair value and record the gain on the derivative in other comprehensive income.				
Other comprehensive income	\$5,250.54			
Interest expense	457.26			
Transaction gain/loss		\$5,707.80		

To reclassify an amount out of accumulated other comprehensive income to do both of the following:

- a. To increase interest expense to the USD yield of 11.028 percent
- b. To offset the transaction loss on the debt.

Journal entries for the remaining four years are not displayed.

This Example would also be relevant for a non-interest-bearing foreign-currency-denominated receivable or payable instrument. An amount based on the rate implicit in the forward contract would be reported in earnings each period. Given the short maturities of many receivables and payables, the amount reported in earnings each period may be small.

Example 4.5.10: Reclassifying amounts from a cash flow hedge of a forecasted foreigncurrency-denominated intra-entity sale (from ASC 815-30-55-86 to 55-90)

This Example illustrates the application of paragraphs 815-20-25-30 and 815-20-25-39 through 25-41. This Example has the following assumptions:

- a. Parent A is a multinational corporation that has the U.S. dollar (USD) as its functional currency.
- b. Parent A has the following two subsidiaries:
 - 1. Subsidiary B, which has the Euro (EUR) as its functional currency
 - 2. Subsidiary C, which has the Japanese yen (JPY) as its functional currency.
- Subsidiary B manufactures a product and has a forecasted sale of the product to Subsidiary C
 that will be transacted in JPY.

Eventually, Subsidiary C will sell the product to an unrelated third party in JPY. Subsidiary B enters into a forward contract with an unrelated third party to hedge the cash flow exposure of its forecasted intra-entity sale in JPY to changes in the EUR-JPY exchange rate.

The transaction in this Example meets the hedge criteria of paragraphs 815-20-25-30 and 815-20-25-39 through 25-41, which permits a derivative instrument to be designated as a hedge of the foreign currency exposure of variability in the functional-currency-equivalent cash flows associated with a forecasted intra-entity foreign-currency-denominated transaction if certain criteria are met. Specifically, the operating unit having the foreign currency exposure (Subsidiary B) is a party to the hedging instrument; the hedged transaction is denominated in JPY, which is a currency other than Subsidiary B's functional currency; and all other applicable criteria in Section 815-20-25 are satisfied.

Subsidiary B measures the derivative instrument at fair value and records the gain or loss on the derivative instrument in accumulated other comprehensive income. In the consolidated financial statements, the amount in other comprehensive income representing the gain or loss on a derivative instrument designated in a cash flow hedge of a forecasted foreign-currency-denominated intra-entity sale should be reclassified into earnings in the period that the revenue from the sale of the manufactured product to an unrelated third party is recognized and presented in earnings in the same income statement line item as the earnings effect of the hedged item. The reclassification into earnings in the consolidated financial statements should occur when the forecasted sale affects the earnings of Parent A. Because the consolidated earnings of Parent A will not be affected until the sale of the product by Subsidiary C to the unrelated third party occurs, the reclassification of the amount of derivative gain or loss from other comprehensive income into earnings in the consolidated financial statements should occur upon the sale by Subsidiary C to an unrelated third party.

This guidance is relevant only with respect to the consolidated financial statements. In Subsidiary B's separate entity financial statements, the reclassification of the amount of the derivative instrument gain or loss from other comprehensive income into earnings should occur in the period the forecasted intra-entity sale is recorded because Subsidiary B's earnings are affected by the change in the EUR-JPY exchange rate when the sale to Subsidiary C occurs.

Example 4.5.11: Cash flow hedge of forecasted sale or purchase on credit (from ASC 815-30-55-106 to 55-112)

This Example illustrates the application of paragraphs 815-30-35- 9 and 815-20-25-34 through 25-36, which permit 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 sale or purchase on credit.

This Example has the following assumptions:

- a. Entity A, a U.S. dollar (USD) functional currency entity, forecasts the purchase of inventory on credit for FC 100,000 in 182 days with settlement of the payable in 227 days. The purchase will occur July 15 on credit; the resulting payable will settle August 29.
- b. Entity A enters into a forward contract to purchase FC 100,000 in 227 days at the forward rate of USD .6614 = FC 1.
- c. Entity A designates a single cash flow hedge that encompasses the variability of functionalcurrency-equivalent cash flows attributable to foreign exchange risk related to the settlement of the foreign-currency- denominated payable resulting from the forecasted purchase on credit.
- After the initial quantitative effectiveness test, Entity A elects to assess effectiveness on a quantitative basis based on forward rates.

Exchange rates are as follows.

Period	Spot	8/29 Forward	7/15 Forward
1/14	0.6575	0.6614	0.6605
3/31	0.6757	0.6793	
6/30	0.6689	0.6734	
7/15	0.6761	0.6767	
8/29	0.6798	0.6798	

Entity A would record the following journal entries.

		Debit (Credit)				
	Cash	Inventory	Forward Contract	Accounts Payable	Earnings	Accum. Other Comprehensive Income
Inception 1/14	-	-	-	-	-	-
March 31 entry (76 days):	March 31 entry (76 days):					
Mark forward to fair value			\$1,703			(\$1,703)
June 30 entry (91 days):						
Mark forward to fair value			(526)			526
July 15 entries (15 days):						
Inventory purchase		\$67,610		(\$67,610)		
August 29 entries (45 days):						
Mark forward to fair value			663			(663)

Functional currency transaction loss on payable				(370)	\$370	
Adjustment for paragraph 815-30-35-3(d)—offset the functional currency transaction loss					(370)	370
Adjustment for paragraph 815-30-35-3(d)—effect of hedge (based on implicit interest rate; see paragraph 815-30-55-112)					78	(78)
Settlement of payable	(\$67,980)			67,980		
Settlement of forward	1,840		(1,840)			
Total	(\$66,140)	\$67,610	\$ -	\$ -	\$78	(\$1,548)

Upon sale of the inventory, Entity A would record cost of goods sold of \$67,610 and reclassify \$1,548 from other comprehensive income to earnings to achieve a net cost of goods sold of \$66,062. The effect of the hedge would result in a net cost to Entity A of \$66,140 for the purchase of the inventory.

The amount of the adjustment under paragraph 815-30-35-3(d) is that amount needed to ensure that a net amount in earnings reflects the effect of the hedge through each reporting period up to and including the final settlement of the payable.

The amount of cost or income to be ascribed to each period is calculated as follows.

Daily interest rate implicit in the hedging relationship as a result of the forward contract: \$65,750 PV, \$66,140 FV, 227n, i = 0.0026053%

1/14	\$65,750	
3/31	65,880	\$130
6/30	66,036	156
7/15	66,062	26
8/29	66,140	78
		\$390

Method using two foreign currency forward of	exchange rates:
From 1/14 to 7/15	
7/15 Forward Rate .6605	
\$66,050-\$65,750=	\$300
From 7/16 to 8/29	
8/29 Forward Rate .6614	
\$66,140-\$66,050=	90
	\$390

Pro rata method:	
From 1/14 to 7/15:	
\$390 × 182/227=	\$313
From 7/16 to 8/29:	
\$390 × 45/227=	77
	\$390

Example 4.5.12: Hedge accounting in the consolidated financial statements applied to internal derivatives that are offset on a net basis by third-party contracts (from ASC 815-30-55-113 to 55-125)

This Example illustrates the application of paragraphs 815-20-25-61 through 25-63, specifically, the mechanism for offsetting risks assumed by a Treasury Center using internal derivatives on a net basis with third-party contracts. This Example does not demonstrate the computation of fair values and as such makes certain simplifying assumptions.

Entity XYZ is a U.S. entity with the U.S. dollar (USD) as both its functional currency and its reporting currency. Entity XYZ has three subsidiaries: Subsidiary A is located in Germany and has the Euro (EUR) as its functional currency, Subsidiary B is located in Japan and has the Japanese yen (JPY) as its functional currency, and Subsidiary C is located in the United Kingdom and has the pound sterling (GBP) as its functional currency. Entity XYZ uses its Treasury Center to manage foreign exchange risk on a centralized basis. Foreign exchange risk assumed by Subsidiaries A, B, and C through transactions with external third parties is transferred to the Treasury Center via internal contracts. The Treasury Center then offsets that exposure to foreign currency risk via third-party contracts. To the extent possible, the Treasury Center offsets exposure to each individual currency on a net basis with third-party contracts.

On January 1, Subsidiaries A, B, and C decide that various foreign-currency-denominated forecasted transactions with external third parties for purchases and sales of various goods are probable. Also on January 1, Subsidiaries A, B, and C enter into internal foreign currency forward contracts with the Treasury Center to hedge the foreign exchange risk of those transactions with respect to their individual functional currencies. The Treasury Center has the same functional currency as the parent entity (USD).

Subsidiaries A, B, and C have the following foreign currency exposures and enter into the following internal contracts with the Treasury Center.

				Internal Contracts with Treasury Center		
Subsidiary	Functional Currency	Forecasted Exposures	Expected Transaction Date	Currency Received	Currency Paid	
A (German)	EUR	JPY payable 12,000	Jun 1	JPY 12,000	EUR 115 ^(a)	
		GBP receivable 50	Jun 1	EUR 80 ^(a)	GBP 50	
B (Japanese)	JPY	USD payable 100	Jun 15	USD 100	JPY 10,160 ^(a)	
		EUR receivable 100	Jun 15	JPY 10,432 ^(a)	EUR 100	
C (UK)	GBP	USD receivable 330	Jun 30	GBP 201 ^(a)	USD 330	

⁽a) Computed based on forward exchange rates as of January 1.

Subsidiaries A, B, and C designate the internal contracts with the Treasury Center as cash flow hedges of their foreign currency forecasted purchases and sales. Those internal contracts may be designated as hedging instruments in the consolidated financial statements if the requirements of this Subtopic are met. From the subsidiaries' perspectives, the requirements of paragraph 815-20-25-61 for foreign currency cash flow hedge accounting are satisfied as follows:

- a. From the perspective of the hedging affiliate, the hedging relationship must meet the requirements of paragraphs 815-20-25-30 and 815-20-25-39 through 25-41 for cash flow hedge accounting. Subsidiaries A, B, and C meet those requirements. In each hedging relationship, the forecasted transaction being hedged is denominated in a currency other than the subsidiary's functional currency, and the individual subsidiary that has the foreign currency exposure relative to its functional currency is a party to the hedging instrument. In addition, the criteria in Section 815-20-25 are met. Specifically, each subsidiary prepares formal documentation of the hedging relationships, including the date on which the forecasted transactions are expected to occur and the amount of foreign currency being hedged. The forecasted transactions being hedged are specifically identified, are probable of occurring, and are transactions with external third parties that create cash flow exposure that would affect reported earnings. Each subsidiary also documents its expectation of high effectiveness based on the internal derivatives designated as hedging instruments.
- b. The affiliate that issues the hedge must offset the internal derivative either individually or on a net basis. The Treasury Center determines that it will offset the exposure arising from the internal derivatives with Subsidiaries A, B, and C on a net basis with third-party contracts. Each currency for which a net exposure exists at the Treasury Center is offset by a third-party contract based on that currency.

To determine the net currency exposure arising from the internal contracts with Subsidiaries A, B, and C, the Treasury Center performs the following analysis.

Subsidiary Perspective—Internal Contracts with the Treasury Center					
		Currency Received (Currency Paid)			
Subsidiary	Contract with Treasure Center	EUR	JPY	GBP	USD
A (German)	Internal Contract 1	(115)	12,000		
	Internal Contract 2	80		(50)	
B (Japanese)	Internal Contract 3		(10,160)		100
	Internal Contract 4	(100)	10,432		
C (UK)	Internal Contract 5			201	(330)
Net exposure		(135)	12,272	151	(230)

Treasury Center Perspective—Internal Contracts with the Subsidiaries					
		Currency Received (Currency Paid)			
Subsidiary	Contract with Treasury Center	EUR	JPY	GBP	USD
A (German)	Internal Contract 1	115	(12,000)		
	Internal Contract 2	(80)		50	
B (Japanese)	Internal Contract 3		10,160		(100)
	Internal Contract 4	100	(10,432)		
C (UK)	Internal Contract 5			(201)	330
Net exposure		135	(12,272)	(151)	230

For Subsidiaries A, B, and C to designate the internal contracts as hedging instruments in the consolidated financial statements, the Treasury Center must meet certain required criteria outlined in paragraphs 815-20-25-62 through 25-63 in determining how it will offset exposure arising from multiple internal derivatives that it has issued. Based on a determination that those requirements are satisfied (see the following paragraph, the Treasury Center determines the net exposure in each currency with respect to USD (its functional currency). The Treasury Center determines that it will enter into the following three third-party foreign currency forward contracts. The Treasury Center enters into the contracts on January 1. The contracts mature on June 30.

Treasury Center's Contracts with Unrelated Third Parties					
	Currency Bought (Currency Sold) EUR JPY BP USD				
Internal Contract 1	(135)			138 ^(a)	
Internal Contract 2		12,272		(121) ^(a)	
Internal Contract 3			151	(247) (a)	
Net exposure	(135) 12,272 151 (230)				

⁽a) Computed based on forward exchange rates as of January 1.

From the Treasury Center's perspective, the required criteria in paragraphs 815-20-25-62 through 25-63 are satisfied as follows:

- 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, and 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. The Treasury Center enters into third-party derivative instruments to offset the exposure of each foreign currency on a net basis. The Treasury Center offsets 100 percent of the net exposure to each currency; that is, the Treasury Center does not selectively keep any portion of that exposure. In this Example, the Treasury Center's third-party contracts generate losses that are equal to the losses on internal contracts designated as hedging instruments by Subsidiaries A, B, and C (see analysis beginning in the following paragraph).
- b. Internal derivatives that are not designated as hedging instruments and all nonderivative instruments are excluded from the determination of the foreign currency exposure on a net basis that is offset by the third-party derivative instrument. The Treasury Center does not include in the determination of net exposure any internal derivatives not designated as hedging instruments or any nonderivative instruments.
- c. Foreign currency exposure that is offset by a single net third-party contract arises from internal derivatives that involve the same currency and that mature within the same 31-day period. The offsetting net third-party derivative instrument related to that group of contracts must offset the aggregate or net exposure to that currency, must mature within the same 31-day period, and must be entered into within 3 business days after the designation of the internal derivatives as hedging instruments. The Treasury Center's third-party net contracts involve the same currency (that is, not a tandem currency) as the net exposure arising from the internal derivatives issued to Subsidiaries A, B, and C. The Treasury Center's third-party derivative instruments mature within the same 31-day period as the internal contracts that involve currencies that are offset on a net basis. In this Example, for simplicity, all internal contracts and third-party derivative instruments are entered into on the same date.
- d. The issuing affiliate tracks the exposure that it acquires from each hedging affiliate and maintains documentation supporting linkage of each derivative instrument and the offsetting aggregate or net derivative instrument with an unrelated third party. The Treasury Center maintains documentation supporting linkage of third-party contracts and internal contracts throughout the hedge period.
- e. The issuing affiliate does not alter or terminate the offsetting derivative instrument with an unrelated third party unless the hedging affiliate initiates that action. If the issuing affiliate does alter or terminate the offsetting third-party derivative (which should be rare), the hedging affiliate must prospectively cease hedge accounting for the internal derivatives that are offset by that third-party derivative. Based on Entity XYZ's policy, the Treasury Center may not alter or terminate the offsetting derivative instrument with an unrelated third party unless the hedging affiliate initiates that action.

f. If an internal derivative that is included in determining the foreign currency exposure on a net basis is modified or dedesignated as a hedging instrument, compliance must be reassessed. For simplicity, this Example does not involve a modification or dedesignation of an internal derivative.

At the end of the quarter, each subsidiary determines the functional currency gains and losses for each contract with the Treasury Center.

Subsidiary	Contract with Treasury Center	Beginning of Period Functional Currency Amount Receive (Pay) ^(a)	End of Period Functional Currency Amount Receive (Pay) ^(a)	Functional Currency Gain (Loss) ^(b)	US Dollar Gain (Loss) ^(c)
A (German)	Internal Contract 1	(115)	(115)	-	-
	Internal Contract 2	80	83	(3)	(3)
B (Japanese)	Internal Contract 3	(10,160)	(10,738)	578	5
	Internal Contract 4	10,432	10,421	11	-
C (UK)	Internal Contract 5	201	204	(3)	(5)
Net USD Gain (Loss)					(3)

⁽a) Computed based on forward exchange rates as of January 1 and March 31.

At the end of the quarter, the Treasury Center determines its gains or losses on third-party contracts.

Contract with Third Parties	Beginning of Period USD Amount Receive (Pay) ^(a)	End of Period USD Amount Receive (Pay) ^(a)	USD Gain (Loss) ^(b)
Third-Party Contract 1	138	131	7
Third-Party Contract 2	(121)	(114)	(7)
Third-Party Contract 3	(247)	(244)	(3)
		Net USD Gain (Loss)	(3)

⁽a) Computed based on forward exchange rates as of January 1 and March 31.

Journal Entries at March 31 (Note: All journal entries are in USD.)

Subsidiaries' Journal Entries		
German Subsidiary A		
There is no entry for Contract 1 because the USD gain or loss is zero.		
Other comprehensive income	\$3	
Derivative liability		\$3
To record the loss on Internal Contract 2.		
Japanese Subsidiary B		
Derivative asset	\$5	
Other comprehensive income		\$5
To record the gain on Contract 3.		
There is no entry for Internal Contract 4 because the USD gain or loss is	zero.	
UK Subsidiary C		
Other comprehensive income	\$5	
Derivative liability		\$5
To record the loss on Internal Contract 5.		

⁽b) For simplicity, functional currency gains or losses are not discounted in this Example.

⁽c) Functional currency gains and losses converted to USD based on current spot rates.

⁽b) For simplicity, gains or losses are not discounted in this Example.

Treasury Center's Journal Entries				
Journal Entries for Internal Contracts with Subsidiaries				
There is no entry for Internal Contract 1 because the USD gain or loss is a	zero.			
Derivative asset	\$3			
Earnings		\$3		
To record the gain on Internal Contract 2 with German Subsidiar	y A.			
Earnings	5			
Derivative liability		5		
To record the loss on Internal Contract 3 with Japanese Subsidia	ıry B.			
There is no entry for Internal Contract 4 because the USD gain or loss is a	zero.			
Derivative asset	5			
Earnings		5		
To record the gain on Internal Contract with UK Subsidiary C.				
Journal Entries for Third-Party Contracts				
Derivative asset	\$7			
Earnings		\$7		
To record the gain on Third-Party Contract 1.				
Earnings	7			
Derivative liability		7		
To record the loss on Third-Party Contract 2.				
Earnings	3			
Derivative liability		3		
To record the loss on Third-Party Contract 3.				
Results in Consolidation				
Derivative asset	\$7			
Other comprehensive income	3			
Derivative liability		\$10		

In consolidation, the amounts in the balance sheets of Subsidiaries A, B, and C reflecting derivative instrument assets and derivative instrument liabilities arising from internal derivatives acquired from the Treasury Center eliminate against the Treasury Center's derivative instrument liabilities and derivative instrument assets arising from internal derivatives issued to the subsidiaries. The amount reflected in consolidated other comprehensive income reflects the net entry to other comprehensive income of Subsidiaries A, B, and C. The Treasury Center's gross derivative instrument asset and gross derivative instrument liability arising from third-party contracts are also reflected in the consolidated balance sheet. Based on the assumptions in this Example, the Treasury Center's net loss on third-party derivative instruments used to offset the exposure, on a net basis, of internal contracts with Subsidiaries A, B, and C equals the net loss on internal contracts with the subsidiaries. Therefore, within the Treasury Center, the gains on internal contracts issued to Subsidiaries A, B, and C, and the losses on third-party contracts are equal and offsetting. If the Treasury Center's net gain or loss on third-party contracts does not equal the net gain or loss on internal derivatives designated as hedging instruments by affiliates, the difference must be recognized in consolidated other comprehensive income.

The reclassification of amounts out of consolidated other comprehensive income is based on Subsidiaries A, B, and C's internal contracts with the Treasury Center. That is, the reclassification of amounts out of consolidated other comprehensive income into earnings is based on the timing and amounts of the individual subsidiaries' forecasted transactions. In this Example, at June 30, the forecasted transactions at Subsidiaries A, B, and C have been consummated and the net debit amount in consolidated other comprehensive income of 3 has been reversed.

Chapter 5: Fair value hedge accounting

5.1 Overview

Spotlight on hedges involving LIBOR or another rate expected to be discontinued

As discussed in more detail in Section 1.3, reference rate reform will result in the elimination of LIBOR, and may result in the elimination of other interbank offered rates as well. For hedging relationships that reference LIBOR (or another reference rate expected to be eliminated), temporary optional expedients and exceptions are provided in ASC 848 related to the accounting for that hedging relationship. One or more of these temporary optional expedients and exceptions relates to the guidance in this section. For additional information about these temporary optional expedients and exceptions refer to our white paper, Optional accounting expedients can make LIBOR transition easier.

Fair value hedge accounting minimizes earnings volatility because both changes in the fair value of the derivative or other hedging instrument, and changes in the fair value of the hedged item that are attributable to the hedged risk, are recognized in earnings and offset one another. Specifically, the accounting for a fair value hedge is outlined in ASC 815-25 and summarized as follows:

- The carrying amount of the derivative or other hedging instrument is adjusted to its fair value through earnings, with the exception of amounts that are excluded from the assessment of effectiveness and recognized in earnings through an amortization approach. (Any difference between the change in fair value of the excluded component and amounts recognized in earnings through an amortization approach is recognized in other comprehensive income.)
- The carrying amount of the hedged item is adjusted through earnings for changes in its fair value that are attributable to the hedged risk. It is important to keep in mind that this is not equivalent to adjusting the carrying amount of the hedged item to its fair value. For example, the carrying amount of a hedged item is only adjusted for changes in its fair value that occur during the period of the hedge. Additionally, when hedging a component or components of risk rather than total changes in fair value (refer to the chart at Section 1.2.2 for permissible risks to hedge), the carrying amount of the hedged item is only adjusted for changes in its fair value that are specifically attributable to the hedged component(s) during the term of the hedge. For example, if hedging interest rate risk associated with a fixed-rate loan, the carrying amount of the loan would be adjusted for changes in its fair value during the term of the hedge that are attributable to the benchmark interest rate. Other factors, such as credit risk, that would impact the fair value of the loan are ignored.

If the hedging instrument in a fair value foreign exchange hedge is a nonderivative, its gain or loss attributable to foreign currency risk is the foreign currency transaction gain or loss determined in accordance with ASC 830-20-35-1 (i.e., the increase or decrease in functional currency cash flows attributable to the change in spot exchange rates between the functional currency and the currency in which the hedging instrument is denominated).

As it relates to amounts excluded from the assessment of effectiveness associated with a cross-currency interest rate swap, the initial cost (excluded component) of a cross-currency basis spread is typically embedded in the coupon payments that are paid to the counterparty. Consequently, it would be recognized in earnings each period through the typical swap accrual process, which as noted in paragraph BC163 of ASU 2017-12, the FASB views as a systematic and rational method for recognizing the cost. As a result, when an election is made to exclude this component and recognize it in earnings on a systematic and rational basis, the change in fair value of the swap attributable to the cross-currency basis spread incorporated in the discount rates used to value the swap is deferred in other comprehensive income. No amounts related to the change in the value of the cross-currency basis spread need to be manually amortized to earnings because their effect on the swap discounting reverses to zero in accumulated other comprehensive income as the swap matures.

At its February 2018 meeting, the FASB discussed the amortization of excluded components when the hedging instrument is a cross-currency interest rate swap that is off-market at hedge inception and indicated a method should be used that would not violate the guidance in ASC 815-35-35-6 to 35-7. In other words, the method used should ensure that only amounts of the swap related to spot changes on the notional amount of the net investment should remain in the currency translation adjustment at the end of the hedging relationship. The FASB indicated that any systematic and rational approach that results in the off-market nature of the swap equaling zero at the end of the hedging relationship is acceptable; however, structuring these swaps to achieve a specific accounting result is not considered rational and would therefore not be acceptable.

All amounts recognized in earnings as outlined in the preceding paragraphs are required to be presented in the same income statement line item. Examples are provided beginning at ASC 815-20-55-79W to illustrate this required presentation, including when the earnings effect of the hedged item is presented in two income statement line items.

If an entity designated and documented that it would assess effectiveness and measure hedge results on an after-tax basis as permitted by ASC 815-20-25-3(b)(2)(vi), any gain or loss on the hedging instrument that exceeds the loss or gain on the hedged item is recognized as an offset to the related tax effects in the period in which those tax effects are recognized.

There are various examples in Chapters 2, 3 and 4 of this guide that illustrate fair value hedge accounting.

5.2 Additional accounting considerations relevant to the hedged item in a fair value hedge

As indicated in Section 5.1, the carrying amount of the hedged item in a fair value hedge is adjusted for changes in fair value attributable to the hedged risk. Adjustments to the carrying amount of a hedged asset or liability should be accounted for in the same manner as other components of the carrying amount of that asset or liability. For example, in a fair value hedge of inventory, adjustments would impact the carrying amount of the inventory and would ultimately be recognized through cost of sales when the inventory item is sold.

5.2.1 Amortizing adjustments to the carrying amount of a debt instrument

In a fair value hedge where the hedged item is a debt instrument, hedge accounting adjustments to the carrying amount of the debt instrument should be amortized to earnings beginning no later than when the debt instrument ceases to be adjusted for changes in its fair value attributable to the risk being hedged (i.e., the hedging relationship is terminated). Example 3.3.10 illustrates an immediate amortization of adjustments to the carrying amount of a debt instrument, which is generally advantageous in terms of the amortization offsetting changes in the fair value of the interest rate swap that are attributable to interest accruals. Given complexities associated with recomputing a level-yield amortization of hedge accounting adjustments, some entities elect to wait until the termination of the hedging relationship to begin amortizing adjustments to the carrying amount. When hedging with an interest rate swap, as long as hedge accounting continues until the swap's expiration, the basis adjustments will generally reverse as the swap nears expiration and its fair value moves towards zero. The approach that will be taken in amortizing adjustments is a policy election that we believe should be documented in the inception date documentation discussed at Section 1.2 and consistently applied for similar hedges.

The period over which the adjustments should be amortized is the remaining life of the hedging relationship. If the hedge is discontinued, any remaining adjustments should be amortized over a period that is consistent with the amortization of other discounts or premiums.

ASC 815-25-35-13B permits using an assumed term when hedging select (rather than all) contractual cash flows to measure the change in the fair value of the hedged item attributable to interest rates. The

assumed term begins when the first hedged cash flow begins to accrue and ends when the last hedged cash flow is due and payable. As noted at paragraph BC105 of ASU 2017-12, basis adjustments made to the hedged item in a partial-term hedge are typically amortized over the life of the hedging relationship, when amortization is elected before the hedge is discontinued.

If an entity elects to amortize the basis adjustment during an outstanding partial-term hedge rather than waiting until the hedge is discontinued, that basis adjustment should be fully amortized on or before the hedged item's assumed maturity date.

5.2.1.1 Special considerations for adjustments associated with last-of-layer hedging relationships

Paragraph BC121 of ASU 2017-12 indicates that basis adjustments associated with last-of-layer hedging relationships discussed at Section 3.2.2.1.1 do not need to be allocated until the hedge is discontinued, given that the basis adjustments relate directly to the last-of-layer that is being hedged rather than the assets that make up the closed portfolio. In other words, if an asset is sold and the remaining balance of the portfolio exceeds the last-of-layer designated as the hedged item, a portion of the remaining basis adjustment does not need to be allocated to the asset that was sold. An allocation process may be necessary, however, to comply with certain disclosure requirements for an asset class. ASC 815-10-50-5B permits the basis adjustment to be allocated to individual assets or any other level more granular than the entire portfolio and less granular than the individual asset.

Once a last-of-layer hedging relationship is discontinued (in whole or part), the outstanding basis adjustment (or portion thereof) should be allocated to the individual assets in the closed portfolio using a systematic and rational method, and amortized over a period that is consistent with the amortization of other discounts or premiums associated with the respective assets in accordance with ASC 815-25-40-9.

Spotlight on future standard setting

The FASB has a project on its agenda, Hedging—Last-of-Layer Method, which is expected to address issues related to accounting for basis adjustments associated with a portfolio of loans designated as the hedged item in a last-of-layer approach. As such, further guidance should be forthcoming. For additional information about the status of this project, refer to the related FASB project update page.

5.2.2 Capitalized interest ramifications for assets under construction

When a financial liability is designated as the hedged item in a fair value hedge, as ASC 815-25-35-14 indicates, amounts in interest costs related to the amortization of the adjustments to the carrying amount of the hedged liability that are recognized during the period in which interest is eligible for capitalization are reflected in the capitalization rate under ASC 835-20.

5.2.3 Impairment considerations

Hedged items in a fair value hedge remain subject to any impairment or credit losses guidance that is relevant to the particular asset or liability. The relevant impairment or credit losses guidance should be applied after the carrying amount of the hedged item has been adjusted for changes in the fair value attributable to the hedged risk. When performing the impairment or credit losses analysis, no consideration is given to the hedging instrument (e.g., derivative) because it is a separate asset or liability from the hedged item. When the hedged item is a loan receivable for which credit losses are recognized using a discounted cash flows approach, the effective rate used as the discount rate should be based on the amortized cost basis of the loan as adjusted for the application of fair value hedge accounting. Example 3.3.12 illustrates the interaction of fair value hedge accounting with loan impairment (and measurement of credit losses).

5.3 Discontinuing fair value hedge accounting

Spotlight on hedges involving LIBOR or another rate expected to be discontinued

As discussed in more detail in Section 1.3, reference rate reform will result in the elimination of LIBOR, and may result in the elimination of other interbank offered rates as well. For hedging relationships that reference LIBOR (or another reference rate expected to be eliminated), temporary optional expedients and exceptions are provided in ASC 848 related to the accounting for that hedging relationship. One or more of these temporary optional expedients and exceptions relates to the guidance in this section. For additional information about these temporary optional expedients and exceptions refer to our white paper, Optional accounting expedients can make LIBOR transition easier.

Once elected, hedge accounting should continue to be applied unless or until one of the following occurs, as outlined at ASC 815-25-40:

- Any of the criteria to apply hedge accounting are no longer met (for example, the hedging relationship is no longer highly effective).
- The derivative instrument expires or is sold, terminated (including modified, as discussed later) or exercised.
- The hedge is dedesignated (i.e., management decides to remove the hedge designation prospectively).

At the point in time that a hedge is no longer highly effective, hedge accounting should be discontinued. If there is no identifiable event or change in circumstance that caused the hedging relationship to no longer be highly effective, hedge accounting should be discontinued after the last date on which compliance with the effectiveness criterion was established.

As pointed out at ASC 815-20-55-56, if any of the critical terms of the hedging relationship are changed, the hedge needs to be dedesignated, and hedge accounting discontinued unless a new hedging relationship is appropriately established. ASC 815-25-40-1A indicates that a change in the counterparty to a derivative instrument would not, in and of itself, be considered a termination of the derivative instrument or trigger the dedesignation of the hedge. (However, if there is a change in counterparty creditworthiness or ability to perform, the effectiveness of the hedge could be impacted.) Examples of changes that could result in the need to dedesignate the hedge include a change to a critical term of the derivative (e.g., to extend its maturity) or the item its hedging, a change to the hedged risk (unless it's a cash flow hedge of a forecasted transaction that remains highly effective), or a change to the method of assessing effectiveness.

In the event hedge accounting is discontinued, as pointed out at ASC 815-25-40, a new hedging relationship can be designated prospectively with the same or a different hedging instrument, hedged item or transaction as long as the newly designated hedging relationship meets the relevant criteria in ASC 815-20-25 (including appropriately documented), as outlined in Chapter 1. If an existing derivative is redesignated, its fair value will likely be off market (i.e., no longer zero) at the time of the redesignation. Consideration should be given to the ramifications of its off-market nature to the assessment of the effectiveness of the newly designated hedge relationship.

Upon termination of hedge accounting, the derivative instrument (if it continues to exist) would need to continue to be accounted for at fair value, with changes in fair value reflected in earnings; however, the hedged item's carrying amount should no longer be adjusted for changes in fair value attributable to the hedged risk. (Refer to Section 5.2 for additional considerations relevant to the hedged item.) For those hedges for which an election is made to amortize the value of components that are excluded from the assessment of effectiveness over the life of the hedging instrument as outlined at Section 1.2.4.4, unamortized amounts remaining in accumulated other comprehensive income at the time a hedged item

is derecognized should be recorded in earnings. Any amount remaining in accumulated other comprehensive income for all other discontinued fair value hedges should be recognized in earnings in the same manner as other components of the carrying amount of the hedged asset or liability in accordance with Section 5.2.

5.3.1 Termination of fair value hedge of firm commitment

A fair value hedge of a firm commitment should be terminated if the hedged item no longer meets the definition of a firm commitment. Upon termination, the asset or liability associated with the adjustment to the carrying amount of the firm commitment should be removed from the balance sheet and a corresponding gain or loss recognized in earnings. As noted at ASC 815-25-40-6, a pattern of discontinuing hedge accounting for this reason would call into question the firmness of future hedged commitments and the ability to apply hedge accounting.

Chapter 6: Cash flow hedge accounting

6.1 Overview

Spotlight on hedges involving LIBOR or another rate expected to be discontinued

As discussed in more detail in Section 1.3, reference rate reform will result in the elimination of LIBOR, and may result in the elimination of other interbank offered rates as well. For hedging relationships that reference LIBOR (or another reference rate expected to be eliminated), temporary optional expedients and exceptions are provided in ASC 848 related to the accounting for that hedging relationship. One or more of these temporary optional expedients and exceptions relates to the guidance in this section. For additional information about these temporary optional expedients and exceptions refer to our white paper, Optional accounting expedients can make LIBOR transition easier.

Cash flow hedge accounting minimizes earnings volatility because changes in the fair value of the derivative or other hedging instrument are recognized in other comprehensive income and reclassified into earnings when the hedged transaction impacts earnings. Specifically, the accounting for a cash flow hedge is outlined in ASC 815-30 and summarized as follows:

- All changes in the fair value of a derivative that are included in the assessment of hedge effectiveness are recognized in other comprehensive income.
- Any components that are excluded from the assessment of effectiveness are recognized in earnings (in the same income statement line item as the effect of the hedged item), either through an amortization or mark-to-market approach.
- The gain or loss in other comprehensive income associated with amounts included in the assessment
 of hedge effectiveness is reclassified into earnings (in the same income statement line item as the
 effect of the hedged item) in the same period or periods during which the hedged forecasted
 transaction affects earnings.

Examples are provided beginning at ASC 815-20-55-79W to illustrate income statement presentation, including when the earnings effect of the hedged item is presented in two income statement line items.

No guidance is provided to address the income statement classification of amounts excluded from the assessment of effectiveness in net investment hedges. The FASB acknowledged at paragraph BC131 of ASU 2017-12 that it would not make sense to require presentation in the same income statement line item as the earnings effect of the net investment hedge (generally gain or loss on sale of subsidiary) given that the sale or liquidation of a subsidiary may not have occurred in the current period and may not occur at all.

If an entity designated and documented that it would assess effectiveness and measure hedge results on an after-tax basis as permitted by ASC 815-20-25-3(b)(2)(vi), any gain or loss on the hedging instrument that exceeds the loss or gain on the hedged item are recognized as an offset to the related tax effects in the period in which those tax effects are recognized.

There are various examples in Chapters 2, 3 and 4 of this guide that illustrate cash flow hedge accounting.

6.2 Reclassification of amounts in other comprehensive income to earnings

The following table illustrates how gains and losses associated with the derivative instrument in a cash flow hedging relationship are generally reclassified out of other comprehensive income and into earnings for certain common types of hedged items. (Reference should also be made to the relevant sections that follow for additional considerations.)

Forecasted purchase of depreciable fixed asset	Amounts in other comprehensive income are reclassified into earnings over the period that the asset is depreciated.
Forecasted purchase of inventory	Amounts in other comprehensive income are reclassified into earnings when the inventory is sold and the sale recognized in earnings
Forecasted sale	Amounts in other comprehensive income are reclassified into earnings when the sale is recognized in earnings. Example 4.5.10 illustrates this process when the hedged transaction is a foreign-currency-denominated intra-entity sale.
Interest payments on a debt instrument	Amounts in other comprehensive income are reclassified into earnings as the hedged variable interest payments on the debt instrument impact earnings. This is illustrated at ASC 815-30-35-41B in the context of an interest rate cap and in Example 3.3.3 of this guide in the context of an interest rate swap. Reference should be made to ASC 815-30-35-45 when the hedged interest payments are capitalized for an asset under construction (amounts in other comprehensive income are reclassified into earnings over the depreciable life of the constructed asset to coincide with the amortization period for the capitalized interest cost on the debt).
Functional-currency- equivalent cash flows associated with a recognized foreign- currency- denominated asset or liability remeasured at spot exchange rates in accordance with ASC 830	ASC 815-30-35-3(d) indicates that If the hedging instrument is a nonoption-based contract, the amount that should be reclassified each period from other comprehensive income to earnings is the amount that will both: (a) offset the related transaction gain or loss arising from the remeasurement of the asset or liability and (b) adjust earnings for that period's allocable portion of the initial spot-forward difference associated with the hedging instrument (if the assessment of effectiveness is based on total changes in cash flows). If the hedging instrument is an option contract, the amount that should be reclassified each period to or from other comprehensive income to earnings is determined with respect to changes in the underlying that result in a change to the option's intrinsic value. If hedge effectiveness is assessed based on total changes in the option's cash flows, the amount reclassified each period should also include the amortization of the cost of the option on a rational basis.

6.2.1 Derivative with nonzero fair value at hedge inception

ASC 815-30-35-41A requires that any amounts that are recorded in other comprehensive income for the initial fair value of a derivative designated in a cash flow hedge relationship that did not have a zero fair value at inception should be reclassified to earnings on a systematic and rational basis over the periods during which the hedged forecasted transactions affect earnings, and presented in the same income statement line item as the earnings effect of the hedged item.

In practice, periodic cash settlements associated with an interest rate swap are recorded in earnings, while the change in value of all future periodic settlements (i.e., the *clean value*) is deferred in other comprehensive income. Absent reclassifying the inception date fair value of the derivative in accordance with the preceding paragraph, the initial fair value or some portion of it would remain in accumulated other comprehensive income when the hedging instrument matures.

6.2.2 Gains or losses from cash flow hedges of debt that is extinguished

ASC 815-30-35-44 addresses the ramifications of the extinguishment of debt that has been designated in a cash flow hedge. Namely, any amounts reclassified out of accumulated other comprehensive income to

earnings pertaining to a cash flow hedge of debt that is extinguished should not be included in the debt extinguishment gain or loss.

6.3 Impairment considerations associated with hedged items or transactions

ASC 815-30-35-40 requires immediate loss recognition if and to the extent losses in accumulated other comprehensive income are expected to result in the recognition of a net loss on the combination of the hedging instrument and the hedged transaction (and the related asset acquired or liability incurred). An example is provided at ASC 815-30-35-41 in the context of hedging the forecasted purchase of inventory. (A loss should be recognized in earnings to the extent that the cost basis of the inventory plus the related loss reported in accumulated other comprehensive income exceeds the amount expected to be recovered through sales of that inventory). Additionally, as noted at ASC 815-30-35-42 to 35-43, assets and liabilities that are designated as the hedged item in a cash flow hedge remain subject to impairment assessments and recognition of credit losses when required by other U.S. GAAP. Relevant impairment or credit loss requirements should be applied after hedge accounting has been applied for the period. No consideration should be given to the fair value or expected cash flows of the derivative or other hedging instrument when evaluating the hedged item for impairment. If an asset impairment loss or writeoff due to credit losses is recognized or an impairment obligation associated with an asset or liability to which a hedged forecasted transaction relates is recognized, any offsetting net gain related to that transaction in accumulated other comprehensive income should be reclassified immediately into earnings. Similarly, if a recovery is recognized on the asset or liability to which the forecasted transaction relates, any offsetting net loss in accumulated other comprehensive income should be reclassified immediately into earnings.

6.4 Discontinuing cash flow hedge accounting

Spotlight on hedges involving LIBOR or another rate expected to be discontinued

As discussed in more detail in Section 1.3, reference rate reform will result in the elimination of LIBOR, and may result in the elimination of other interbank offered rates as well. For hedging relationships that reference LIBOR (or another reference rate expected to be eliminated), temporary optional expedients and exceptions are provided in ASC 848 related to the accounting for that hedging relationship. One or more of these temporary optional expedients and exceptions relates to the guidance in this section. For additional information about these temporary optional expedients and exceptions refer to our white paper, Optional accounting expedients can make LIBOR transition easier.

Hedge accounting should be discontinued prospectively upon the occurrence of any of the following outlined at ASC 815-30-40-1:

- Any criterion to apply hedge accounting is no longer met.
- The derivative instrument expires, is sold, terminated (including modified) or exercised.
- The hedge designation is removed (refer to Example 2.5.5 for an illustration).

As part of the ongoing monitoring of a hedge, consideration needs to be given to whether the criteria to apply hedge accounting (as summarized in Chapter 1) continue to be met because if any criterion are not met, hedge accounting should be discontinued. For example, at the point in time that a hedge is no longer highly effective, hedge accounting should be discontinued. If there is no identifiable event or change in circumstance that caused the hedging relationship to no longer be effective, hedge accounting should be discontinued after the last date on which compliance with the effectiveness criterion was established. As another example, in a hedge of forecasted transactions as the hedged item, in the event those forecasted transactions are no longer probable of occurring, hedge accounting should be discontinued. (Refer to the related discussion at Section 1.2.2.2.1.1.)

As pointed out at ASC 815-20-55-56, if any of the critical terms of the hedging relationship are changed, the hedge needs to be dedesignated, and hedge accounting discontinued unless a new hedging relationship is appropriately established. ASC 815-25-40-1A indicates that a change in the counterparty to a derivative instrument would not, in and of itself, be considered a termination of the derivative instrument or trigger the dedesignation of the hedge. (If, however, it is no longer probable that the counterparty will be able to perform in accordance with the contractual provisions of the derivative, hedge accounting would need to be discontinued.) Examples of changes that could result in the need to dedesignate the hedge include a change to a critical term of the derivative (e.g., to extend its maturity) or the item its hedging that makes it no longer probable that the forecasted hedged transactions as described are going to occur, or a change to the method of assessing effectiveness. As noted at ASC 815-30-35-37A and illustrated through Examples 2.5.1 and 3.3.4, hedge accounting can continue to be applied if there is a change to the designated hedged risk as long as the hedging instrument is highly effective at achieving offsetting cash flows attributable to the revised hedged risk.

Upon discontinuing hedge accounting, the derivative instrument (if it continues to exist) would need to continue to be accounted for at fair value; however, all changes in fair value are reflected in earnings rather than other comprehensive income. As indicated at ASC 815-30-40-4, the net derivative gain or loss that was accumulated in other comprehensive income during the period of time that the cash flow hedge was effective should continue to be reported in accumulated other comprehensive income and reclassified into earnings in accordance with Section 6.2 unless it is probable that the hedged forecasted transaction will not occur by the end of the originally specified time period (documented at the inception of the hedging relationship) or within an additional two-month period of time thereafter. In other words, absent the existence of extenuating circumstances elaborated on at ASC 815-30-40-4, any amounts in other comprehensive income associated with a cash flow hedge would be immediately reclassified to earnings if it is no longer probable that the hedged forecasted transaction would occur by the end of the originally specified time period or within an additional two-month period of time thereafter. (There is no guidance addressing where on the income statement such amounts should be reported.) As noted at Section 1.2.2.2.1.1, a pattern of determining that hedged forecasted transactions are probable of not occurring would call into question both the entity's ability to accurately predict forecasted transactions and the propriety of using hedge accounting in the future for similar forecasted transactions.

Various examples within ASC 815 illustrate the ramifications of hedged forecasted transactions no longer being probable and the discontinuation of hedge accounting, including certain of the cash flow hedge examples incorporated in Chapters 2 and 3 and the example that follows from ASC 815-30-55-100 to 55-105:

Example 6.4.1: Discontinuation of a cash flow hedge (from ASC 815-30-55-100 to 55-105)

The following Cases illustrate the application of paragraphs 815-30-40-4 through 40-5 to changes in timing of a forecasted transaction in relation to an originally specified time period:

- a. Transactions to occur within two months of end of originally specified time period (Case A)
- b. Transactions not to occur within two months of end of originally specified time period (Case B).

Cases A and B share the following assumptions. On January 1, an entity enters into a hedge of the variability in the total cash flows of a forecasted sale of the first 100 units of a specified product during the 3-month period from February 1 to April 30. Gains and losses on the hedging instrument are accumulated in other comprehensive income and reclassified into earnings as sales occur and are presented in the same income statement line item as the earnings effect of the hedged item. However, as of March 10, only 60 units of the product have been sold and the entity determines that it is probable that the sale of the remaining 40 units will not occur by April 30. As a result, the entity must discontinue cash flow hedge accounting under the originally designated hedging relationship as of March 10 (pursuant to paragraph 815-30-40-1(a)).

Case A: Transactions to Occur within Two Months of End of Originally Specified Time Period

In this Case, the entity determines that it is probable that the sale of the remaining 40 units will occur by June 20. Based on this new information, the entity is permitted to designate a new cash flow hedge under which subsequent derivative instrument gains and losses would receive cash flow hedge accounting. This Example focuses on the derivative instrument gains and losses that have been accumulated in other comprehensive income at March 10 with respect to the remaining 40 unsold units. The derivative instrument gains or losses accumulated in other comprehensive income related to the sale of the remaining 40 units should not be reclassified into earnings as of March 10 because the entity determined on that date that it is at least reasonably possible that the forecasted transactions will occur within the two-month period following April 30 (the end of the originally specified time period).

Case B: Transactions Not to Occur within Two Months of End of Originally Specified Time Period

In this Case, the entity determined on March 10 that it is probable that the sale of the remaining 40 units will not occur by June 30 but it was reasonably possible that the sale would occur in July or August.

In that circumstance, the derivative instrument gains or losses accumulated in other comprehensive income related to the sale of the remaining 40 units must be reclassified into earnings as of March 10 because the entity would have determined on that date that it is probable that the forecasted transactions will neither occur by the end of the originally specified time period (that is, April 30) nor within the allowable additional two-month period of time (ending on June 30).

Furthermore, the example indicates no extenuating circumstances that could justify applying the exception related to a forecasted transaction that is probable of occurring on a date beyond the additional two-month period of time.

6.4.1 Designating a new hedge

Spotlight on hedges involving LIBOR or another rate expected to be discontinued

As discussed in more detail in Section 1.3, reference rate reform will result in the elimination of LIBOR, and may result in the elimination of other interbank offered rates as well. For hedging relationships that reference LIBOR (or another reference rate expected to be eliminated), temporary optional expedients and exceptions are provided in ASC 848 related to the accounting for that hedging relationship. One or more of these temporary optional expedients and exceptions relates to the guidance in this section. For additional information about these temporary optional expedients and exceptions refer to our white paper, Optional accounting expedients can make LIBOR transition easier.

In the event hedge accounting is discontinued, as pointed out at ASC 815-30-40, a new hedging relationship can be designated prospectively with the same or different hedging instrument, hedged item or transaction as long as the newly designated hedging relationship meets the relevant criteria in ASC 815-20-25 (including appropriately documented), as outlined in Chapter 1. If an existing derivative is redesignated, its fair value will likely be off market (i.e., no longer zero) at the time of the redesignation. Consideration should be given to the ramifications of its off-market nature to the assessment of the effectiveness of the newly designated hedge relationship. For example, if the hypothetical-derivative method discussed at Section 1.2.4.3.3.2 is elected to assess the effectiveness of a hedge involving an off-market interest rate swap, the fixed interest rate on the hypothetical interest rate swap would be the rate that would result in the hypothetical swap having a zero fair value on the redesignation date. Additionally, as noted in Section 6.2.1, any amounts that are recorded in other comprehensive income for the initial fair value of a derivative designated in a cash flow hedge relationship that did not have a zero fair value at inception should be reclassified to earnings on a systematic and rational basis over the

periods during which the hedged forecasted transactions affect earnings, and presented in the same income statement line item as the earnings effect of the hedged item.

Appendix A: High level overview of ASU 2017-12, as amended by ASU 2019-04

On August 28, 2017, the FASB issued ASU 2017-12 that brought forth some long-awaited improvements to hedge accounting. Various provisions of ASU 2017-12 were subsequently clarified through the issuance of ASU 2019-04 in April 2019. This appendix provides a high-level overview of each of these ASUs.

A.1 ASU 2017-12

The most significant improvements brought forth by ASU 2017-12, as well as its effective date and transition provisions, are summarized in the discussion that follows.

A.1.1 Risk component hedging

Prior to the issuance of ASU 2017-12, ASC 815-20 was restrictive in terms of the specific risks that could be hedged when applying hedge accounting. ASU 2017-12 permits certain new risk components to be hedged, including:

- Variability in cash flows attributable to changes in a contractually specified component in a cash flow hedge of a forecasted purchase or sale of a nonfinancial asset, such as a commodity
- Variability in cash flows attributable to the contractually specified interest rate in a cash flow hedge of interest rate risk
- Changes in fair value attributable to interest rate risk related to the SIFMA Municipal Swap Rate in a fair value hedge of a tax-exempt financial instrument

A.1.2 Accounting for the hedged item in fair value hedges of interest rate risk

ASU 2017-12 is more permissive in terms of how fair value hedges of interest rate risk can be designated and how the change in fair value of the hedged item can be measured by permitting:

- The change in fair value of the hedged item to be measured on the basis of the benchmark rate component rather than on the basis of full contractual coupon cash flows.
- The hedged item in a partial-term hedge to be measured by assuming it has a term that reflects only the designated cash flows being hedged.
- Entities to consider only how changes in the benchmark interest rate affect a decision to settle a
 prepayable debt instrument before its scheduled maturity when calculating the change in the fair
 value of the hedged item.
- Use of a *last-of-layer* designation method when hedging a closed portfolio of prepayable financial assets whereby an entity can designate the hedged item as an amount that is not expected to be affected by prepayments, defaults and other events that could impact cash flows.

A.1.3 Recognition and presentation of the effects of hedging instruments

To promote better financial statement alignment of the recognition and presentation of the effects of the hedging instrument and the hedged item, ASU 2017-12 requires:

- The earnings effect of the hedging instrument to be presented in the same income statement line item with the earnings effect of the hedged item.
- Hedge ineffectiveness to no longer be separately measured and reported.

A.1.4 Amounts excluded from the assessment of hedge effectiveness

Pre-existing guidance permitted an entity to exclude option premiums and forward points from the assessment of hedge effectiveness. ASU 2017-12 also permits the portion of the change in fair value of a currency swap that is attributable to a cross-currency basis spread to be excluded from the assessment of

effectiveness. In addition, the initial value of any excluded components can be recognized in earnings over the life of the hedging instrument using a systematic and rational method, such as straight line, rather than recognizing all fair value changes of excluded components currently in earnings as the guidance in ASC 815 required prior to the issuance of ASU 2017-12.

A.1.5 Other simplifications of hedge accounting guidance

ASU 2017-12 brought about certain other targeted improvements to ease the burden associated with assessing hedge effectiveness, including:

- Permitting an entity to elect on a hedge-by-hedge basis to assess effectiveness qualitatively (after an
 initial quantitative assessment is performed as necessary) by verifying and documenting on a
 quarterly basis that facts and circumstances have not changed, such that the entity can assert
 qualitatively that the relationship was, and continues to be, highly effective.
- The ability to assume that the derivative and a hedged group of forecasted transactions mature at the same time if the derivative matures, and the hedged transactions occur, within the same 31-day period or fiscal month.
- Allowing up until the first quarterly effectiveness testing date to perform the initial prospective quantitative assessment of effectiveness.
- Allowing private companies (other than financial institutions and certain not-for-profit entities) up until
 the date on which the next interim (if applicable) or annual financial statements, including footnotes,
 are available to be issued to: (a) select the method that will be used to assess effectiveness and (b)
 perform any required initial and quarterly effectiveness assessments. (This relief is in addition to the
 simplified hedge accounting approach that can be elected by certain private companies for qualifying
 hedges of variable-rate debt.)
- Allowing an entity that applies the shortcut method and subsequently determines that the use of the
 method was not, or no longer is, appropriate, to apply a long-haul method for assessing
 effectiveness, as long as the hedge is highly effective and the entity documents at hedge inception
 the long-haul methodology that will be used.

A.1.6 Effective date

ASU 2017-12 is effective for public business entities in fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. It is effective for all other entities in fiscal years beginning after December 15, 2020, and interim periods within fiscal years beginning after December 15, 2021. Early application is permitted in any interim period after issuance of ASU 2017-12, with the impact of adoption reflected as of the beginning of the fiscal year of adoption.

A.1.7 Transition

Given that upon the adoption of ASU 2017-12, ineffectiveness will no longer be separately measured and reported, the cumulative amount of ineffectiveness recognized in earnings for existing cash flow and net investment hedges should be reclassified out of the opening balance of retained earnings and into accumulated other comprehensive income. Transition is prospective for: (a) the requirement to present the entire change in the fair value of the hedging instrument in the same income statement line item as the earnings effect of the hedged item (except for amounts excluded from the assessment of hedge effectiveness in a net investment hedge) and (b) the new and modified disclosure requirements. In the materials for FASB's September 5, 2018 meeting, the FASB staff indicated that entities may choose, but are not required, to conform pre-adoption financial statement presentation to post-adoption presentation.

A.1.8 Advantageous transition elections

ASU 2017-12 permits certain advantageous transition elections to be made upon its adoption. Entities should allow sufficient time prior to adoption to evaluate these elections and decide and document those

it intends to elect given there are stringent time frames in which the elections must be made. Those time frames are as follows, depending on the nature of the entity.

Private companies, excluding: (a) financial institutions ¹⁷ and (b) not-for-profit entities that have issued, or are a conduit bond obligor for, securities that are traded, listed or quoted on an exchange or an over-the-counter market	Before the next interim (if applicable) or annual financial statements are available to be issued.	
All other entities	Before the first quarterly effectiveness assessment date after the date of adoption	

With one exception, the transition elections pertain only to accounting hedges that are outstanding at the date of adoption. Any entity (including those without existing hedges) can elect upon transition to reclassify certain individual debt securities from held-to-maturity to available-for-sale without tainting its stated intent to hold those securities to maturity. This one time ability to elect to reclassify a security or securities pertains only to securities that are eligible to be hedged under the last-of-layer method described at Section 3.2.2.1.1. (Note that an entity is not required to elect hedge accounting for a transferred security, the security just needs to qualify for the method.) The unrealized gain or loss on any securities that are reclassified to available-for-sale would be recognized in accumulated other comprehensive income upon transfer. The remaining available transition elections should be given careful consideration by entities with existing accounting hedges as they may ease some of the burdens of hedge accounting for those existing hedges. These transition elections are outlined in ASC 815-20-65-3 and relate primarily to the following types of hedges:

- Fair value hedges of interest rate risk
- Fair value hedges of foreign exchange risk with a currency swap
- Hedges that exclude a portion of the hedging instrument from the assessment of effectiveness if management desires to modify the recognition model for the excluded component from a mark-tomarket approach to an amortization approach
- Hedges for which a quantitative method is used to assess effectiveness if management desires, and the relationship meets the requirements, to change to a qualitative method
- Hedges for which effectiveness is assessed under the shortcut method for interest rate swaps if
 management desires as a measure of protection to document how effectiveness will be assessed in
 the event the relationship did not qualify, or no longer qualifies, for the shortcut method
- Cash flow hedges for which the hedged risk is designated as the variability in total cash flows if management desires to change the designation to a contractually specified component or interest rate to promote effectiveness

A.2. ASU 2019-04

A.2.1 Overview

In addition to impacting other accounting standards, ASU 2019-04 brought forth various clarifications and corrections to ASU 2017-12, including the following:

• Amongst other changes related to partial-term fair value hedges, multiple partial-term hedges of a single financial instrument can be outstanding at the same time.

¹⁷ See description at ASC 942-320-50-1.

- An entity may (but is not required to) amortize a fair value hedge basis adjustment before the fair value hedging relationship is discontinued. The basis adjustment should be fully amortized by the hedged item's assumed maturity date.
- As it relates to disclosures of the hedged item in a fair value hedge, available-for-sale debt securities should be disclosed at their amortized cost, and fair value hedge basis adjustments related to foreign exchange risk should not be disclosed.
- As it relates to the application of the hypothetical derivative method, the contractually specified interest rate that is being hedged should be considered.
- Entities that do not report earnings (e.g., not-for-profit entities and benefit plans) cannot elect to amortize amounts excluded from the assessment of effectiveness for fair value hedging relationships and cannot apply cash flow hedge accounting.
- The analysis supporting a last-of-layer hedge designation should be documented by a private company (and all other entities) at the inception of the hedge.
- Not-for-profit entities (except for those that have issued, or are a conduit bond obligor for, securities
 that are traded, listed or quoted on an exchange or an over-the-counter market) qualify for the hedge
 effectiveness assessment timing relief in ASC 815-20-25-142.
- A cash flow hedge of overall changes in cash flows on the first payments received from a group of variable interest payments continues to be permissible.
- Clarifies certain transition provisions of ASU 2017-12 including:
 - Those related to rebalancing fair value hedging relationships of interest rate risk when the measurement methodology used for the hedged item is modified from total contractual coupon cash flows to the benchmark rate component of contractual coupon cash flows.
 - An entity may transition from a quantitative method of assessing hedge effectiveness to a qualitative method if certain conditions are met.
 - The reclassification of a debt security from held-to-maturity to available-for-sale in accordance with ASC 815-20-65-3(e)(7) does not call into question an assertion to hold other debt securities to maturity and does not restrict the entity from subsequently selling the reclassified security. Additionally, the reclassified security is not required to be designated in a last-of-layer hedging relationship.

A.2.2 Effective date and transition considerations

For those entities that adopted ASU 2017-12 before the April 2019 issuance of ASU 2019-04, ASU 2019-04 is effective as of the beginning of the first annual reporting period after its issuance, and can be early adopted. The effective date of ASU 2019-04 is the same as the effective date for ASU 2017-12 for entities that did not adopt ASU 2017-12 before the issuance date of ASU 2019-04. Transition provisions are outlined in ASC 815-20-65-5. The most notable transition provision is that an entity that adopted ASU 2017-12, but did not transfer any held-to-maturity debt securities to available-for-sale as permitted by ASC 815-20-65-3, has another opportunity to make a transfer of eligible securities in conjunction with the adoption of ASU 2019-04.

Appendix B: Acronyms, definitions and literature references

Several acronyms are used throughout this guide and references are made to specific topics and subtopics in the ASC. This appendix includes an acronym legend, which lists the acronyms and their corresponding definitions, definitions of certain key terms and a literature listing of ASUs and ASC topics and subtopics referred to throughout this guide with their corresponding titles.

Acronym legend

Acronym	Definition
ASC	FASB's Accounting Standards Codification
ASU	Accounting Standards Update
FASB	Financial Accounting Standards Board
LIBOR	London Interbank Offered Rate
OIS	Overnight Index Swap
SEC	Securities and Exchange Commission
SIFMA	Securities Industry and Financial Markets Association
SOFR	Secured Overnight Financing Rate
U.S. GAAP	U.S. generally accepted accounting principles

Definitions

Several terms with specific meaning are used throughout this guide. Those terms and the corresponding definition in the Master Glossary of the ASC are provided in the table that follows, except for the definition of *private company*, which is not defined in the Master Glossary, but for which we have provided a definition for purposes of its use in this guide.

Term	Definition
All-in-One Hedge	In an all-in-one hedge, a derivative instrument that will involve gross settlement is designated as the hedging instrument in a cash flow hedge of the variability of the consideration to be paid or received in the forecasted transaction that will occur upon gross settlement of the derivative instrument itself.
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.

Term	Definition
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.
Contractually Specified Component	An index or price explicitly referenced in an agreement to purchase or sell a nonfinancial asset other than an index or price calculated or measured solely by reference to an entity's own operations.
Credit Risk	 For purposes of a hedged item in a fair value hedge, credit risk is the risk of changes in the hedged item's fair value attributable to both of the following: a. Changes in the obligor's creditworthiness b. Changes in the spread over the benchmark interest rate with respect to the hedged item's credit sector at inception of the hedge. For purposes of a hedged transaction in a cash flow hedge, credit risk is the risk of changes in the hedged transaction's cash flows attributable to all of the following: a. Default b. Changes in the obligor's creditworthiness c. Changes in the spread over the contractually specified interest rate or the benchmark interest rate with respect to the related financial asset's or liability's credit sector at inception of the hedge.
Expected Cash Flow	The probability-weighted average (that is, mean of the distribution) of possible future cash flows.
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.
Fed Funds Effective Swap Rate (or Overnight Index Swap Rate)	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, equates to the present value of the variable cash flows.
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 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 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

Term	Definition
	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, 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.
Financial Statements Are Available to Be Issued	Financial statements are considered available to be issued when they are complete in a form and format that complies with U.S. GAAP and all approvals necessary for issuance have been obtained, for example, from management, the board of directors, and(or) significant shareholders. The process involved in creating and distributing the financial statements will vary depending on an entity's management and corporate governance structure, as well as statutory and regulatory requirements.
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

Term	Definition
	does not give an entity any present rights to future benefits or a present obligation for future sacrifices.
Foreign Exchange Risk	The risk of changes in a hedged item's fair value or functional-currency- equivalent cash flows attributable to changes in the related foreign currency exchange rates.
Interest Rate Risk	For recognized variable-rate financial instruments and forecasted issuances or purchases of variable-rate financial instruments, interest rate risk is the risk of changes in the hedged item's cash flows attributable to changes in the contractually specified interest rate in the agreement. For recognized fixed-rate financial instruments, interest rate risk is the risk of changes in the hedged item's fair value attributable to changes in the designated benchmark interest rate. For forecasted issuances or purchases of fixed-rate financial instruments, interest rate risk is the risk of changes in the hedged item's cash flows attributable to changes in the designated benchmark interest rate.
Internal Derivative	A foreign currency derivative instrument that has been entered into with another member of a consolidated group (such as a treasury center).
Intrinsic Value	The amount by which the fair value of the underlying stock exceeds the exercise price of an option. For example, an option with an exercise price of \$20 on a stock whose current market price is \$25 has an intrinsic value of \$5. (A nonvested share may be described as an option on that share with an exercise price of zero. Thus, the fair value of a share is the same as the intrinsic value of such an option on that share.)
London Interbank Offered Rate 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 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.
Nonperformance Risk	The risk that an entity will not fulfill an obligation. Nonperformance risk includes, but may not be limited to, the reporting entity's own credit risk.
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.
Private company	An entity other than a public business entity, a not-for-profit entity or an employee benefit plan within the scope of ASC 960 through 965 on plan accounting.
Public Business Entity	A business entity meeting any one of the following criteria. Neither a not-for-profit entity nor an employee benefit plan is a business entity. a. It is required by the U.S. Securities and Exchange Commission (SEC) to file or furnish financial statements, or does file or furnish financial statements (including voluntary filers), with the SEC (including other

Term	Definition
	entities whose financial statements or financial information are required to be or are included in a filing).
	 It is required by the Securities Exchange Act of 1934 (the Act), as amended, or rules or regulations promulgated under the Act, to file or furnish financial statements with a regulatory agency other than the SEC.
	c. It is required to file or furnish financial statements with a foreign or domestic regulatory agency in preparation for the sale of or for purposes of issuing securities that are not subject to contractual restrictions on transfer.
	 d. It has issued, or is a conduit bond obligor for, securities that are traded, listed, or quoted on an exchange or an over-the-counter market.
	e. It has one or more securities that are not subject to contractual restrictions on transfer, and it is required by law, contract, or regulation to prepare U.S. GAAP financial statements (including notes) and make them publicly available on a periodic basis (for example, interim or annual periods). An entity must meet both of these conditions to meet this criterion.
	An entity may meet the definition of a public business entity solely because its financial statements or financial information is included in another entity's filing with the SEC. In that case, the entity is only a public business entity for purposes of financial statements that are filed or furnished with the SEC.
Securities Industry and Financial Markets Association (SIFMA) Municipal Swap Rate	The fixed rate on a U.S. dollar, constant-notional interest rate swap that has its variable-rate leg referenced to the Securities Industry and Financial Markets Association Municipal Swap Index with no additional spread over the SIFMA Municipal Swap Index 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, equates to the present value of the variable cash flows.
Spot Rate	The exchange rate for immediate delivery of currencies exchanged.
Time Value of an Option	The time value of an option is equal to the fair value of an option less its intrinsic value.
Transaction	An external event involving transfer of something of value (future economic benefit) between two (or more) entities. (See FASB Concepts Statement No. 6, <i>Elements of Financial Statements</i> .)
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.
Zero-Coupon Method	A swap valuation method that involves computing and summing the present value of each future net settlement that would be required by the contract terms if future spot interest rates match the forward rates implied by the

Term	Definition
	current yield curve. The discount rates used are the spot interest rates implied by the current yield curve for hypothetical zero coupon bonds due on the date of each future net settlement on the swap.

Literature listing

ASC topic or subtopic	Title
815	Derivatives and Hedging
815-10	Derivatives and Hedging – Overall
815-20	Derivatives and Hedging – Hedging – General
815-25	Derivatives and Hedging – Fair Value Hedges
815-30	Derivatives and Hedging – Cash Flow Hedges
815-35	Derivatives and Hedging – Net Investment Hedges
820	Fair Value Measurement
830	Foreign Currency Matters
830-20	Foreign Currency Matters – Foreign Currency Transactions
830-30	Foreign Currency Matters – Translation of Financial Statements
835-20	Interest – Capitalization of Interest
848	Reference Rate Reform
942-320	Financial Services—Depository and Lending – Investments—Debt and Equity Securities
960	Plan Accounting—Defined Benefit Pension Plans
965	Plan Accounting—Health and Welfare Benefit Plans

Other literature	Title
ASU 2016-13	Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments
ASU 2017-12	Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities
ASU 2018-16	Derivatives and Hedging (Topic 815): Inclusion of the Secured Overnight Financing Rate (SOFR) Overnight Index Swap (OIS) Rate as a Benchmark Interest Rate for Hedge Accounting Purposes
ASU 2019-04	Codification Improvements to Topic 326, Financial Instruments—Credit Losses, Topic 815, Derivatives and Hedging, and Topic 825, Financial Instruments
ASU 2020-04	Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting

+1800 274 3978

rsmus.com

This document contains general information, may be based on authorities that are subject to change, and is not a substitute for professional advice or services. This document does not constitute audit, tax, consulting, business, financial, investment, legal or other professional advice, and you should consult a qualified professional advisor before taking any action based on the information herein. RSM US LLP, its affiliates and related entities are not responsible for any loss resulting from or relating to reliance on this document by any person. Internal Revenue Service rules require us to inform you that this communication may be deemed a solicitation to provide tax services. This communication is being sent to individuals who have subscribed to receive it or who we believe would have an interest in the topics discussed.

RSM US LLP is a limited liability partnership and the U.S. member firm of RSM International, a global network of independent audit, tax and consulting firms. The member firms of RSM International collaborate to provide services to global clients, but are separate and distinct legal entities that cannot obligate each other. Each member firm is responsible only for its own acts and omissions, and not those of any other party. Visit rsmus.com/aboutus for more information regarding RSM US LLP and RSM International.

RSM, the RSM logo and *the power of being understood* are registered trademarks of RSM International Association.

