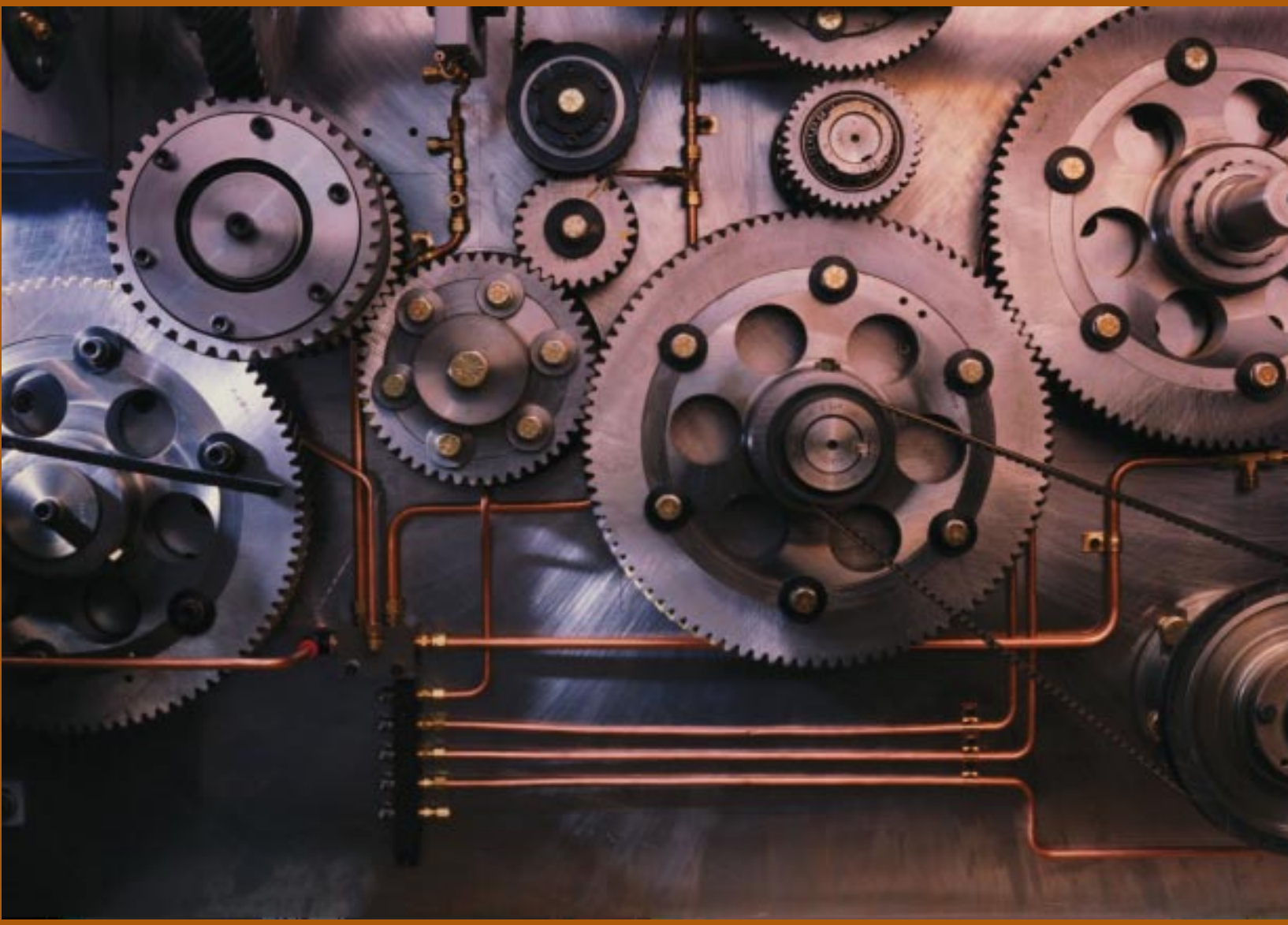
PRICEWATERHOUSECOOPERS

Hedging Relationships: A Guide to Understanding and Applying CICA Accounting Guideline 13



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Hedging Relationships: A Guide to Understanding and Applying CICA Accounting Guideline 13

To Our Friends

In December 2001 the CICA Accounting Standards Board issued Accounting Guideline 13, *Hedging Relationships*. It is effective for years starting on or after July 1, 2003. The Guideline applies to both profit-oriented enterprises and not-for-profit organizations. There are no exemptions for specific industries or differential reporting options for non-public enterprises.

The Guideline establishes strict criteria that must be met before an entity can apply hedge accounting. Hedge accounting involves deferring gains and losses on a hedging instrument until the hedged item affects earnings. It also includes accounting for derivative financial instruments such as interest rate swaps, cross-currency swaps and forward contracts on a cost basis. Accordingly, the Guideline is far reaching in its scope.

The Guideline will change hedge accounting practices significantly in a number of areas:

- It requires an entity to document hedging strategies, relationships and effectiveness assessments in much greater detail than existing GAAP.
- It will preclude entities from applying hedge accounting for certain well-established hedging strategies. For example, it prohibits so-called "macro hedge" accounting. Under the Guideline, derivatives and other hedging instruments generally must be matched, one for one, to individual assets, liabilities or anticipated transactions, or groups of similar assets, liabilities and anticipated transactions.
- It requires detailed assessments of the effectiveness of the hedging relationship. In many cases, it will be possible to demonstrate effectiveness only by using regression or other formal methods of statistical analysis.

The cost of not meeting the rules in the Guideline is heavy – income statement volatility. For example, an entity that hedges a debt using an interest rate swap in a way that is not in compliance with the Guideline will have to mark the swap to fair value and immediately recognize changes in its fair value in earnings.

The Guideline is complex. We have prepared this monograph to help you understand and implement the new rules. It includes our observations on the requirements and clarifies some important aspects of the standard. As additional implementation questions emerge, we will consider issuing further guidance.

As always, our experts stand ready to assist you. Please get in touch with your local engagement partner or other PricewaterhouseCoopers contact for help.

December 2003

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Purpose and Scope

The Guideline applies to both profit-oriented enterprises and not-for-profit organizations. It provides no exemptions for specific industries or differential reporting alternatives under Section 1300, DIFFERENTIAL REPORTING.

The primary purpose of the Guideline is to set criteria that an entity must meet to in order to use "hedge accounting". A second objective is to establish the accounting to be followed when an entity no longer meets these criteria and must discontinue hedge accounting. While the Guideline supplements and interprets the existing requirements on accounting for foreign currency hedges in CICA Handbook Section 1650, FOREIGN CURRENCY TRANSLATION, it applies to hedges of all other types of risk exposures such as interest rate risk, credit risk and all other forms of price risk.

The standard does not address how actually to apply hedge accounting. Once an entity has met the Guideline's requirements, it would account for gains and losses on the hedged item and hedging item using existing GAAP.

Hedge Accounting

The Guideline describes "hedge accounting" as a technique that modifies the normal basis for recognizing gains and losses (or revenues and expenses) associated with a hedged item or a hedging item so that both are recognized in earnings in the same accounting period. Hedge accounting thus affords management the opportunity to eliminate the income statement volatility that otherwise would arise if the hedged item and hedging items were accounted for under GAAP separately, without regard to the business purpose of the hedge.

Broadly speaking, hedge accounting takes three basic forms under existing GAAP:

- Deferring recognized gains and losses in respect of the hedging item on the balance sheet until the hedged item affects earnings, or vice versa.
- Accounting for derivative financial instruments and certain similar types of instruments using the cost or accrual method of accounting.
- Accounting for combinations of two or more instruments designed to emulate the characteristics of another instrument on a combined basis, as if the instrument being emulated actually had been issued or acquired – so called "synthetic instrument accounting".

Deferring Recognized Gains and Losses

Perhaps the most familiar form of hedge accounting is to defer a gain or loss recognized in respect of the hedging item until the offsetting loss or gain on the hedged item is recognized (or, alternatively, defer the gain or loss on the hedged item until the loss or gain on the hedging item is recognized). For example, assume an entity uses a future foreign currency revenue stream to hedge a foreign currency debt. Under GAAP, the entity must translate the debt at the spot rate in effect at the balance sheet date. Under hedge accounting, the entity would defer the resulting exchange gain or loss it recognizes on the balance sheet until the foreign currency revenues are recognized. Another example of deferral accounting is the treatment of gains or losses recognized on the early termination of an interest rate swap that hedges an interest exposure on a long-term debt. Even though the gain or loss on the swap has been "realized" in cash, the entity would defer the gain or loss until the related interest expense is recognized in the income statement.

Accounting for Derivative Instruments Using the Cost or Accrual Method

In EIC 128, *Accounting for Trading, Speculative or Non-Hedging Derivative Financial Instruments*, the EIC reached a consensus that unless a derivative financial instrument qualifies for hedge accounting under the Guideline, the derivative should be accounted for at fair value and changes in its fair value should be recognized in earnings as they arise. There are some exceptions to this rule, which are identified below.

Under existing Canadian GAAP, derivative financial instruments usually are accounted for using the cost or accrual method rather than at fair value. Consequently, unless the criteria in the Guideline are met, the accounting for these instruments will need to change. Under the cost or accrual method, gains and losses on a derivative generally are recognized only as amounts become receivable or payable under the contract. Occasionally, other gains and losses are recognized on the derivative to offset losses and gains required to be recognized on the hedged item. For example, when an entity uses a forward exchange contract to hedge a foreign currency debt, it will recognize gains and losses on the forward as necessary to offset losses and gains arising from the translation of the debt.

Section 3860, FINANCIAL INSTRUMENTS – DISCLOSURE AND PRESENTATION, describes derivative financial instruments as contracts that create rights and obligations that have the effect of transferring between the parties to the instrument one or more of the financial risks inherent in an underlying primary financial instrument. It also states that derivative financial instruments do not result in a transfer of the underlying financial instrument on inception of the contract and that such a transfer does not necessarily take place on maturity of the contract. Derivative financial instruments therefore include contracts that either require or permit "net settlement" in cash or other financial assets when the settlement amount is based on the value of a specified financial asset. Net settlement provisions in a contract mean that the contract can or must be settled by one of the parties paying the other an amount based on the change in the price of an asset or some other variable identified in the contract, instead of delivering the asset.

Common examples of derivative financial instruments include:

- Interest rate swaps.
- Cross-currency swaps.
- Cross-currency interest rate swaps.
- Forward exchange contracts.
- Financial options.
- Forward rate agreements.

EIC 128 excludes the following instruments from its scope:

- Loan or deposit facilities.
- Note issuance facilities.
- Letters of credit.
- Financial guarantees.
- Regular-way trades of securities.
- Contracts issued in connection with stock-based payments under CICA 3870.
- Contracts classified as equity under CICA 3860.
- Contracts issued as contingent consideration for a business combination under CICA 1581.
- Derivative financial instruments embedded in primary financial instruments (e.g. a financial put or call option included a debt).

Some contracts have terms that are very similar to derivative financial instruments. Consider a contract that requires net settlement based on the increase or decrease in the value of a non-financial instrument such as a commodity. This contract qualifies as a financial instrument under Section 3860 and most people would regard it as a derivative. However, the instrument technically does not qualify as a "derivative financial instrument" because the payout under the contract is determined by reference to a non-financial asset rather than to a financial instrument. Accordingly, under a literal reading, these contracts do not fall within the scope of EIC 128. Does this mean, therefore, that the contracts can continue to be accounted for under the cost basis even if they do not comply with the hedging requirements in the Guideline?

In our view, the accounting for a financial instrument should not be different simply because the amount of cash to be paid or received under the contract is based on a non-financial asset rather than a financial asset. Accordingly, we believe that these instruments also must comply with the Guideline if they are to be accounted for under the cost method.

Other contracts do not require net settlement but will put the parties to the contract in virtually the same position as if the contract called for net settlement. For example, the holder of an exchange-traded futures contract that requires the delivery of a commodity is in substantially the same position as the holder of a commodity contract that requires net settlement because the holder of the futures contract can and usually will realize the net gain or loss on the contract through a transaction with the exchange that does not involve physical delivery. The same could be said to be true for other contracts that permit or require delivery of a non-financial item if others stand ready to acquire the contract or the asset that is the subject of the contact is readily convertible to cash. Must these contracts meet the requirements of the Guideline if they are accounted for on the cost or accrual basis?

Agreements that permit or require the delivery of non-financial assets do not qualify as financial instruments under Section 3860. In addition, there is no consensus under Canadian GAAP as to whether, and under what circumstances, such agreements should be regarded as derivative instruments. As a general rule, therefore, we believe that an entity would not be required to meet the hedging requirements in the Guideline to account for these contracts on the cost basis. If, however, the contracts are formally designated as hedges for accounting purposes (that is, the entity treats the contracts as derivatives as a matter of accounting policy), the Guideline should be applied.

Synthetic Instrument Accounting

The Guideline also includes so-called "synthetic financial instruments" within its scope. Synthetic financial instruments are combinations of primary instruments and derivatives that are intended to emulate the characteristics of another primary instrument. For example, an entity might emulate a floating rate debt by issuing a fixed rate debt and simultaneously entering into an interest rate swap that effectively converts the fixed interest payments on the debt to a floating rate. Synthetic instrument accounting involves accounting for the instruments making up a synthetic instrument on the basis of their combined cash flows: that is, as if in substance a single primary instrument had been issued or acquired. Synthetic instrument accounting is primarily income statement-oriented in its focus. On the balance sheet, the individual instruments making up the synthetic instruments have to be presented separately unless the offsetting rules in Section 3860 are satisfied.

In many cases, the results produced by synthetic instrument accounting will be identical to those obtained by accounting for each instrument separately under the cost method, such as in the case of a plain vanilla interest rate swap hedging a debt. In other cases, however, there can be differences.

Synthetic instruments are included within the scope of the Guideline on the conceptual grounds that synthetic instrument accounting may include some modification to the normal basis of recognizing gains, losses, revenues and expenses associated with the instruments comprising a synthetic instrument. Accordingly, if a combination of instruments does not qualify for hedge accounting, it also cannot qualify for synthetic instrument accounting.

Conditions for Applying Hedge Accounting

The Guideline establishes six basic conditions that must be met in order to apply hedge accounting:

- Gains and losses on the hedged item and the hedging item both affect earnings. Further, the gains and losses would be reported in the income statement in different periods if hedge accounting were not applied.
- The risk exposure being hedged by the entity is the risk that the fair value or cash flows of the hedged item will change in response to some future event such as a change in interest rates, foreign exchange rates, credit risk or market prices.
- The source of the risk exposure being hedged is all or a portion of an individual asset, liability, or anticipated transaction, or all or a portion of a group of similar assets, liabilities or anticipated transactions.
- The hedging item offsets the risk exposure being hedged and arises from all or a percentage of an individual asset, liability or anticipated transaction, or all or a percentage of a group of qualifying assets, liabilities or anticipated transactions.
- The entity assesses the hedging relationship for effectiveness at the inception of the hedging relationship and periodically over its term and concludes that it is effective.
- There is appropriate documentation of the hedging relationship at the inception of the hedging relationship and throughout its term.

We examine each of these conditions in the following sections.

It should be emphasized that hedge accounting is discretionary – an entity always can decide not to comply with the conditions in the Guideline for applying hedge accounting. However, as we have said, deciding not to comply these conditions generally comes at a heavy cost – income statement volatility. For instance, assume an entity hedges the interest rate risk on a debt with an interest rate swap. If the conditions in the Guideline for hedge accounting are not met, the entity will account for the debt the way it always has but will have to change its accounting for the swap. The swap now will have to be measured at fair value and changes in fair value will have to be recognized in earnings as they arise. A similar fate awaits an entity that hedges the principal amount of a foreign debt with a forward exchange contract that does not satisfy the requirements of the Guideline – the debt will continue to be translated at the spot rate in effect at the balance sheet date but the forward will be measured at its fair value.

The option not to meet the conditions in the Guideline exists only at the inception of the hedging relationship. Once an entity applies hedge accounting to a particular relationship, it must continue to apply all of the Guideline's requirements until the relationship is terminated.

Hedged Item and Hedging Item Affect Earnings

The first condition for applying hedge accounting is that gains and losses on the hedged item and the hedging item both affect earnings. In addition, the gains and losses would be reported in the income statement in different periods if hedge accounting were not applied.

Gains and Losses on the Hedged Item and Hedging Item Both Affect Earnings

In our view, any item that has the potential for affecting earnings will satisfy this requirement. For example, we believe that an entity can hedge the interest rate risk in a fixed rate receivable or payable even if it intends to hold the receivable or payable to maturity. While it is true that an entity will not suffer a gain or loss on a fixed rate receivable or payable due to changes in interest rates if the entity actually holds the instrument until maturity, it is always possible that the instruments will be disposed of or extinguished before then. In addition, if interest rates increase or decrease, the interest income or expense recognized on the fixed rate debt always will be different than the interest that would be recognized if the debt had been issued at the prevailing market rate. Accordingly, even when it is virtually certain that an entity will hold a fixed rate debt to maturity, it can be argued that the income statement includes gains and losses arising from changes in interest rates.

Because the hedged item and hedging item both have to affect earnings, it would not be appropriate to apply hedge accounting for hedges of any items included in shareholders' equity or transactions that directly affect shareholder's equity. For example, assume a Canadian dollar reporting company expects to declare a dividend on perpetual preferred shares denominated in U.S. dollars and takes out a derivative financial instrument such as a forward exchange contract to hedge the risk that the Canadian dollar amount of the dividend will change due to changes in exchange rates. It would not be possible to account for the derivative as a hedge until the dividend is declared and recognized as a liability. This is because any increase or decrease in the amount of the dividend attributable to changes in exchange rates before that time would be charged to retained earnings, not earnings. Accordingly, until a liability is recognized, the derivative will have to be accounted for at fair value and any changes in its fair value will have to be recognized in earnings as they arise.

Hedge accounting also would not be appropriate when an entity hedges the interest rate risk or currency risk associated with so-called "EIC 71" instruments – debt obligations that for accounting purposes have been classified by the issuer as equity to the extent that the issuer can settle its obligations by delivering common shares rather than financial assets. While EIC 71 securities affect earnings per share, they do not affect earnings and thus are not candidates for hedge accounting.

Other transactions not eligible for hedge accounting include hedges of risks relating to the anticipated sale, purchase or redemption of financial instruments included in equity.

Hedged Item and Hedging Item Must Affect Earnings in a Different Period

The Guideline states that hedge accounting is unnecessary if gains and losses and revenues and expenses on the hedged item and hedging item always would be recognized in the same period if hedge accounting were not applied. Accordingly, it permits hedge accounting only when gains and losses on the hedged item

otherwise would be recognized in earnings in a different period than the offsetting gains and losses on the hedging item.

The phrase "in a different period" should be interpreted as meaning "at a different time". To illustrate, assume an entity that prepares quarterly interim financial statements enters a forward exchange contract at the beginning of the quarter to hedge a U.S. dollar sale that will occur in the quarter. If hedge accounting were not applied, the U.S. dollar sale would affect earnings of the quarter only at the time of the sale. By contrast, the forward contract always would be measured at fair value and therefore affects earnings of the quarter every time exchange rates change. Thus, the sale and the forward contract affect earnings in different periods within the quarter and hedge accounting is appropriate.

Even when the phrase "in a different period" is interpreted to mean "at a different time", hedge accounting will not be appropriate in some situations. Consider, for example, an entity that is hedging a foreign currency receivable with a payable denominated in the same foreign currency. Absent hedge accounting, both the receivable and the payable would be translated at the same exchange rate. Exchange gains and losses on both always would be recognized at the same time and hedge accounting could not be applied.

Risk Exposures an Entity Can Hedge

In general, the Guideline permits an entity to apply hedge accounting for a hedge only if it is hedging either a "fair value" or "cash flow" risk exposure. These can be described as follows:

- **Fair value risk exposure** – the risk that the fair value of the hedged item will change in response to some future event, such as changes in interest rates, foreign exchange rates, or market prices.
- **Cash flow risk exposure** – the risk that the future cash flows of the hedged item will change in response to such events.

An example of a fair value exposure is the risk that the fair value of a fixed rate debt will change due to changes in the market rate of interest. An example of a cash flow risk exposure is the risk that the future interest payments an entity will make in respect of a floating rate debt will change in response to changes in the interest rate index on which the payments are based.

Hedging the Risk of Favourable and Unfavourable Changes in Fair Values or Cash Flows

Under the Guideline, an entity can hedge either the risk of both favourable and unfavourable changes in fair values or cash flows, or the risk of unfavourable changes only. The first hedging strategy has the effect of fixing or "locking in" the fair values or cash flows of the hedged item. The second hedging strategy allows an entity to eliminate downside risk but retain the upside. Of course, different hedging instruments will be used to accomplish the different objectives. For instance, an entity might use a forward contract to fix the Canadian dollar sales price of a sale it expects to make in U.S. dollars. Alternatively, it might acquire an option to sell U.S. dollars at a fixed exchange rate to eliminate the downside risk that the U.S. dollar will weaken and reduce the Canadian dollar proceeds from the sale.

It also is possible to hedge the risk of variability in fair values or cash flows outside a particular range. To illustrate, assume an entity commits to purchase a fixed asset for a price that has been fixed in U.S. dollars. The entity might hedge its risk that the Canadian dollar cost of the asset will vary due to changes in exchange

rates by acquiring an option to purchase U.S. dollars at $1.60 and writing an option giving the counterparty the right to sell U.S. dollars to it at $1.40, receiving or paying no net premium. In this so-called "costless collar" strategy, the entity caps the Canadian dollar cost of the asset at an exchange rate of $1.60 and puts a floor on it at an exchange rate of $1.40 but retains the risk of variability between these two rates.

Conditions for Hedging Risk Exposures

Under the Guideline, an entity can hedge a particular risk exposure only if all of the following conditions are met:

- The risk exposure being hedged can be identified.
- Hedging is consistent with the entity's risk management objectives and strategy.
- The effects of the risk exposure on the hedged item and hedging item are reliably measurable.

Identifying risk exposures

Under the Guideline, a particular risk exposure can be hedged only if it is capable of being "identified". We understand this to mean that only risk exposures that are commonly understood to directly affect the fair values or cash flows of the hedged item can be hedged. Indirect risk exposures, in other words, cannot be hedged. For example, we do not believe it would be appropriate for a domestic entity to apply hedge accounting to a contract acquired to hedge the risk that the domestic sales price of its goods will decline if the domestic currency strengthens relative to the currency of a major foreign competitor. While it is entirely possible that the strengthening of the currency might affect domestic selling prices, it would be difficult to identify with any certainty its effect on the sales of the domestic entity.

Under the Guideline, the types of risk exposures that an entity is permitted to identify depend on whether the hedged item is a financial instrument or involves a financial instrument. If the hedged item does not involve a financial instrument, the Guideline states that it is possible to identify and thus hedge only the following risks:

- An overall exposure to the risk of changes in the fair value, or cash flows attributable to, the hedged item; or
- When the price of the hedged item is denominated in a foreign currency, the foreign exchange risk related to its anticipated acquisition or sale.

Accordingly, an item not involving a financial instrument may be designated as a hedged item only for the effects on fair value or cash flows relating to all changes in the purchase price or selling price of the item, whether that price and related cash flows are stated in the entity's measurement currency or in a foreign currency. This means, for example, that it would not be possible for an entity to hedge the raw material content of its finished goods inventory (e.g. a tire manufacturer cannot hedge the risk of changes in the fair value of the rubber content of its tire inventory).

The Guideline provides much more latitude when the hedged item is a financial instrument or an anticipated transaction involving a financial instrument. For these items, the Guideline states that "various" risk exposures, such as the financial risks described in Section 3860, can be hedged. These risks are described in Table 1 on page 8.

Table 1: Financial Instrument Risks That Can Be Hedged	
Market price risk	The risk the fair value or cash flows of a financial instrument will change as a result of changes in market prices, regardless of whether those changes are caused by factors specific to the individual instrument or its issuer or factors affecting the fair value or cash flows of all instruments.
Interest rate risk	The risk that the fair value or cash flows of a financial instrument will change due to changes in market interest rates.
Foreign currency (exchange) risk	The risk that the fair value or cash flows of a financial instrument will change due to changes in foreign exchange rates.
Credit risk	The risk that the fair value or cash flows of a financial instrument will change because one party to a financial instrument will fail to discharge an obligation.
Liquidity risk	The risk of change in the fair value or cash flows resulting from an inability to sell a financial asset quickly at close to its fair value.

We believe the Guideline permits an entity to identify any of these risks, subcomponents of these risks, or combinations thereof, as a risk exposure that can be hedged provided the risk exposure being identified directly affects the fair value or cash flows of the hedged item. For example, an entity could hedge a variety of risk exposures relating to a fixed rate debt including the following:

- The overall change in the fair value of the debt.
- The change attributable to changes in the market rate of interest. While neither the Guideline nor Section 3860 defines "the market rate of interest", we understand it to mean the risk free rate plus the credit spread appropriate to the hedged item.
- The change attributable to changes in the risk free interest rate or the substantially risk free interest rate, sometimes known as the benchmark rate. In Canada, the benchmark rate would be the rate on Government of Canada bonds or the BA rate. In the United States, the benchmark rate would be the U.S. treasury rate or LIBOR.
- The change attributable to changes in the prime rate or some other widely quoted interest rate.
- The change attributable to changes in general credit spreads.
- The change attributable to changes in the credit risk of the obligor.
- The change attributable to both changes in general credit spreads and the credit risk of the obligor.

An entity should not assume that all of the risks listed in Section 3860 directly affect the fair values or cash flows of the hedged item. This will depend on the nature of the hedged item. For example, assume an entity is hedging a prime-based floating rate loan receivable with a BA-based swap. We do not believe that it would be appropriate for an entity to identify the risk being hedged as the risk of variability of interest payments on the loan attributable to changes in the BA rate. While changes in the prime rate and the BA rate often are highly correlated, only changes in the prime rate directly affect the interest payments to be made on a prime-based loan.

Consistent with risk management objectives and strategy

The Guideline states that an entity can hedge a particular risk exposure only if hedging that exposure is "in accordance with the entity's risk management objectives and strategy". We understand this to mean that an entity can account for an instrument as a hedge only if this is consistent with the way an entity actually manages its risks. For example, it would not be appropriate for an entity to account for an interest rate swap that has the effect of eliminating the cash flow exposure on a floating rate debt as a hedge if the entity has a policy of being exposed only to floating interest rates.

Assessments whether hedging a particular risk is in accordance with the entity's risk management objectives and strategies should take into consideration the financial statement results that are produced by the hedging strategy. Consider, for instance, the situation where a lender with fixed rate loans financed with floating rate debt has a risk management strategy to "lock in" its margin using interest rate swaps. Identifying the swaps either as a fair value hedge of the fixed rate loans or a cash flow hedge of the floating rate debt would be consistent with that strategy because both approaches produce income statement effects under hedge accounting that are consistent with the economic strategy. In other words, the economic description of the risk management objectives and strategy does not have to be the same as the accounting description, but the two must be compatible.

Complying with this requirement means that those responsible for hedge accounting (e.g. the accounting department) should be communicating closely with those responsible for initiating and managing risk exposures (e.g. the treasury department) to ensure that the hedge accounting being applied is consistent with the risk management policies of the entity. Entities that have not formalized their risk management objectives and strategies should do so to permit compliance with the Guideline.

Reliable measurement

The last condition for hedging a risk exposure is that its effect on the fair values or cash flows of the hedged item is capable of reliable measurement. The condition is necessary because the Guideline requires an entity to assess the hedging relationship for effectiveness. In many cases, this will involve actually measuring the change in fair value or cash flows attributable to the risk being hedged. We discuss the effectiveness assessment requirements of the Guideline later in this monograph.

Examples of Risk Exposures that Often Are Hedged

Table 2 on page 10 provides examples of common hedging strategies and indicates whether the risk exposure being hedged would be identified under the Guideline as a fair value or a cash flow exposure.

Table 2: Common Risk Exposures That Entities Often Hedge

Economic Objective	Fair Value or Cash Flow Exposure
Hedges of market price risk exposure	
A company fixes the value of its commodity inventory by entering into a commodity futures contract.	Fair value exposure. The company is hedging the risk of changes in the overall fair value of the inventory.
A company with a binding contract to sell or purchase a commodity at a fixed price in the future enters into a futures contract to convert the fixed price to the market price in effect at the date of sale.	Fair value exposure. The company is hedging the risk of changes in the overall fair value of the contract. Note: it would not be possible to designate the risk being hedged as the risk of changes in the fair value of the contract due to changes in the commodity price because the contract does not qualify as a financial instrument. Only the overall change in the fair value of the contract can be hedged.
A company expecting to sell a commodity in the future at the then prevailing market price fixes the selling price of the goods by entering into a futures contract.	Cash flow exposure. The company is hedging the risk of variability in the cash to be received on the sale due to changes in the market price of the goods.
A company expecting to sell a commodity in the future at the then market price protects against the possibility that the sales price of the asset will decline by purchasing an option to sell the asset at a fixed price.	Cash flow exposure. The company is hedging the risk of variability in the cash flow from the sale due to declines in the market price of the asset.
Hedges of interest rate exposures	
A company with fixed rate debt converts the debt into a floating rate using an interest rate swap.	Fair value exposure. The company is hedging the risk of changes in the fair value of the debt due to changes in a specified interest rate.
A company with floating rate debt converts the rate on the debt to a fixed rate using an interest rate swap.	Cash flow exposure. The company is hedging the risk of variability in interest payments due to changes in the interest rate specified for the debt.
A company intends to issue a fixed rate debt in the future at the then prevailing interest rate acquires a derivative to protect itself from the effects of changes in a specified interest rate that may occur before the debt is issued.	Cash flow exposure. The company is hedging the variability in interest payments, due to changes in a specified interest rate, on a debt expected to be issued within a specified period.
A company intends to issue a fixed rate debt in the future at today's coupon rate enters into a derivative to protect itself from the effects of changes in a specified interest rate that may occur before the debt is issued.	Cash flow exposure. The company is hedging the variability in the expected proceeds from the issuance of a debt having the specified attributes within a specified period due to changes in the specified interest rate.
Hedges of foreign currency (and interest rate) exposure	
A company expecting to sell goods or services in U.S. dollars takes out a forward exchange contract to fix the Canadian dollar price of the goods.	Cash flow exposure. The company is hedging the risk of changes in the Canadian dollar amount of the sale due to changes in exchange rates.
A company selling goods in U.S. dollars buys an option to sell U.S. dollars to hedge the risk the Canadian dollar proceeds of the sale will fall due to changes in exchange rates.	Cash flow exposure. The company is hedging the risk that the Canadian dollar amount of the sale will fall due to changes in exchange rates.

Table 2: Common Risk Exposures That Entities Often Hedge

Economic Objective	Fair Value or Cash Flow Exposure
Hedges of foreign currency (and interest rate) exposure	
A company with a fixed rate U.S. dollar debt enters into a cross-currency swap to effectively convert the debt into a fixed rate Canadian dollar borrowing.	Cash flow exposure. The company is hedging the risk that debt payments in Canadian dollars will change due to changes in exchange rates. Also, one could identify a fair value exposure – the risk that the Canadian dollar fair value of the debt will change due to changes in exchange rates.
A company with a fixed rate U.S. dollar debt enters into a cross-currency interest rate swap to effectively convert the debt into a floating rate Canadian dollar borrowing.	Fair value exposure. The company is hedging the risk that Canadian dollar fair value of the debt will change due to changes in specified interest and exchange rates.
A company with a floating rate U.S. dollar debt enters into a cross-currency interest rate swap to effectively convert the debt into a fixed rate Canadian dollar borrowing.	Cash flow exposure. The company is hedging the risk that Canadian dollar debt payments will change due to changes in specified exchange rates and foreign interest rates.
A company with a floating rate U.S. dollar debt enters into a cross-currency interest rate swap to effectively convert the debt into a floating rate Canadian dollar borrowing.	Fair value exposure. The company is hedging the risk that the fair value of the debt measured in Canadian dollars will change due to changes in exchange rates.
A company hedges the risk of exchange gains and losses on a net investment in self-sustaining foreign operation using a foreign currency debt or forward exchange contract.	This risk exposure does not qualify as either a fair value exposure or a cash flow exposure. However, Section 1650, FOREIGN CURRENCY TRANSLATION, specifically permits an entity to hedge a net investment in a self-sustaining operation.

Risk Exposures Hedged by a Parent but Arising in a Subsidiary

As a general rule, the Guideline permits a parent to identify and hedge risk exposures arising in separate subsidiaries. For instance, it is possible for a parent to account for an interest swap it acquires to hedge the interest risk of a debt in a subsidiary as a hedge of the debt in its consolidated financial statements. This reflects the view that the consolidated financial statements of the parent are those of a single consolidated entity. Under this view, whether the subsidiary issued the debt and the parent acquires the derivative, or vice versa, simply is not relevant.

There is an important exception to this rule. That exception relates to the hedging by a parent of the foreign currency risk arising in a subsidiary or other foreign operation of the parent that has a different functional currency than that of the parent. Under the foreign currency translation rules in Section 1650, a parent is presumed to be at risk only to the extent of its net investment in a self-sustaining foreign operation. Accordingly, the individual transactions undertaken by the foreign operation are deemed not to present foreign currency exposures to the parent. For example, a parent with a Canadian dollar functional currency cannot hedge the foreign currency risk relating to the U.S. dollar debt of a U.S. self-sustaining operation because the parent, by definition, does not have a foreign currency exposure relating to the debt. Further, the parent cannot even hedge a bona-fide foreign currency risk exposure of the U.S. subsidiary. For instance, assume the U.S. subsidiary has a Euro exposure. At the consolidated level, the parent could not designate a Canadian-Euro derivative as a hedge of that exposure because the parent's only risk exposure with respect to the subsidiary is a U.S. dollar exposure on the net investment in the subsidiary.

By contrast, if the subsidiary is integrated with the parent, rather than a self-sustaining foreign operation, the parent could hedge a foreign currency risk exposure in the subsidiary.

Identification of Risk Exposures in Synthetic Instruments

As we explained previously, synthetic instruments are combinations of instruments that are designed to emulate the characteristics of other instruments and synthetic instrument accounting involves accounting for the combination based on the combined cash flows of the instruments, as if a single instrument had been issued. Under the Guideline, synthetic instrument accounting is appropriate only if all of the conditions for hedge accounting are satisfied, including the requirements relating to the identification of risk exposures. Some types of synthetic instruments will not meet these requirements. For example, assume a Canadian dollar reporting company simultaneously issues a fixed rate Canadian dollar debt and enters into a cross-currency interest rate swap that effectively converts it into a fixed rate U.S. dollar debt. The swap cannot qualify as a hedge of the debt because all the entity has done is to create an additional exposure as the result of the swap.

The Hedged Item

In general, the Guideline permits an entity to hedge an eligible risk exposure only if it arises from one or more of the following:

- A single asset, a single liability or a single anticipated transaction.
- A portion of a single asset, a portion of single liability or a portion of single anticipated transaction.
- A group of similar assets, a group of similar liabilities, or a group of similar anticipated transactions.
- A portion of a group of similar assets, a portion of a group of similar liabilities, or a portion of a group of similar anticipated transactions.

Hedge accounting is not permitted for hedges of risk exposures arising from other sources. For instance, it would not be appropriate to apply hedge accounting to a foreign currency forward contract taken out to hedge the foreign currency risk relating to expected net earnings or cash flows of a foreign operation. In accordance with EIC 128, such a contract would have to be measured at fair value, with changes in fair value recognized in earnings when they occur.

Meaning of Anticipated Transaction

The Guideline defines an “anticipated transaction” to be any transaction expected to occur in the future that has not yet given rise to a recognized asset or liability. Common examples of anticipated transactions include the following:

- A sale or purchase to be made in the future at a fixed price pursuant to a binding contract.
- An anticipated sale or purchase of an asset or a liability expected to occur in the future for which no binding commitment exists.
- The receipt or payment of interest under a long-term debt.
- The future issuance of a debt under a binding contract that specifies the critical terms of the debt, including the interest rate and maturity.
- The anticipated issuance or purchase of a debt for which no binding commitment exists.

Some anticipated payments, such as future interest payments on an existing long-term debt, never will give rise to a recognized asset or liability – these payments act only to reduce liabilities that will already have been recognized. Under a literal reading of the definition of anticipated transaction in the Guideline, it would appear that such payments would not qualify as anticipated transactions (because they never will give rise to an asset or a liability). In practice, however, such payments usually are thought of as anticipated transactions and we believe that doing so does not produce a result that is contrary to the Guideline. In this monograph, therefore, any reference to anticipated transactions includes such payments.

Portions of Assets, Liabilities and Anticipated Transactions

We understand the term "portion" to mean any one of the following:

- A percentage of an asset, liability or anticipated transaction or a percentage of a group of similar assets, similar liabilities or similar anticipated transactions.
- One or more selected cash flows (for example, the payments of principal on a debt, the interest payments, or a percentage of either).
- A derivative embedded in a non-derivative asset, liability or anticipated transaction, such as an embedded call option in a debt.

A derivative embedded in a contract exists when terms of the contract cause some or all of the cash flows that otherwise would be required by the contract to be modified based on a specified interest rate, price or other variable. Examples of embedded derivatives include a put option, call option, an interest rate cap, or an interest rate floor contained in an existing asset or liability, the equity option embedded in a purchased convertible security or the prepayment option included in a debt.

It would not be appropriate to impute the existence of an embedded derivative that is not evident from the terms of the contract. For example, assume an entity issues a floating rate debt receivable that is hedged by a pay fixed, receive floating interest rate swap. It would be unreasonable to conclude that the debt consists of a fixed rate debt with an embedded receive-fixed, pay-floating interest rate swap that has terms that precisely match those of the actual swap.

Groups of Assets, Liabilities and Anticipated Transactions

The Guideline precludes hedging a risk exposure arising from a group of items unless the items in the group are similar. It does so on the grounds that applying hedge accounting in other situations would not be possible. For example, assume an entity uses a single hedging instrument to hedge a common risk arising from a basket of dissimilar items – so called "macro hedging". In this circumstance, it would be necessary to allocate the overall gain or loss on the hedging instrument to the individual items in the basket. Such an allocation would be inherently arbitrary. In addition, if some of the items in the basket were producing gains and others losses, the entity would have to impute both gains and losses to the single hedging instrument to offset both the gains and the losses on the hedged items.

Restricting hedged items to groups of similar assets, liabilities and anticipated transactions means that an entity often will have to take a more granular approach to the identification of hedged items than is actually necessary to manage the risks arising from these items. For instance, entities sometimes will acquire a single derivative to hedge their net foreign currency exposure arising from anticipated sales and purchases that are denominated in the same foreign currency. To illustrate, if anticipated sales are U.S. $10 million and anticipated purchases are U.S. $6 million in a month, an entity might take out a forward contract to hedge

the net U.S. $4 million foreign currency exposure. It would not be possible under the Guideline to identify the net currency exposure arising from these sales and purchases as the exposure being hedged because sales and purchases are not similar items. However, an entity could identify the exposure arising from U.S. $4 million of sales as the risk being hedged.

Some might argue that identifying the hedged item in this way is not in keeping with the requirement that the entity identify risk exposures in accordance with the entity's overall risk management strategy. We do not agree. In implementing its business strategy, management is indifferent as to which particular U.S. dollar sales are being hedged by U.S. dollar purchases and which are being hedged by the forward contract. Identifying which particular sales are hedged by the forward contract does not contradict the entity's risk management strategy; it simply makes it more precise in order to accommodate the "matching" requirements of the Guideline.

When Items in a Group Are Similar

Under the Guideline, the rules for determining whether assets, liabilities and anticipated transactions in a group are similar depend on whether the risk exposure arising from those items is a fair value or a cash flow exposure.

For fair value hedges, an entity should consider the following factors:

- The type of assets or liabilities.
- The nature and terms of any collateral.
- The interest rate (fixed or variable) and, in the case of fixed rate assets or liabilities, the coupon rate.
- The currency in which the assets or liabilities are denominated.
- The scheduled maturity date and, in the case of prepayable assets, the prepayment terms, past prepayment history and expected future prepayment performance.

The Guideline also states that when hedging an exposure to changes in the fair value of a group of assets or liabilities, the company must expect that changes in the fair value attributable to the hedged risk exposure for each individual asset in a hedged group will correspond, in a generally proportionate manner, to changes in fair value attributable to the hedged risk exposure for the group as a whole. We think that a movement of the fair value of the individual items within a fairly narrow range, such as from 9% to 11% when the fair value of the portfolio as a whole moves 10%, would be consistent with this requirement, but a move such as from 7% to 13% would not be consistent.

For cash flow hedges, a group of anticipated transactions is eligible for designation as the hedged item when the individual transactions in the group share the same risk exposure for which they are designated as being hedged. Sharing the same risk exposure means not only that the anticipated transactions have a common risk (e.g. foreign currency risk) but also that the exposure moves in the same direction. For example, anticipated foreign currency sales and purchases do not share the same risk exposure because the risk to the entity from the purchase moves in the opposite direction to the risk exposure from the sale.

For both fair value and cash flow hedges, an entity must be able to identify the individual items within the group. While the application of the concept of specific identification generally should be straightforward for assets and liabilities, it is less so for anticipated transactions. For instance, when an entity is hedging the currency exposure arising from U.S. $4 million of sales in a period when more than U.S. $4 million of sales are anticipated, how should an entity determine which particular sales are being hedged?

The identification process should be such that an entity is able to identify whether a particular transaction occurring in the period is hedged when the transaction occurs. Essentially, this means establishing an ordering system to identify hedged items. For instance, when an entity is hedging the foreign currency risk relating to U.S. $4 million of sales in a month, it could designate the first U.S. $4 million of sales occurring in the period as being the hedged item – an entity would know whenever a foreign currency sale occurs whether it is hedged. By contrast, an entity could not identify the last U.S. $4 million of sales as being the hedged item because when a particular sale occurs, it would not be possible to know whether the sale is a hedged item.

Exceptions to the Rules on Grouping Items

The Guideline makes two exceptions to its prohibition on grouping dissimilar items. It permits an entity to apply hedge accounting for instruments that hedge:

- The foreign currency risk relating to net investments in self-sustaining foreign operations; and
- Qualifying net exposures accumulated by "treasury centers".

Hedging a net investment in a self-sustaining foreign operation constitutes hedging a group of dissimilar items because the assets and liabilities of the operation are included separately in the consolidated balance sheet of the parent rather than as a single investment. While hedging dissimilar net assets is contrary to the general principles in the Guideline, it is specifically permitted by Section 1650 for self-sustaining foreign operations.

Entities often carry on operations through individual subsidiaries or divisions that hedge risks through a central treasury unit or similar function. Typically, the operating entities will enter into separate derivative contracts with the treasury centre (so-called "internal hedges"). The treasury centre then will hedge the aggregate or net risk exposure with third parties using a single contract. On a consolidated basis, the internal hedges will eliminate, leaving only the third party hedging contracts outstanding. As a result, common exposures arising from dissimilar items are being hedged.

The Guideline permits an entity to apply hedge accounting in the consolidated financial statements based on internal hedges only if all of the following conditions are satisfied:

- The hedging relationship established by the subsidiary or division, considered from the perspective of that subsidiary or division, satisfies all of the conditions for hedge accounting in the Guideline.
- The treasury centre enters into one or more contracts with unrelated parties to offset the risk exposure or exposures that result from internal hedges. A treasury centre may combine separate risk exposures arising from internal contracts, and hedge the aggregate or net exposure with unrelated parties only if:
  - the term to maturity of the contract with an unrelated party is substantially the same as the term to maturity of each of the internal hedging contracts being combined and offsets the same aggregate or net risk exposure;
  - the treasury centre tracks the risk exposure that it assumes from each hedging affiliate and maintains documentation supporting the linkage between each internal hedging contract and the offsetting aggregate or net hedging contract with an unrelated party; and
  - the hedging contract with an unrelated party is not altered or terminated unless the hedging subsidiary or division initiates this action.

Items Ineligible for Hedge Accounting

The Guideline specifically precludes the following from being designated as the hedged item in a hedging relationship:

- **Freestanding derivative instruments.** The Guideline does not explain why a freestanding derivative instrument cannot be a hedged item. We believe the prohibition reflects the view that derivatives are taken out only for two purposes – trading (i.e. speculation), and hedging. Treating a freestanding derivative as a hedged item in a hedging relationship is not consistent with either of these activities.
- **Investments accounted for by the equity method, other than the foreign exchange exposure to an equity method investment classified as a net investment in a self-sustaining foreign operation.** The Guideline states that the equity method is inconsistent with the concepts underlying hedge accounting because the method does not involve periodic recognition of changes in the fair value of an investment or changes in the cash flows from it. While not stated specifically in the Guideline, this means that it is also not appropriate to hedge investments in controlled subsidiaries.
- **An accrued benefit asset or liability for employee future benefits.** This is prohibited on the grounds that an accrued benefit asset or liability represents a combination of dissimilar assets and liabilities.
- **Minority interest.** Technically a non-controlling interest in a subsidiary does not qualify as an asset, liability or anticipated transaction.
- **Anticipated business combinations, anticipated investments to be accounted for by the equity method or anticipated transactions involving a parent's interest in a subsidiary, except for foreign exchange risk thereon.** We understand that these cannot be designated as hedged items for the same reason that equity investments cannot be designated. Note, however, that an entity can hedge risks relating to the anticipated issue of debt used to fund an anticipated business combination or acquisition.
- **Equity transactions.** See our earlier discussion.
- **Anticipated transactions if the hedging item is itself an anticipated transaction.** The presumption in the Guideline is that hedge accounting in this situation is not necessary because earnings will be unaffected regardless of whether the hedge accounting is applied.
- **Anticipated transactions not meeting the criteria discussed in the following section**.

The prohibition on identifying freestanding derivative instruments as a hedged item means that entities should be reviewing all contracts being hedged to ensure that they are not derivatives in their entirety. This can be difficult because there is no authoritative definition of a derivative instrument in the Canadian authoritative accounting literature other than the description in Section 3860 of freestanding derivative financial instruments. In the absence of specific authoritative guidance, we believe that the identification of derivative instruments other than freestanding derivative financial instruments is a matter of accounting policy. Relevant considerations in the formation of this policy include whether a contract is in the normal course of business, the nature of the assets that are the subject of the contract, and whether the entity is required or can be obligated to "net settle" the contact (see our earlier discussion in the Purpose and Scope section). As a general rule, we believe that an entity would not be required to consider a contract as a derivative if the entity is either required or permitted to settle the contract through the delivery of a non-financial asset, such as a commodity. Entities may wish to consider the definitions of a derivative in FAS 133 and IAS 39, as well as their scope provisions, in establishing an accounting policy for the identification of derivative contracts other than freestanding derivative financial instruments.

Special Rules for Anticipated Transactions

Under the Guideline, an anticipated transaction can qualify as a hedged item only if it is probable that the transaction will occur "at the time and in the amount expected". We believe that probable should be interpreted to mean "likely"; i.e. the chance of occurrence of the transaction in the amount expected is high (roughly, 75% or above).

We interpret the phrase "at the time expected" broadly; i.e. we do not believe that hedge accounting is precluded if an entity cannot determine that it is probable that a transaction will occur on a specific date provided that it is probable that the transaction will occur within a range. For example, we believe that hedge accounting would be possible if an entity can determine with a high degree of probability that it expects to purchase 100,000 units of inventory within the next six months even if cannot predict the exact date when the purchase will occur.

We understand the phrase "in the amount expected" to refer to quantity and not necessarily to dollar amount. For instance, in the example in the preceding paragraph, the "amount" being hedged would refer to the 100,000 units.

The Guideline states that all factors should be taken into consideration in determining whether the timing and amount of an anticipated transaction is probable, including the following:

- The existence of a firm commitment to undertake the transaction.
- The existence of similar transactions in the past.
- The financial and operational ability of the entity to carry out the transaction.
- The extent of the entity's current commitments of resources to the business activity of which the anticipated transaction is a part.
- The length of time to the date the anticipated transaction is expected to occur.
- The extent of loss or disruption to the entity if it does not undertake the anticipated transaction.
- The likelihood that another transaction might take place to achieve the same business purpose.
- The likelihood that another party will be willing and able to undertake the anticipated transaction with the entity.
- If the anticipated transactions are uncommitted future sales or other similar types of transactions, the susceptibility of the transaction to changes in demand and the risk of technological obsolescence in the underlying product.

Firm Commitments

Under the Guideline, a firm commitment provides evidence that the timing and amount of an anticipated transaction is probable. The Guideline does not define the term "firm commitment" and views may vary as to its meaning. In our view, a firm commitment represents an agreement between unrelated parties that is binding, includes a disincentive for non-performances and establishes the timing and amount of the anticipated transaction. It should be noted that under FAS 133, firm commitments are restricted to being commitments with a fixed price.

If a firm commitment has a floating price, or a price fixed in a foreign currency, it would be possible to designate the transaction arising from the commitment as the hedged item in a cash flow hedge. If a firm

commitment has a fixed price other than a price fixed in a foreign currency, there would be no cash flow variability in the anticipated transaction and cash flow hedging would not be possible. However, the firm commitment itself could be the hedged item in a fair value hedge in such circumstances because the entity is exposed to changes in fair value of that commitment.

Anticipated but Uncommitted Transactions

In many cases, entities will not be hedging risk exposures arising from firm commitments but rather those arising from transactions that they only expect to happen – budgeted sales, for example. Concluding that anticipated but uncommitted transactions are probable is more difficult than for transactions arising from firm commitments. The Guideline gives some idea of the factors that should be taken into consideration when assessing their probability by contrasting the following examples:

- A level of sales into a foreign market for a particular product line for a particular period that has been achieved consistently in the past; and
- An increase in sales in a foreign market due to the introduction of a new product line.

The Guideline states that the sales in the first instance might be considered to be probable if the entity is not aware of any changes in the foreign market indicating that the level of sales cannot be achieved in the forthcoming year. However, the increase in sales in the second instance would not be considered probable. A history of similar transactions therefore would appear to be a critical factor in evaluating the probability that future sales will occur. Absent such a history, it is questionable whether an anticipated but uncommitted transaction could be considered sufficiently probable to justify designating the transaction as a hedged transaction. Budgets, by themselves, do not appear to provide a sufficient level of certainty.

The Guideline does not specify how long a history of sales (or other similar types of transactions) must be in order to conclude that the occurrence of an amount of future sales within a given time period is probable. This is a matter of judgment based on the particular facts and circumstances.

A past history of sales does not, in and of itself, justify the conclusion that sales are probable. The other factors listed above must be considered as well. For example, another important factor affecting a probability assessment is the length of time until the anticipated transaction occurs. The Guideline states that in most situations, the proportion of anticipated transactions that are probable should be expected to decline the farther into the future the transactions are. It states, for instance, that management might consider 80% of sales expected in the next fiscal year to be probable, but might consider only 50% of sales expected in three years' time to be probable.

The Hedging Item

The Guideline defines a hedging item as all or a specified percentage of an asset, liability or an anticipated transaction, or all or a specified percentage of a group of assets, liabilities or anticipated transactions, offsetting a risk exposure identified in the hedged item, provided that non-derivatives in a group are all similar.

Offsetting Risk Exposure

The word "offset" in this criterion has its usual meaning – counterbalance. Thus, hedge accounting is prohibited unless the entity can demonstrate that the change in the fair value or cash flows of the hedging item attributable to the risk being hedged moves in the opposite direction of the change in the fair value or cash flows of the hedged item attributable to that same risk.

Eligible Sources of Risk Exposure

Under the Guideline, certain assets and liabilities that can be identified as the hedged item cannot be designated as the hedging item, and vice versa. We summarize the similarities and differences in the requirements in Table 3 below.

Table 3: Hedged Items Versus Hedging items

	Hedged Item	Hedging Item
1. A single derivative instrument	No	Yes
2. A group of derivative instruments, whether or not similar	No	Yes
3. A single asset, single liability or single anticipated transaction other than a derivative instrument	Yes	Yes*
4. A group of similar assets, similar liabilities or similar anticipated transactions other than a group of similar derivative instruments	Yes	Yes*
5. A specified portion of 3 or 4 above, where the portion is:		
(a) a percentage	Yes	Yes*
(b) specified cash flows	Yes	No
(c) embedded derivative(s)	Yes	No
6. A combination of one of: 3, or 4 or 5(a) above with one or a group of derivatives	No	Yes

* An anticipated transaction cannot be the hedged item if the hedging item is an anticipated transaction.

Derivative Instruments as Hedges

Hedging usually is accomplished with derivative instruments such as forward exchange contracts, futures contracts, interest rate swaps, cross-currency and commodity swaps and purchased options. As shown in Table 3, derivatives may be designated as the hedging instrument either singly or in combination with one or more other derivatives, or even in combination with groups of similar non-derivative assets, liabilities and anticipated transactions. Derivative instruments do not have to be similar to be combined, either together or with non-derivative instruments.

In some circumstances, combining derivatives with non-derivative instruments may enable an entity to obtain a "synthetic instrument accounting like" result that otherwise might be precluded. For example, assume an entity holding a prime-based receivable and a BA-based liability enters into a pay prime-receive BA swap to eliminate the interest rate mismatch. Under the Guideline, the swap could not be designated as a hedge of either the asset or the liability because the swap does not eliminate the cash flow variability of either instrument; the swap merely converts one kind of cash flow variability into another kind. However, the combination of the swap and the prime-based receivable would offset the cash flow variability of the BA-based liability and therefore the combination could qualify as a hedging item. By the same reasoning, the combination of the swap and BA-based liability could be identified as a hedge of the prime-based receivable.

Portions versus Percentages

As illustrated in Table 3, a hedging item can only be all or a percentage of an item or of a group of items. In contrast, hedged items also can be specified cash flows or embedded derivatives.

If an entity designates a percentage of a derivative financial instrument as a hedging instrument, EIC 128 requires the entity to recognize a portion of the changes in the fair value of the derivative in earnings, as they arise. The portion recognized in earnings would be the total change in the fair value of the derivative multiplied by the percentage of the derivative that is not acting as a hedge.

Options – A Special Case

In order for options to be hedging items, the following conditions must be met:

- **In the case of a purchased put or call option** – the option is intended to provide protection against loss on an item exposed to risk and is effective while "in-the-money".
- **In the case of a written option** – the combination of the hedged item and the written option provides (a) at least as much potential for gains as a result of favourable change in the fair value of the combined instruments as exposure to losses from an unfavourable change in their combined fair value; or (b) at least as much potential for favourable cash flows as exposure to unfavourable cash flows.

Written options rarely will qualify as hedges. Even so-called "covered call" strategies will not. In a covered call strategy, an entity will write an option giving the counterparty the right to acquire an asset the entity already owns in exchange for a premium. The strategy does not qualify for hedge accounting because the option writer effectively transfers all of the potential gain in the asset above the strike price to the holder but retains all of the potential loss in the asset below the strike price. This is antithetical to the notion of hedging in the Guideline.

The Guideline does not specifically address whether option strategies that result in an entity selling some, but not all of the upside potential of an item qualify for hedge accounting. For example, assume an entity has a

portfolio investment in equity securities that have a current fair value of $100 per share. The entity writes an option giving the counterparty the right to purchase the securities for $100 per share but purchases an option to buy the same securities for $110 per share. On a net basis, the entity still has unlimited upside potential because there is an infinite possible outcome above $110 per share but its downside risk is limited to $100 per share. Thus, it is possible to conclude that there is still more potential for gains than losses from the combined position in the equity securities and the options. In the absence of specific guidance, we believe that the test required under FAS 133 to evaluate these situations provides an appropriate basis for considering the appropriateness of these strategies. That test requires an entity to consider whether all possible percentage favourable changes in the value of the underlying instrument (from zero to 100%) provide at least as much gain as the loss that would be incurred from an unfavourable change in the value of the underlying instrument of the same percentage. If so, hedge accounting is permitted.

The question arises whether, and if so when, a combination of purchased and written options should be evaluated as a net purchased option or a zero cost collar so that it is unnecessary to apply the requirements for written options discussed above. The Guideline states that this would be the case when all of the following conditions are met:

- No net premium is received;
- The underlying item that is the subject of the options is the same;
- The notional amount of the written option is not greater than the notional amount of the purchased option; and
- Both options mature at the same time.

The Guideline specifically permits an entity to use a written call option to hedge an embedded call option in a debt (a purchased call from the debtor's perspective).

Items that Cannot Be Identified as Hedging Items

Under the Guideline, the following items cannot be hedging items in a hedging relationship:

- An investment accounted for by the equity method, other than the foreign exchange exposure to an equity method investment classified as a net investment in a self-sustaining foreign operation.
- An accrued benefit asset or liability for employee future benefits.
- Minority interest.
- Items included in shareholders equity or transactions directly affecting shareholders equity.
- Anticipated transactions not meeting the criteria discussed earlier for hedged items.

As discussed earlier, these items also cannot be identified as hedged items.

Hedge Effectiveness

Under the Guideline, hedge accounting is permitted only if the entity assesses the hedging relationship for effectiveness at the inception of the hedging relationship and periodically over its term and finds it to be effective.

The Concept of Effectiveness

The Guideline defines hedge effectiveness as the extent to which changes in the fair value or cash flows of a hedged item relating to a risk being hedged and arising during the term of the hedging relationship are offset by changes in the fair value or cash flows of the corresponding hedging item relating to the same risk and arising during the same period. Hedge ineffectiveness is the flip side of the same coin – the extent to which changes in the fair value or cash flows of the hedged item and hedging item attributable to the risk being hedged do not offset within a period. For example, assume an entity is hedging the risk of change in the fair value of a debt with an interest rate swap. If the change in the fair value of the debt is $100 for a particular period within the term of the hedging relationship, and the offsetting change in the fair value of the swap for the period is $90, the ineffectiveness for the period would be $10.

Hedge ineffectiveness arises because hedging relationships seldom are perfect – there often will be differences between the hedged item and hedging item that will cause fair values or cash flows to change by different magnitudes in response to events. Examples of differences that can produce ineffectiveness include:

- **Basis differences** – the fair value or cash flows of the hedged item depend on a variable that is different than the variable that causes the fair value or cash flows of the hedging item to change. For example, an entity hedges an instrument based on the price of gold with an instrument based on the price of silver.
- **Location differences** – the fair value or cash flows of the hedged item and hedging item both depend on the price of the same commodity but are based on the price at different locations. The price of a commodity will be different in different locations because of factors such as regional supply and demand and transportation costs.
- **Timing differences** – the hedged item and hedging item occur or are settled at different dates. For example, an entity hedges the anticipated purchase of a commodity with a derivative that settles at an earlier or later date than the date of the anticipated purchase. Another example is a floating rate debt whose variability is hedged with an interest rate swap where the interest rate reset dates on the two instruments are different.
- **Quantity or notional amount differences** – the hedged item and hedging item are based on a different quantities or notional amounts. For instance, an entity hedges the change in the fair value of a debt having a principal balance of $1,000,000 with an interest rate swap that has a notional principal amount of $900,000.
- **Changes in the fair value or cash flows of a derivative hedging instrument relating to risks other than the specific risk being hedged** – see discussion below.

When the hedging item is a derivative instrument, the question arises whether the entire change in the fair value or cash flows of the derivative always should be regarded as "relating to the risk being hedged". Assume, for example, that an entity uses a derivative to hedge the risk of changes in the fair value of commodity inventory. The overall change in the fair value of the commodity will be solely a function of changes in the spot price of the commodity. However, the overall change in the fair value of the derivative

could be affected by other factors, such as changes in the credit risk of the counterparty. In assessing the effectiveness of the relationship, should one consider the entire change in the fair value of the derivative or only the portion of the change attributable to the change in the price of the commodity?

The Guideline does not directly address this issue. It does, however, state that when an entity uses a forward or futures contract to hedge a risk, an entity may exclude the effect of changes in the time value of the contract if the entity assesses the effectiveness of a hedging relationship based on changes in the spot price of the item that is the subject of the forward. (We discuss the exclusion of time value from the assessment of effectiveness later in this chapter.) We infer from this that changes in the fair value or cash flows of a derivative attributable to all other risks should be included in an assessment of effectiveness, even when some of those risks are not being hedged. This interpretation is consistent with both FAS 133 and IAS 39, from which the basic principles of the Guideline have been drawn.

Under this interpretation, both the credit risk inherent in a derivative and the credit risk in the hedged item could be sources of ineffectiveness in a fair value hedging relationship. For instance, assume an entity is hedging the risk of overall change in the fair value of a fixed rate loan or a fixed price firm commitment with a derivative and the counterparties are not the same. The fair value of the firm commitment and the derivative will change disproportionately in a period if the credit standing of the parties changes disproportionately during that period. As a result, the change in fair value of the hedged item and hedging item relating to the risk being hedged will not completely offset in the period.

Credit risk also can affect cash flow hedges. Adverse changes in the credit risk of the counterparties to the hedged item and the hedging item might indicate that occurrence of the offsetting cash flows no longer is probable. This would result in the cessation of hedge accounting. In addition, changes in the credit risk of the counterparty to a hedging instrument would affect an assessment of the effectiveness of a cash flow hedge if the entity intends to generate the offsetting cash flows of the hedging instrument by liquidating the instrument before its maturity at its fair value.

In many cases, it will be possible to minimize the ineffectiveness in a hedging relationship by the way an entity designates the risk being hedged. For instance, an entity hedging an exposure to changes in the fair value of a fixed rate debt payable with a receive-fixed, pay floating BA interest rate swap could identify the risk being hedged as the risk of changes in the fair value of the loan attributable to changes in the BA rate. This designation would result in changes in fair value of the hedged item attributable to factors other than changes in the BA rate being excluded from the assessment of effectiveness.

In assessing the effectiveness of a cash flow hedge, the entity should be comparing the change during the period in the expected cash flows of the hedged item attributable to the risk being hedged to the offsetting change in the expected cash flows of the hedging item attributable to that risk. We believe an entity generally will need to consider the time value of money in these assessments, if time value is significant in the circumstances. This is especially important if the hedging instrument involves periodic settlements, such as would be the case in an interest rate swap. Considering time value means making assessments based on present values. In calculating present values, an entity might apply one of a different number of possible discount rates. In many cases, we would expect the entity to use the same rate for the hedged item and hedging item. That rate often would be the rate applicable in determining the fair value of the hedging derivative.

In assessing the effectiveness of a fair value hedge, an entity would apply a similar process. Of course, by definition, calculations of changes in fair value always would reflect the time value of money.

For both fair value and cash flow hedging relationships, effectiveness assessments should take into account the effect of payments and changes due to the passage of time as appropriate.

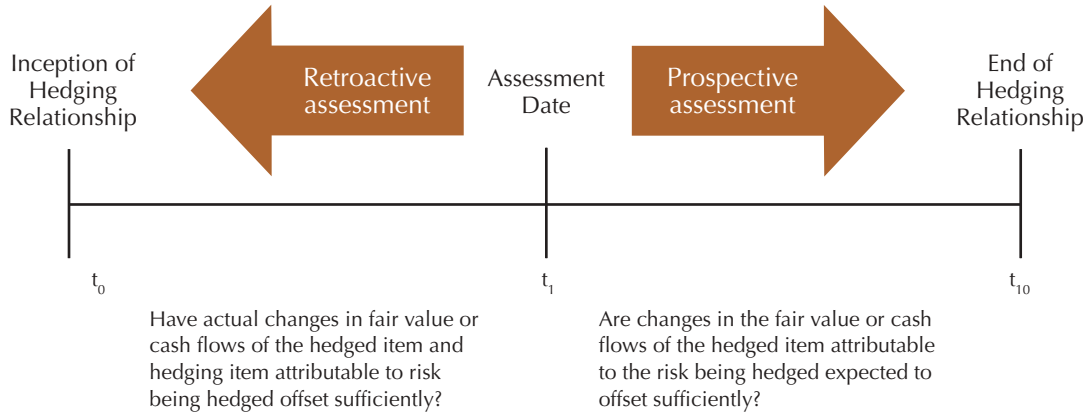
The Requirements for Assessing Effectiveness

The Guideline requires an entity to assess the effectiveness of hedging relationships at least once every quarter starting from the inception of the hedging relationship. An entity can choose any lesser period for doing assessments – every day, every week, or every month, for example – provided an assessment period does not extend beyond the period for which financial statements are prepared and issued.

Two types of assessment are necessary:

- **Prospective assessment** – at the beginning of the period, the entity must assess whether it is reasonable to expect that changes in the fair value or cash flows of the hedged item and hedging item attributable to the hedged risk will offset sufficiently in the future; and
- **Retroactive assessment** – at the end of the period, the entity must assess whether actual changes in the fair value or cash flows of the hedged item and hedging item attributable to the risk being hedged have offset sufficiently up to the assessment date.

TABLE 4: PROSPECTIVE AND RETROACTIVE ASSESSMENT



If an entity passes the prospective test at the beginning of the period but fails the retroactive test at the end of the period, hedge accounting would be precluded for the period but would not be precluded in the future. If the entity passes the retroactive test at the end of one period but fails the prospective test at the beginning of the next period, hedge accounting would be permitted for the period just ended but precluded for the upcoming period.

Detailed prospective and retroactive assessments always are necessary unless the entity can conclude that a hedging relationship contains no ineffectiveness. The Guideline identifies two situations where such a conclusion would be appropriate:

- The critical terms of the hedged item and hedging item are the same.
- The hedged item relates to a recognized interest-bearing asset or liability and the hedging item is an interest rate swap or cross-currency interest rate swap, and all of the conditions specified in paragraphs A5-A6 of the Guideline are satisfied.

In the following sections, we review the general requirements in the Guideline for detailed assessments. We then consider these two situations where it is possible to avoid making detailed assessments. Other situations are discussed in the Illustrations.

How Effective a Hedging Relationship Has To Be To Qualify for Hedge Accounting

Under the Guideline, a hedging relationship qualifies for hedge accounting when changes in the fair value or cash flows of the hedged item and offsetting changes in the fair value or cash flows of the hedging item attributable to the hedged risk that occur during the term of the relationship are "highly correlated". The Guideline does not specify a single method for establishing whether offsetting changes are highly correlated. In practice, there are two basic approaches:

- **Dollar offset**. The entity calculates the ratio of changes in the fair value or cash flows of the hedged item relating to the risk being hedged to the offsetting changes in the fair value or cash flows of the hedging item relating to the same risk. A hedging relationship is considered highly correlated under this method if the ratio of changes in the fair values or cash flows of the hedged item and hedging item attributable to the risk being hedged is between -0.8 and -1.25.
- **Regression or other statistical methods.** Under these methods, an entity demonstrates formally the tendency of changes in the fair value or cash flows of the hedged item relating to the risk being hedged to vary with changes in the fair value or cash flows of the hedging item relating to the same risk. A hedging relationship is considered highly correlated using regression if the regression is statistically valid and statistically significant and the "R-squared" statistic is 0.80 or more and the "slope" of the regression line (as adjusted for the hedging ratio) is between -.80 and -1.25. We provide an overview of the basic principles of the regression method in an appendix to the monograph.

The Guideline does not require an entity to use the same method in making prospective and retroactive assessments of the same hedging relationship. Thus, it is possible to use regression for prospective assessments and dollar offset for retroactive assessments, or vice versa. However, the entity must determine the methods it will use at the inception of the hedging relationship and abide by their results. If an entity decides to use dollar offset to make retroactive assessments, for example, it must cease hedge accounting as soon as it determines the hedging relationship is not effective under this method. This is necessary even if the entity could demonstrate that the hedging relationship would have been effective using regression or some other method of assessment.

An entity should use the same method for assessing the effectiveness of similar hedging relationships. If an entity changes its method, it should not account for the change as a change in accounting policy. Rather, the entity should follow the requirements in the Guideline for the voluntary termination of hedging relationships (see "Discontinuing Hedge Accounting" below). In essence, when an entity changes its method of assessing effectiveness, the existing hedging relationship is deemed to have been terminated and to have been replaced with a new hedging relationship.

Retroactive Assessments

As explained above, retroactive assessments of effectiveness must consider the actual performance of the hedging relationship up to the end of the assessment period. While this might seem to be a straightforward

exercise, there will be a number of choices to make regardless of whether the entity uses dollar offset or regression or some other form of statistical analysis as the basis for its assessment. The choices include:

- How often to make assessments.
- The type of data to use to establish the extent of correlation of changes in fair value or cash flows between the hedged item and the hedging item attributable to the hedged risk.
- The interval between data points and the number of data points to use.
- Whether to assess effectiveness cumulatively from the inception of the hedging relationship or on a period-by-period basis.
- Whether to assess effectiveness based on spot prices or forward prices.

How often to make assessments

As explained above, retroactive assessments of effectiveness must occur at least quarterly but could occur more frequently. Because we believe retroactive and prospective assessments should be made as of the same date, an entity's decision about how often to make retroactive assessments also will determine how often it makes prospective assessments. For example, if an entity decides to make retroactive assessments every month, it also will be obliged to evaluate hedges prospectively on the same basis.

Type of data an entity uses to make assessments

A second choice relevant to both dollar-offset and regression and other statistical analysis is the type of data that an entity will use to make retroactive assessments. In some situations, it may be possible to use "proxy data" such as changes in prices, interest rates or some other relevant observable variable, rather than actual changes in fair values or cash flows, to assess effectiveness. Using such proxy data generally would be appropriate only when the proxy variable captures all sources of ineffectiveness in the hedging relationship. For example, an entity hedging the variability in the price of an anticipated purchase of a commodity with a derivative whose cash flows are based on the price of a different commodity might assess effectiveness by considering the correlation of changes in the prices of the two commodities during the period if the different commodities are the only source of ineffectiveness in the hedging relationship.

If an entity uses regression or some other form of statistical analysis, it may be acceptable to use fair values or cash flows as the variables to be input into the regression model rather than changes in fair values or cash flows. Similarly, if an entity uses proxy data such as prices, interest rates, or other variables as the key determinants for establishing effectiveness, it may be acceptable to use each variable as it existed at a specific point-in-time rather than its change over a period of time as the input. In principle, comparing changes is more in keeping with the Guideline but using point-in-time data would be appropriate if the hedging relationship is static – when the number of hedging units or notional amount and the hedged item will remain the same through the designated hedge period.

Interval between date points and number of date points to use

In using regression or other statistical analysis, it also will be necessary for an entity to determine the interval between data points – for example, whether to use daily, weekly, monthly, or quarterly changes in prices in assessing effectiveness – and the number of data points to use. The selection of the frequency period should take into consideration factors such as the nature of the hedged item, the nature of the hedging instrument, whether certain data points will most appropriately represent the interaction of the hedged item and hedging item and the availability of data. The number of data points to use will depend in part on the number needed

to produce a statistically valid result. In order to obtain the required number of data points, an entity may need to use data that predates the inception of the hedging relationship.

When dollar offset is used, we expect that entities will select a data interval for retroactive assessments that corresponds with the assessment period they have selected. For instance, if an entity elects to assess effectiveness of a hedge of the price risk of a commodity quarterly, it will assess effectiveness based on the change in the price between the beginning and end of the quarter.

Cumulative or period-by-period assessments

An entity will have to determine whether to assess the effects of changes in fair value or cash flows on a period-by-period basis or cumulatively from the inception of the hedging relationship. The first method is called the "discrete" method and the second the "cumulative" method. The two methods can produce significantly different results, particularly if the entity is applying the dollar offset method. This is illustrated below.

TABLE 5: CUMULATIVE VERSUS DISCRETE METHOD – DOLLAR OFFSET

	Cumulative method			Discrete method		
	Hedged Item	**Hedging Item**	**%**	**Hedged Item**	**Hedging Item**	**%**
Inception	–	–	–	–	–	–
Quarter 1	50	(50)	100%	50	(50)	100%
Quarter 2	105	(107)	98%	55	(57)	96%
Quarter 3	129	(120)	108%	24	(13)	185%
Quarter 4	115	(116)	99%	(14)	4	350%

In the example in Table 5, the discrete method results in the disqualification of hedge accounting in quarters 3 and 4. By contrast, had the cumulative method of retroactive assessment been applied, all periods would have been considered highly effective and qualified for hedge accounting.

The above table illustrates a significant problem with the dollar offset method – the "small dollar problem". In Quarter 4, the hedging relationship under the discrete method would be considered ineffective even though the absolute dollar amount of the changes is rather small. To take an even more extreme example, suppose the change in the hedged item relating to the risk being hedged was only $1 and the offsetting change in the hedging item was only $2. In this case, the effectiveness ratio would be 0.5 and hedge accounting would be denied even though the dollar changes are trifling.

It is not clear under the Guideline whether an entity would be compelled automatically to discontinue hedge accounting in such a situation. In concept, we believe hedge accounting should not be precluded if the entity could demonstrate that the results were not truly indicative of the effectiveness of the hedging relationship – in general, the purpose of hedge accounting is to hedge against the risk of large dollar changes not small dollar changes. However, demonstrating that the results truly are not indicative of the relationship's effectiveness may be difficult. In addition, U.S. GAAP would preclude the application of hedging in this situation and the Ontario Securities Commission and other Canadian regulatory bodies have not stated their views on this matter. In light of the small dollar problem and the attendant uncertainty over its use, we expect that many companies will elect to use regression or other statistical analysis to assess effectiveness in preference to dollar offset.

As discussed later, an entity can include data relating to periods occurring before the inception of the hedging relationship in retroactive assessments of effectiveness if the entity is using regression or some other form of statistical analysis.

Assessing effectiveness based on changes in spot or forward prices

The Guideline permits an entity to assess effectiveness by considering the effect of changes in fair value or cash flows attributable to either spot or forward prices. In addition, when the hedging item is a forward or futures contract, the Guideline allows an entity to either include in, or exclude from, its assessment changes in the fair value or cash flows of the contract attributable to changes in the difference between spot and forward prices. This difference often is referred to as "forward points".

The result of these options is that an entity can elect to assess effectiveness in one of three ways:

- **Spot to spot comparison** – assess effectiveness based on changes in spot rates and exclude the effects of changes in the forward points from the assessment.
- **Forward to forward comparison** – assess effectiveness based on changes in forward rates and include the effects of changes in the forward points in the assessment.
- **Spot to forward comparison** – assess effectiveness based on changes spot rates and include the effects of changes in the forward points in the assessment.

We illustrate these different approaches in the example provided in Table 6 below.

Table 6: Assessing Effectiveness – Spot Versus Forward Prices

Assume an entity hedges the cash flow risk relating to the anticipated purchase of a commodity using a forward contract. The prevailing spot price of the commodity at the inception of the hedging relationship is $300 and the forward price is $312, which is also the forward price stipulated in the contract. When the hedging relationship ends, and the contract matures, the spot price is $330.

Under the Guideline, an entity can assess effectiveness of the hedging relationship based on changes attributable to changes in spot prices or forward prices and by including or excluding the effect of forward points. In our example, the change in cash flows of the anticipated purchase and of the forward attributable to changes in spot prices over the term of the contract would be $30. The change attributable to changes in forward prices would be $18, which would also represent the overall change in the cash flow of the forward. The change in the difference between the spot and the forward price would be $12.

The following table shows the calculation of the cumulative ineffectiveness in the hedging relationship at the maturity of the contract under each approach:

Approach	Spot-to-spot	Forward-to-forward	Spot-to-forward
Change in cash flow of anticipated purchase attributable to changes in:			
• Spot price of commodity	$30	–	$30
• Forward price of commodity	–	$18	–
Overall change in cash flow of forward contract	(18)	(18)	(18)
Change in the difference between the spot and forward price differential	(12)	N/A	N/A
Ineffectiveness	Nil	Nil	$12

This table illustrates that the premium or discount in a future or forward contract does not represent a source of ineffectiveness under the "spot to spot" and "forward to forward" methods of assessment but is a source of ineffectiveness under the "spot to forward" method.

The Guideline also allows entities similar choices when the hedging instrument is an option rather than a forward or futures contract. Specifically, the Guideline provides that:

- When an entity assesses the effectiveness of a hedging relationship involving an option based on changes in the option's intrinsic value, the change in the time value of the contract may be excluded from the assessment.
- When an entity assesses the effectiveness of a hedging relationship involving an option based on changes in the option's minimum value, that is, its intrinsic value plus the effect of discounting, the change in the volatility value of the contract may be excluded from the assessment of the contract.

Prospective Assessments

Making prospective assessments of effectiveness requires an entity to consider many of the same issues we discussed above for retroactive assessments. However, in contrast to retroactive assessment, prospective assessment involves determining whether it is reasonable to expect the hedging relationship to be effective in the future. Moreover, the first prospective assessment must be made before there is any evidence as to how well the hedging relationship actually has performed. Consequently, there are additional issues to consider. These include:

- Whether to make assessments using historical data or scenario analysis.
- Whether to assess effectiveness over a shorter horizon than the remaining term of the hedging relationship.
- If regression is used, whether it is appropriate to use the same regression to satisfy both the prospective and retroactive test.

Using historical data or scenario analysis

In general, a prospective assessment of effectiveness can be done in one of two ways:

- Assessing how effective the hedging relationship was, or would have been, in prior periods; or
- Applying scenario analysis – modeling how effective the hedging relationship would be under various possible scenarios, often using historical information.

To illustrate the first approach, assume an entity is hedging the variability in the price of an anticipated purchase of a commodity with a derivative whose cash flows are based on the price of a different commodity and this is the only source of ineffectiveness in the relationship. At the inception of the hedging relationship, the entity might establish whether it expects the hedging relationship to be effective in the future by considering the correlation of daily, monthly, quarterly or annual changes in the prices of the commodities that have occurred in the past. In subsequent prospective assessments, the entity would update the test by including actual results during the term of the hedging relationship.

We expect many entities will find it easier to use this method in preference to scenario analysis because it does not involve the generation and selection of multiple scenarios – entities can simply use observable historical data for a specific period of time considered to be appropriate in the circumstances.

We also expect that many entities will use regression rather than dollar offset under this approach because of the difficulties involved in interpreting multi-period results under dollar offset.

Assessing effectiveness over a shorter horizon than the remaining term of the hedging relationship

Assume an entity is hedging the fair value of a financial asset that has a five year term with a derivative that also has a five year term. The entity assesses the effectiveness of the hedging relationship every three months on a prospective basis by considering possible changes in the value of the hedged item and hedging item. In making this assessment, is the entity obliged to consider the effect of possible changes in the fair value of the hedged item over the remaining life of the hedging relationship, or may it consider the possible changes in value occurring only over a shorter period, such as the next three months of the hedging relationship?

The Guideline does not specifically address this issue. In our view, an entity may consider the effectiveness prospectively by considering the effectiveness of the hedging relationship over the shorter period provided it specifies that this will be its approach at the inception of the hedging relationship.

Using the same regression to satisfy the prospective and retroactive test

With the appropriate choice of inputs, a single regression or other statistical analysis can be used to make both prospective and retroactive assessments. For example, assume today is the inception of the hedging relationship and weekly observations for the preceding year are used as input for a regression analysis. Every three months it will drop the oldest three months of data and include the most recent three months. As a result, the regression always will include data from the most recent period of the actual hedging relationship and therefore will satisfy the retroactive assessment requirements of the Guideline. The regression also would satisfy prospective assessment requirements.

All Critical Terms Match

The Guideline states: “When the critical terms of the hedging item and hedged item are the same the entity could conclude that changes in the fair value or cash flows attributable to the risk being hedged are expected to offset completely at the inception of the hedging relationship and on an ongoing basis”. If this condition exists, an entity can dispense with detailed effectiveness assessments.

In our view, a “critical term” is any term of the hedged item or hedging item that might affect the effectiveness of the hedging relationship. Further, critical terms are the same if and only if the terms are exactly the same.

Illustrating the method

The Guideline gives the following as an example of a hedging relationship where all critical terms are the same – a forward contract that hedges the anticipated purchase of a commodity where:

- The forward contract is for the purchase of the same quantity of the same commodity at the same time and location as the hedged anticipated purchase;
- The fair value of the forward at inception of the hedging relationship is zero; and
- The change in the discount or premium on the forward contract is excluded from the assessment of effectiveness or the change in the expected cash flows on the anticipated transaction is based on the forward price of the commodity.

Notice that the terms of the hedged item and hedging item listed in the example all pertain to factors that could produce ineffectiveness in a hedging relationship.

The Guideline specifies that the fair value of the forward must be zero at the inception of the hedging relationship because forward contracts with a value of other than zero include a "financing" element that is a source of ineffectiveness. To illustrate, assume an entity enters a forward to purchase a commodity at a price lower than the prevailing market price by making an upfront payment to the counterparty. While the reduction in the contract price effectively will return the upfront payment plus "interest" to the entity, it also will cause the cash flows of the contract to change over the term of the hedging relationship differently than if the fair value of the contract was zero at inception. This will means that changes in the cash flow of the forward will not exactly offset changes in the cash flows of the anticipated purchase during the term of the hedging relationship.

The fair value of a forward or other derivative is unlikely to be nil at any time other than at the date of its origination. Accordingly, use of the "all critical terms are the same" method is restricted to situations where an entity enters into the derivative at or very close to the same time it establishes the hedging relationship. This rule also can have implications for business combinations. If one entity acquires another entity, and the acquired entity has been applying the "all critical terms are the same" method, the acquirer would not be able to continue to apply this method in its consolidated financial statements because the acquirer did not acquire the hedging derivatives when their fair value was zero.

Even when the critical terms of the hedged item and hedging item match, the Guideline specifies that using the all critical terms match method is appropriate only if the entity assesses effectiveness by excluding the premium or discount on the forward or basing changes in expected cash flows on changes in the forward price. This is necessary because an entity also could assess effectiveness by including the premium or discount on the forward in an assessment based on changes in spot prices. As we explained earlier, the premium or discount under this method represents a built-in source of ineffectiveness in the hedging relationship. Accordingly, its use is not consistent with the presumption that there is no ineffectiveness in a hedging relationship when all critical terms match.

Scope of application of the method

The example in the Guideline of a hedging relationship where all critical terms match is that of a cash flow hedge where the entity intends to hold the hedging instrument until its maturity. It is appropriate to conclude there is no ineffectiveness in this example because there are no other factors that could affect the effectiveness of the hedging relationship. In other hedging relationships, however, ineffectiveness can arise even when all critical terms of the hedged item and hedging item are the same. For example, assume an entity is hedging the change in the fair value of a commodity with a derivative whose terms match the commodity perfectly. In this circumstance, it is possible that the fair value of the derivative will change due solely to changes in the credit risk of the counterparty. If so, changes in the fair value of the hedged item and hedging item will not always offset and ineffectiveness will arise.

We do not believe that it was the intention of the Guideline to permit an entity to apply the all critical terms match method where the effectiveness of a hedging relationship depends on factors other than its terms. Entities considering using this method in these situations should consult with their professional advisors.

Ongoing assessment requirements

Even if all of the critical terms of a hedging relationship match, an entity still must assess the effectiveness of the relationship at least quarterly over its term. The assessment would consist of (a) reviewing the critical terms of the hedging relationship to determine whether any terms have changed; and (b) evaluating whether it continues to be probable that the counterparty in the hedging relationship will perform its obligations in accordance with the requirements of the contract. If either the anticipated purchase or performance by the counterparty to the derivative is no longer probable, hedge accounting would have to be discontinued.

Hedges Involving a Recognized Interest-bearing Asset or Liability and an Interest Rate or Cross-currency Swap under Paragraphs A5 and A6 – the "Shortcut Method"

If an entity uses an interest rate swap or cross-currency swap to hedge a recognized interest-bearing asset or liability or the related interest cash flows, paragraphs A5 and A6 of the Guideline permits a company hedging interest rate risk to assume that no ineffectiveness exists in the hedging relationship if all of the conditions set out below are met. Meeting these conditions is sometimes called the "shortcut method" of assessing effectiveness.

We understand that the shortcut method was introduced to reduce the documentation and assessment burden for certain simple and common hedging relationships. Accordingly, we believe that this method should be applied only when all of the conditions for its use have been strictly met. As soon as an entity no longer meets the conditions for using the shortcut method it will be necessary to use a different method to assess the effectiveness of the hedging relationship.

The criteria for using the shortcut method are:

For both fair value and cash flow hedges

- The notional amount of the swap matches the percentage of the principal amount of the interest-bearing asset or liability that is designated as the hedged item.
- The fair value of the swap at the inception of the hedging relationship is zero.
- The formula for computing net settlements under the interest rate swap is the same for each net settlement. That is, the fixed rate is the same throughout the term, and the variable rate is based on the same index and includes the same constant adjustment or no adjustment.
- The interest-bearing asset or liability is not pre-payable (that is, able to be settled by either party prior to its scheduled maturity). This criterion does not apply to an interest-bearing asset or liability that is pre-payable solely due to: (i) an embedded call option, provided that the hedging interest rate swap contains an embedded mirror-image call option. The call option embedded in the swap is considered a mirror image of the called option embedded in the hedged item when the terms of the two call options match (including matching maturities, strike price, related notional amounts, timing and frequency of payments, and dates on which the instruments may be called) and the entity is the writer of one call option and the holder (or purchaser) of the other call option; or (ii) an embedded put option, provided that the hedging interest swap contains an embedded mirror-image put option.
- The index on which the variable leg of the swap is based matches the interest-rate designated as the interest rate risk being hedged for that hedging relationship.
- Any other terms in the interest-bearing financial instruments or interest rate swaps are typical of those instruments and do not invalidate the assumption of no ineffectiveness.

Additional criteria for cash flow hedges only

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

- There is no floor or cap on the variable interest rate of the swap unless the variable-rate asset or liability has a floor or a cap. In that case, the swap must have a floor or cap on the variable interest rate that is comparable to the floor or cap on the variable-rate asset or liability.
- The repricing dates match those of the variable-rate asset or liability.

Additional criteria for fair value hedges only

- The expiration date of the swap matches the maturity date of the interest-rate bearing asset or liability.
- There is no floor or ceiling on the variable interest rate of the swap.
- The interval between re-pricings of the variable interest rate in the swap is frequent enough to justify an assumption that the variable payment or receipt is at a market rate (generally three or six months or less).

Additional criteria for cross-currency interest rate swaps only

- The conditions set out above apply except as follows:
  - When settlements of a cross-currency interest rate swap are not on a net basis, the formula for computing the gross settlement amounts are the same for each settlement. That is, the fixed rate is the same throughout the term, and the variable rate is based on the same index and includes the same constant adjustment or no adjustment.
  - The currency of one leg of the swap is the same as the currency in which the underlying hedged asset or liability is denominated and the currency of the other leg of the swap is the same as the currency in which the reporting entity measures the underlying hedged asset or liability in its financial statements.
  - When multiple swaps are used, the fair value of the swaps on a combined basis at the inception of the hedging relationship is zero.

Partial Term Hedges

Entities often will hedge exposures using hedging instruments that have a term that is less than the term of the hedged item – so called "partial term" hedges. The Guideline states that it is generally difficult to achieve an effective partial term fair value hedge, particularly if the hedging item has a term to maturity significantly shorter than the term to maturity of the hedged item.

How difficult it will be to achieve an effective partial term fair value hedge will depend on the circumstances. Consider the following two hedging strategies:

- An entity hedges the change in the fair value of a fixed rate 10 year debt attributable to changes in the BA rate with a three year derivative where the reference asset is a 10 year debt having exactly the same characteristics of the debt being hedged. The entity pays the counterparty to the derivative an amount equal to any increase in the value of the debt attributable to changes in the BA rate each quarter and receives an amount equal to any decrease.
- An entity hedges the same changes in the fair value of the same fixed rate 10 year debt for the same three year period but with a derivative where the reference asset is a three year debt rather the 10 year debt.

Under the first strategy, changes in the fair value of the derivative and changes in the fair value of the debt attributable to changes in the BA rate during the three year period the hedge is outstanding would completely offset (assuming no ineffectiveness due to changes in the credit risk of the derivative counterparty). There is complete offset even though the term of the hedged item is significantly shorter than the term to maturity of

the hedged item because the reference asset has the same characteristics as the hedged item, including the same term. By comparison, the second strategy will produce significant ineffectiveness because the term of the reference asset is significantly less than the term of the hedged item. It is unlikely that this hedging relationship will be effective under the Guideline.

Consider a third strategy which, in fact, is far more common. An entity converts to a floating rate the interest payments for the first three years of a 10 year fixed rate debt using a receive fixed, pay floating interest swap. Under the Guideline, this strategy would be described as a fair value hedge of the entity's obligation to make the first three years of interest payments on the debt. This strategy puts the entity in essentially the same situation as the second strategy described above – the entity is hedging the change in the fair value of a 10 year debt with an instrument whose value is based on a notional three year debt. Accordingly, it is unlikely that this hedging relationship will be effective.

In contrast, it is far less difficult to achieve effective partial term cash flow hedges. For instance, assume an entity converts the first three years of a 10 year floating rate debt to a fixed interest rate using a three year receive floating, pay fixed interest rate swap. In this case, the entity would be hedging the variability in the first three years of interest payments. Assuming the terms of the interest rate swap match up, the hedging relationship would be completely effective.

Designation and Documentation

The Guideline requires an entity to formally designate and document a hedging relationship at its inception. It imposes this requirement to preclude the possibility that an entity might retroactively designate a hedged item, a hedging item, or a method of assessing effectiveness to achieve a desired accounting result. Absent concurrent designation and documentation, for instance, an entity could defer a loss on a derivative by claiming that it always had been intended as a hedge or recognize a gain by claiming it never was intended as hedge.

Securities regulators in the United States have announced that hedging documentation should be sufficient to enable a knowledgeable third party to understand the nature of the hedging relationship and the effectiveness assessments being applied, to re-perform those assessments and make the appropriate accounting entries. We expect that a similar standard will develop in Canada.

Specific Documentation Requirements

The Guideline states that an entity's formal documentation should include the following:

- The entity's risk management objective and strategy for establishing the relationship.
- The hedging relationship, identifying the hedged item, the related hedging item, the nature of the specific risk exposure or exposures being hedged and the intended term of the hedging relationship.
- The method for assessing the effectiveness of the relationship.
- The method of accounting for the hedging relationship, including the income recognition of gains, losses, revenues and expenses associated with the items in the relationship.

We believe that documentation relating to the method for assessing the effectiveness should include:

- How the entity will make prospective and retroactive assessments, including (but not necessarily limited to) whether the entity will use dollar offset or regression or some other method of statistical analysis and whether, for retroactive assessments, it will apply the cumulative or discrete method.
- Whether the entity will assess effectiveness based on changes in spot or forward prices and its treatment of time value in forward, futures and options contracts.
- The type of data the entity will use to assess correlation. For example, an entity should document the variables it is using to assess effectiveness, the interval between data points (e.g. whether daily, weekly, monthly or quarterly changes in prices will be used), the number of data points that will be used; the periods over which the data is to be obtained, and the sources for the data inputs.
- How often assessments will be made.

While not stated specifically in the Guideline, we also believe that an entity should document its assessment that it is probable that anticipated transactions will occur as expected and that the counterparties to the hedging relationship will perform their obligations in accordance with the underlying contracts.

Documentation when All Critical Terms Match

If an entity is applying the all critical terms match method, the entity should document that it is applying this method and demonstrate in its documentation that all critical terms in fact do match at the inception of the hedging relationship. This should be done by identifying all critical terms in the relationship and including a comparison of the terms of the hedged item and hedging item. In subsequent assessments, the entity should document that the critical terms of the relationship have not changed, and that it continues to be probable that any anticipated transactions will occur as expected and the counterparties to the hedging relationship will perform their obligations in accordance with the underlying contracts.

Documentation under the Shortcut Method

If an entity is applying the shortcut method, we believe that at the inception of the hedging relationship the entity should document that is applying this method and demonstrate in its documentation that all of the conditions for using the shortcut method have in fact been met. Given that the shortcut method was introduced to simplify the documentation of simple and common hedging relationships, we believe the only ongoing requirement is to monitor counterparty creditworthiness. Of course, if the terms of the hedging relationship change, it will be necessary to reconsider the application of the shortcut method.

Discontinuing Hedge Accounting

The Guideline requires hedge accounting to be discontinued when:

- The hedging item no longer exists as the result of its maturity, expiry, sale, termination, cancellation or exercise, unless it is replaced by another hedging item as part of the entity's documented hedging strategy;
- The hedged item ceases to exist as a result of its maturity, expiry, sale, termination, cancellation or exercise;
- The entity voluntarily terminates its designation of the hedging relationship; or
- The hedging relationship ceases to be effective.

Accounting for the Discontinuance of Hedge Accounting

Table 7 sets out the accounting to be applied when hedge accounting is discontinued.

Table 7: Accounting When Hedge Accounting is Discontinued

Hedging item no longer exists	Any deferred gains, losses, revenues or expenses related to the hedging item are carried forward to be recognized in income when the corresponding gains, losses, revenues or expenses related to the hedged item are recognized.
Hedged item ceases to exist	Any deferred gains, losses, revenues or expenses related to the hedging item are recognized in income along with the related gains, losses, revenues and expenses on the hedged item.
Voluntary termination of hedging relationship	Hedge accounting is not applied to the hedging relationship for gains, losses, revenues or expenses arising after the date of the voluntary termination. However, any previously deferred gains, losses, revenues or expenses continue to be carried forward for recognition in the same period as the gains, losses, revenues and expenses relating to the hedged item are recognized.
Hedging relationship no longer effective	Same as for the voluntary termination of hedging relationship.

If an entity concludes that a hedging relationship is no longer is effective, the entity should cease using hedge accounting as of the latest date it can demonstrate that the hedging relationship was effective. This would be either the last date on which compliance with the effectiveness assessment criteria in the Guideline was established or, if the event or change in circumstances that caused the hedging relationship to fail the effectiveness criterion can be identified, the date of the event or changes in circumstances.

Discontinuing Hedge Accounting when the Hedging Item Is a Derivative Financial Instrument

The discontinuance of a hedging relationship when the hedging item is a derivative financial instrument can have significant implications. Under EIC 128, if a derivative no longer qualifies for hedge accounting, it will have to be recognized on the balance sheet at fair value as an asset or a liability. The other side of the entry to recognize the fair value of the derivative would be a gain or loss. This gain or loss would be recognized in earnings immediately, or deferred on the balance sheet as a deferred charge or deferred credit, depending on the reason for the discontinuance of hedge accounting. Subsequent gains and losses would be recognized in earnings as they arise.

Anticipated Transactions

When the hedged item is an anticipated transaction, such as an anticipated purchase or sale, the Guideline states that hedge accounting must be discontinued when it is no longer probable that the transaction will occur substantially as and when identified at the inception of the hedging relationship. When this occurs, the hedged item is deemed to have ceased to exist.

Hedge accounting must be discontinued when occurrence is no longer probable even if it is reasonably possible that the transaction will occur as identified at the inception of the relationship. To illustrate, assume an anticipated sale is probable when the likelihood of its occurrence is 75% or more. Under the Guideline, hedge accounting must be discontinued the moment the likelihood of its occurrence drops to less than 75%. Thus, relatively trifling changes in estimates of probability can trigger the discontinuance of hedge accounting.

The Guideline provides no guidance for determining whether an anticipated transaction will occur "substantially as and when identified at the inception of the hedging relationship". In our view, hedge accounting should not be discontinued if it becomes apparent that the timing or amount of the anticipated transaction will be different, but not substantially different, than that expected at the inception of the hedging relationship. The question of whether a particular difference is substantial is a question of judgment.

Identification of Anticipated Transactions at the Inception Critical

The way in which an entity identifies the anticipated transaction at the inception of a hedging relationship can be critical to the determination whether it is probable that it will occur. To illustrate, compare the following two scenarios:

- An entity designates a receive-floating, pay-fixed interest rate BA-based swap as a hedge of interest payments pertaining to a specific $100 million BA-based debt.
- The entity designates the swap as hedging the variability of the first interest payments on its BA rate based debt having an aggregate principal amount of $100 million that occur within a specified time frame before and after the due dates specified in the swap.

If the entity extinguishes the debt before its scheduled maturity in the first scenario, it would have to discontinue hedge accounting because the identified hedged item – the interest payments on that specific debt – no longer are probable. In the second scenario, the extinguishment of a BA-based debt before its maturity would not result in the discontinuance of hedge accounting (assuming the extinguishment did not

reduce the overall level of the entity's BA-based debt to less than $100 million). This is because the entity has not identified any particular BA-based debt as being the source of the interest payments being hedged.

Transition

The Guideline is effective for financial years starting on or after July 1, 2003 (though earlier application was encouraged). Accordingly, for a calendar year company it will be effective for the year beginning January 1, 2004.

Remedial Action Permitted To Continue To Apply Hedge Accounting

At the transition date, an entity must assess its existing hedging relationships to determine whether they satisfy all of the requirements in the Guideline. If any of its hedging relationships are deficient, the Guideline permits an entity to take steps to remedy the deficiencies and to continue to apply hedge accounting. Examples of remedial actions include preparing formal documentation of the entity's risk management strategies and objectives and upgrading the designation, documentation and effectiveness assessments of hedging relationships. The necessary work must be done by the first day of the first year in which the Guideline applies.

In our view, remedial action does not represent the termination of the old hedging relationship and the formation of a new relationship but rather the continuation of the pre-existing hedging relationship.

Effectiveness Assessment at Transition

At transition, an entity should assess prospectively the effectiveness of continuing hedging relationships that require remedial action. It would not be appropriate to formally assess effectiveness retroactively unless the entity were already doing so prior to adopting the Guideline. Up to the date of transition, an entity should continue to apply its pre-existing effectiveness assessment methods and tests, whatever they might be.

Macro Hedges on Transition

Under existing GAAP, hedging net exposures arising from different assets, liabilities or anticipated transactions – so called "macro hedging" – was relatively common. As we have seen, macro hedging strategies will not meet the conditions for hedge accounting under the Guideline. In order to continue to apply hedge accounting for derivatives and other hedging instruments used in these strategies, an entity will have to match the hedging instruments to risk exposures arising from individual items or groups of similar hedged items.

If a derivative or other hedging instrument included in a macro hedging relationships has been matched to one of the hedged items included in the macro relationship, we would view the relationship resulting from the match to be the continuation of a pre-existing hedging relationship.

Applying the Shortcut Method on Transition

As we have seen, entities can conclude there is no ineffectiveness in a hedging relationship of interest rate risk involving a recognized interest-bearing asset or liability and an interest rate swap if the conditions in paragraphs A5 and A6 of the Guideline are met. One of these requirements is that the fair value of the swap at the inception of the hedging relationship is zero. If at transition a pre-existing relationship is being continued, we believe an entity should look to the fair value of the swap at the inception of the hedging relationship rather than the fair value of the swap at the date of initial adoption of the Guideline. One the other hand, if a new hedging relationship is established, an entity should look to the fair value of the swap at the transition date.

Hedging Relationships not in Compliance with the Guideline at Transition

For hedging relationships that are not in compliance with the Guideline by the transition date, it will be necessary to discontinue hedge accounting. An entity would discontinue hedge accounting in the same way it would for the voluntary termination of hedging relationships (see "Discontinuing Hedge Accounting"). Thus, hedge accounting would not be applied to gains, losses, revenues or expenses arising from these relationships that occur subsequent to the date of adoption of the Guideline. However, any previously deferred gains, losses revenues or expenses would continue to be carried forward for recognition in the same period as the gains, losses revenues and expenses relating to the hedged item.

For derivative financial instruments that do not qualify as hedges at transition, EIC 128 requires that the instrument be recognized on the balance sheet at fair value. The offsetting entry would be a deferred credit or a deferred charge that would be recognized in earnings on the same basis as the original hedged item. Subsequently, any changes in the fair value of the derivative would be recognized in earnings as they arise.

For a derivative financial instrument (or other instrument) that was included in a macro hedging relationship and does not qualify for hedge accounting on transition, it often will not be possible to match the gain or loss on the derivative with specific hedged items included in the macro hedging relationship. As a practical matter, it would be appropriate to recognize the gain or loss over the remaining term of the derivative.

Proposed Changes to the Guideline and Hedge Accounting

On March 31, 2003 the Board issued exposure drafts of three new Handbook Sections addressing the recognition and measurement of financial instruments, including a separate exposure draft on hedging (referred to herein as "the EDs"). Under the proposals, the Guideline would be included in a new Handbook Section called HEDGES and would be modified to provide that:

- The hedged item cannot be an unrecognized asset or liability, such as an unrecognized intangible asset.
- The hedged item cannot be an embedded derivative, except in limited circumstances.
- The hedging item cannot be an anticipated transaction.

- Internal hedging arrangements can qualify for hedge accounting only when the hedge is a cash flow hedge of a foreign currency risk in an anticipated transaction.
- A held to maturity investment cannot be a hedged item with respect to interest rate risk or prepayment risk.

The proposed new rules would require that derivatives would be measured at fair value regardless of whether hedge accounting is applied (derivatives that represent "normal purchases and sales" are excluded from the scope of the rules). If a derivative does not qualify for hedge accounting, changes in its fair value are recognized in earnings as they arise. If a derivative does qualify for hedge accounting, the treatment of changes in its fair value would depend on the nature of the hedging relationship. If the derivative is a fair value hedge, changes in its fair value would be recognized in earnings as they arise. However, the change in the fair value of the hedged item attributable to the risk being hedged also would be recognized in earnings at the same time by adjusting the carrying value of the hedged item. If the derivative is a cash flow hedge, the effective portion of the derivative's gain or loss is initially reported in "Other Comprehensive Income", a separate account within shareholders equity. It is subsequently reclassified to net income when the hedged item affects earnings.

In addition, any ineffectiveness in a hedging relationship would have to be recognized in earnings immediately. Under existing GAAP, hedging ineffectiveness often is not recognized until the hedged item affects earnings.

The proposed new rules mean that companies face the risk that hedging strategies and accounting systems developed to conform to the Guideline become less attractive. For example:

- The requirement to recognized hedge ineffectiveness in earnings means that valid hedging strategies under the Guideline might nevertheless produce income statement volatility.
- The requirement to recognize changes in the fair value of cash flow hedges in Other Comprehensive Earnings means that companies will be reporting "equity volatility" as the fair values of the hedges change.
- Companies developing accounting systems designed solely to meet the requirements of the Guideline might find that additional modifications are necessary under the EDs. For instance, the new rules require that all derivatives have to be measured at fair value, not just those that do not qualify as hedges. In addition, embedded derivatives have to be accounted for as freestanding derivatives if certain criteria are met.

The effective date proposed for the EDs is for years starting on or after October 1, 2004.

Illustrations

In this section of the monograph, we illustrate the application of the Guideline to various types of hedging strategies. The sole purpose of the illustrations is to demonstrate how certain key aspects of the Guideline might be interpreted and applied. The illustrations are not intended to, and do not, demonstrate how an entity would comply with all of the requirements of the Guideline in assessing and documenting a particular hedging relationship. In all situations, an entity should refer to the Guideline.

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Illustration 1: Converting a Floating Rate Debt to a Fixed Rate – Shortcut Method

Our first illustration demonstrates the application of the "shortcut method" when an entity is hedging the variability in interest payments pertaining to a floating rate debt obligation, due to changes in interest rates.

The shortcut method generally can be used when the entity takes out a plain vanilla swap to effectively convert a fixed rate debt to a floating rate debt, or vice versa, and the swap is issued at the same time as the debt is issued. This method generally is the simplest way of complying with the Guideline but, as discussed below, its inappropriate use can have serious consequences.

Assume Company AA issues a floating rate debt to Bank X. The loan has a face value of $1,000,000. Interest is payable quarterly. The interest rate on the loan resets quarterly and is based on 3-month CDOR (i.e. the BA rate) plus 200 basis points (or "bps"). The debt was issued on January 1, 200X, and has a term of 2 years.

Simultaneously with the issue of the debt, Company AA enters into a receive-floating, pay-fixed interest rate swap with Bank Y. The swap has a notional amount of $1,000,000 – the same as the face amount of the debt being hedged. The fixed-leg payments are based on a constant interest rate of 5.304%, and the floating-leg payments are based on the 3-month CDOR rate plus 200 basis points. The floating-leg interest rate resets quarterly and both legs of the swap pay on a quarterly basis. The swap's fair value on the date of issue is zero. The swap terminates with its last payment on December 31, 200Y, the same day on which the debt matures.

Company AA carefully examines each of the conditions in paragraph A5 of the Guideline and concludes that it can assume there is no ineffectiveness in the hedging relationship because all of the applicable conditions of the paragraph are met. Accordingly, it is exempt from the requirement to do periodic prospective and retroactive assessments of the effectiveness of the hedging relationship, provided that the terms of the items in the hedging relationship do not change and the company documents the hedging relationship appropriately at its inception.

If Company AA makes a mistake, and erroneously concludes that the relationship meets all the conditions for applying the shortcut method in paragraph A5 when in fact it does not, Company AA will not have complied with the requirements for hedge accounting. Absent the shortcut method, the Guideline would require the entity to document certain additional information and to have made detailed retroactive and prospective assessments of effectiveness at least quarterly. Until these assessments are made and documented, the swap would have to be measured at fair value and changes in fair value would have to be recognized as they arise, pursuant to EIC 128. This accounting would be required even if, after the fact, Company AA could demonstrate that the hedging relationship was, and could have been expected to be sufficiently effective.

Compliance with the shortcut method would be best demonstrated by documenting that the conditions are met on a criterion-by-criterion basis. One way to do this would be to use a tabular format, such as is illustrated on page 43.

Conditions for Using the Shortcut Method	Terms of Hedged Item	Terms of Swap
The notional amount of the swap matches the percentage of the principal amount of the interest-bearing asset or liability that is designated as the hedged item.	Face amount of debt is $1,000,000 and 100% is designated as hedged.	Notional amount is $1,000,000.
The fair value of the swap at the inception of the hedging relationship is zero.	N/A	True.
The formula for computing net settlements under the interest rate swap is the same for each net settlement. That is, the fixed rate is the same throughout the term, and the variable rate is based on the same index and includes the same constant adjustment or no adjustment.	N/A	Yes. Fixed rate is 5.304% throughout the term and variable rate is based on 3-month CDOR throughout the term, with the constant adjustment of 200 bps.
The interest-bearing asset or liability is not pre-payable (that is, able to be settled by either party prior to its scheduled maturity), except as described in paragraph A5.d. of AcG-13.	True.	True.
The index on which the variable leg of the swap is based matches the interest rate designated as the interest rate risk being hedged for that hedging relationship.	N/A	True. The variable leg of the swap is based on 3 month CDOR, which is designated as the interest rate being hedged.
Any other terms in the interest-bearing financial instruments or interest rate swaps are typical of those instruments and do not invalidate the assumption of no ineffectiveness.	True. There are no atypical terms.	True. There are no atypical terms.
All interest receipts or payments on the variable rate asset or liability during the term of the swap are designated as hedged, and no interest payments beyond the term of the swap are designated as being hedged.	True. All interest payments up to and including, but not beyond, the swap termination date of December 31, 200Y are designated as hedged.	N/A
There is no floor or cap on the variable interest rate of the swap unless the variable-rate asset or liability has a floor or cap. In that case, the swap must have a floor or cap that is comparable to the floor or cap on the variable-rate asset or liability.	There is no floor or cap.	True. There is no floor or cap.
The repricing dates match those of the variable rate asset or liability.	N/A	True.

Illustration 2: Converting a Floating Rate Debt to a Fixed Rate – Variable Cash Flows Method

Our second illustration demonstrates how an entity could use the Variable Cash Flows Method to evaluate the effectiveness of an interest rate swap hedging a floating rate debt in situations where it is not possible to apply the shortcut method or the entity chooses not to apply it.

The Variable Cash Flows Method[1] is the method that many accountants intuitively would use to assess the effectiveness of an interest rate swap – comparing the effect that changes in interest rates have on the variable leg of the swap and on the variable interest payments being hedged. In certain situations, as illustrated below, we believe that it would be appropriate for an entity using this method to conclude that there is no ineffectiveness in the hedging relationship without performing detailed retroactive and prospective assessments.

Under the Change in Variable Cash Flows Method, ineffectiveness is assessed by comparing the present value of the change in the expected future cash flows on the variable leg of the swap with the present value of the change in the expected future interest cash flows on the floating-rate debt. The present value of the change in the variable swap payments and the expected cash flows usually would be calculated using the same discount rates – ordinarily the discount rates used in the calculation of the fair value of the swap. The method is based on the premise that only the floating rate leg of the swap provides the cash flow hedge (i.e. any change in the swap's value attributable to the fixed leg is not relevant to the variability of the hedged interest payments on the floating rate debt).

Because the Change in Variable Cash Flows Method is founded on the view that the fixed leg of the swap is not a source of ineffectiveness in the hedging relationship, the method will result in no ineffectiveness if all of the following conditions are met:

- The floating-rate leg of the swap and the hedged variable cash flows of the asset or liability are based on the same interest rate index;
- The interest rate reset dates applicable to the floating-rate leg of the swap and to the hedged variable cash flows of the asset or liability are the same;
- The hedging relationship does not contain any other basis differences (e.g. ineffectiveness could be created if the variable leg of the swap contains a cap and the floating-rate asset or liability does not); and
- The likelihood of the obligor not defaulting is assessed as being probable.

Ineffectiveness would be expected to result if any basis difference exists, such as a difference in the indices used to determine cash flows on the variable leg of the swap and the variable cash flows on the debt, or a mismatch between the interest rate reset dates applicable to the variable leg of the swap and the variable cash flows of the debt.

[1] The Variable Cash Flows Method is based on the method of the same name described in the FAS 133 implementation guidance in DIG G7.

In Illustration 2, assume that the fact pattern is the same as in Illustration 1 except that the loan terms give Company AA the option to prepay the loan at any time by simply paying the accrued interest plus outstanding principal. Because the debt is prepayable, but the swap does not contain a mirror-image pre-payment option, Company AA cannot conclude there is no ineffectiveness in the hedging relationship under the shortcut method.

However, Company AA can conclude that there is no ineffectiveness in the hedging relationship under the Variable Cash Flows Method if it is probable that the interest payments being hedged will occur. (If it is not probable that the interest payments will occur, they will not qualify as hedged items.) Such a conclusion would be appropriate even if the company expects to repay the original debt prior to maturity, provided that it also expects to issue new floating rate debt that shares the key characteristics of the original debt issuance and documents this at the inception of the hedging relationship.

In situations where an entity uses the Variable Cash Flows Method, it would be necessary to meet all of the effectiveness assessment and documentation requirements of the Guideline, both at the inception of the hedging relationship and thereafter (including that it is assessing effectiveness under the Variable Cash Flows Method). If an entity concludes that there will be no ineffectiveness, it would be appropriate to use a "checklist" approach similar to that described in Illustration 1 to document its conclusion that there is no ineffectiveness at the inception of the hedging relationship. In such circumstances, an entity could limit its periodic assessments of hedge effectiveness to confirming that the terms of the hedging instrument and the hedged items have not changed and that it continued to be probable that the counterparty to the swap would not default. The requirement to make and document formal assessments of effectiveness periodically over the term of the hedging relationship distinguishes this method from the shortcut method in these situations.

The Variable Cash Flows-Based Method can be used only if the fair value of the swap at the inception of the hedging relationship is at or close to zero. If the fair value of the swap is not somewhat near zero, the method cannot be applied. This is because the ineffectiveness relating to the financing element of the swap (see discussion of this issue under the heading All Critical Terms Match) would be excluded inappropriately from the assessment of effectiveness.

Illustration 3: Converting a Floating Rate Debt to a Fixed Rate – Hypothetical Derivative Method

Our third illustration demonstrates how an entity could use the Hypothetical Derivative Method to evaluate the effectiveness of an interest rate swap hedging a floating rate debt.

The Hypothetical Derivative Method[2] is an alternative method of assessing the effectiveness of a hedging relationship when an entity cannot or elects not to apply the shortcut method or the Variable Cash Flows Method. This method involves comparing the change in the fair value of the actual swap with the change in the fair value of a "hypothetical" derivative whose terms perfectly match the terms of the floating rate debt whose interest payments are being hedged. In contrast to the shortcut method and the Variable Cash Flows Method, the Hypothetical Derivative Method will frequently be used when there is ineffectiveness in the hedging relationship. Accordingly, once an entity has determined the change in fair value of the hypothetical swap and the change in the fair value of the actual swap for particular periods, it would use this data in applying the dollar offset method, regression or some other method of statistical analysis to assess the effectiveness of the hedging relationship.

The Hypothetical Derivative Method often is useful in evaluating the effectiveness of cash flow hedging relationships involving other derivatives, such as cross-currency swaps, commodity swaps and forward exchange contracts.

To illustrate the application of the Hypothetical Derivative Method, assume the fact pattern is the same as that outlined in Illustration 1 except that the fair value of the swap at the inception of the hedging relationship is not at or close to zero. This might be the case for any number of reasons. For example, the entity might receive or make a payment to the counterparty at the swap's inception. Alternatively, the swap might have been part of a different hedging relationship that has been terminated or the swap might be acquired in a business acquisition.

Because the fair value of the swap is not at or close to zero, the entity does not qualify to use either the shortcut method or the Variable Cash Flows Method described in Illustrations 1 and 2 respectively.

An entity using the Hypothetical Derivative Method would construct the perfect hypothetical derivative that will be used in the regression as follows:

[2] The Hypothetical Derivative Method is based on the method of the same name described in the FAS 133 implementation guidance in DIG G7.

	Hedged Item	Perfect Hypothetical Derivative	Actual Derivative
Instrument	Debt	Receive-float, pay-fixed swap	Receive-float, pay- fixed swap
Face amount/Notional amount	$ 1,000,000	$ 1,000,000	$ 1,000,000
Inception date	January 1, 200X	January 1, 200X	January 1, 200X
Maturity date	December 31, 200Y	December 31, 200Y	December 31, 200Y
Swap fair value at inception	N/A	Nil	$(22,999)
Reset frequency	Quarterly	Quarterly	Quarterly
Payment frequency	Quarterly	Quarterly	Quarterly
Debt payment/floating leg – Interest rate – Credit spread	 3-mo CDOR 200 bps	 3-mo CDOR 200bps	 3-mo CDOR 200bps
Fixed leg interest rate	N/A	5.304%	6.500%

The change in the fair value of both the hypothetical derivative and the actual swap for a period can be calculated by computing the difference between the fair value of the swap at the beginning and end of the period adjusted for any payments made during the period. For example, assume the following:

- Fair value of swap at beginning of period $(18,651)
- Fair value of swap at end of period (11,304)
- Payments during the period (4,079)

The change in the fair value of the swap could be computed by adding the payment back to the ending fair value of the swap – this would result in an ending fair value of the swap adjusted for payments of $15,383. The change in the fair value of the swap would be $18,651 less $15,383 or $3,268.

Calculating the Fair Value of Swaps

The fair value of the swaps can be computed using the "zero coupon method". The zero coupon method involves computing and summing the present value of each future net settlement that would be required by the contract terms if spot interest rates match the forward rates implied by the current yield curve. The discount rates used are the spot rates implied by the current yield curve for hypothetical zero coupon bonds due on the date of each future net settlement of the swap. The zero coupon method is not the only acceptable method to determine the fair value of the swap. 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 derivatives. If fair values are provided by the counterparty to the swap, the potential need for additional independent information should be considered.

We illustrate how an entity could use data generated by the application the hypothetical derivatives method in Illustration 5.

Illustration 4: Converting a Floating Rate Debt to a Fixed Rate – Change in Fair Value Method

Our fourth illustration demonstrates how an entity could use the Change in Fair Value Method to evaluate the effectiveness of an interest rate swap hedging a floating rate debt.

The Change in Fair Value Method[3] is an alternative method of assessing the effectiveness of a hedging relationship when an entity cannot, or elects not to apply the shortcut method, the Variable Cash Flows Method or the Hypothetical Derivative Method. Under this method, the entity calculates the present value of the change in expected variable future interest cash flows and compares the change to the change in the fair value of the hedging swap.

Under the Change in Fair Value Method, an entity could calculate the change in the present value of expected variable future interest cash flows using the following approach:

- Estimate the amount of each remaining future interest payment based on the yield curve in effect at the assessment date.
- For these remaining future interest payments, determine what the amount each payment would be based on the yield curve in effect at the previous assessment date.
- Compute the difference for each payment.
- Discount the difference at an appropriate interest rate – usually, the zero coupon rate used to discount similarly-timed cash flows under the swap.
- Sum the discounted differences.

Using the Change in Fair Value Method will result in ineffectiveness, even in situations where using the other methods would not.

[3] The Change in Fair Value Method is based on the method of the same name described in the FAS 133 implementation guidance in DIG G7.

Illustration 5: Prospective and Retroactive Effectiveness Assessment

Illustration 5 demonstrates how an entity might make prospective and retroactive assessments.

When an entity cannot conclude there is no ineffectiveness in a hedging relationship, the Guideline requires an entity to perform detailed assessments of the effectiveness of that hedging relationship on both a prospective and retroactive basis. Under prospective assessment, the entity must conclude at the beginning of every assessment period whether it is reasonable to expect that changes in the fair value or cash flows of the hedged item and hedging item attributable to the hedged risk will offset sufficiently in the future. Under retroactive assessment, the entity must establish whether actual changes in the fair value or cash flows of the hedged item and hedging item attributable to the risk being hedged offset sufficiently up to the assessment date. There are various techniques an entity can use to assess effectiveness.

Assume the basic fact pattern in Illustration 1 except that there is a basis difference that precludes Company AA from concluding there is no ineffectiveness in the hedging relationship under either the shortcut method or the Variable Cash Flows Method. Accordingly, Company AA decides to assess the effectiveness of the hedging relationship based on the Hypothetical Derivative Method (see Illustration 3). Company AA decides to use regression for its prospective assessment and dollar offset for its retroactive assessment. A primer on regression and its application in effectiveness assessment is included in the Appendix.

Initial Prospective Test

Under the Hypothetical Derivative Method, Company AA would assess the effectiveness of the hedging relationship by comparing changes in the fair value of the actual swap with changes in a hypothetical swap that perfectly matches the terms of the underlying debt. For its prospective assessment, Company AA decides to use historical interest rate information to assess whether it is reasonable to expect future changes in the fair value of both the actual and hypothetical interest rate swaps to offset. It does this at the inception of the hedging relationship by determining what the "fair value" of the actual and hypothetical swaps would have been, given historical interest rate curves in effect at the end of each of the 24 months preceding the inception of the hedging relationship. The change in fair value for each period will be computed as the difference between consecutive pairs of these "fair values". For example, the first change in fair value of the actual swap would be computed as the difference between the fair value based on the January 1, 200V interest rate curve and the fair value based on the January 31, 200V interest rate curve. The same calculations would be made for the hypothetical swap and these values would be used as the variables to be input into the regression analysis. These calculations are based on the premise that everything remains the same except that the interest rate curve changes.

The input into the regression is as follows:

	Fair Value of Hypothetical Derivative	Change from Previous Period	Fair Value of Actual Derivative	Change from Previous Period
1/01/200V	46,386		24,026	
1/31/200V	43,255	(3,131)	20,839	(3,187)
2/28/200V	40,407	(2,848)	17,968	(2,871)
3/31/200V	41,901	1,494	19,444	1,476
4/30/200V	47,901	6,000	25,540	6,096
5/31/200V	51,746	3,845	29,448	3,908
6/30/200V	53,278	1,532	31,003	1,555
7/31/200V	47,204	(6,074)	24,843	(6,160)
8/31/200V	38,700	(8,504)	16,216	(8,627)
9/30/200V	30,209	(8,491)	7,589	(8,627)
10/31/200V	17,471	(12,738)	(5,335)	(12,924)
11/30/200V	26,581	9,110	3,896	9,231
12/31/200V	30,040	3,459	7,375	3,480
1/31/200W	30,685	645	8,040	664
2/28/200W	27,307	(3,378)	4,631	(3,408)
3/31/200W	42,310	15,003	19,850	15,219
4/30/200W	33,266	(9,044)	10,682	(9,168)
5/31/200W	30,550	(2,716)	7,931	(2,751)
6/30/200W	23,504	(7,046)	783	(7,148)
7/31/200W	9,798	(13,706)	(13,092)	(13,876)
8/31/200W	10,873	1,075	(11,994)	1,098
9/30/200W	3,918	(6,955)	(19,037)	(7,043)
10/31/200W	2,430	(1,488)	(20,543)	(1,506)
11/30/200W	4,635	2,205	(18,316)	2,227
12/31/200W	(2,596)	(7,231)	(25,618)	(7,302)

The results of the regression are as follows:

R^2	100.0%
F-statistic (achieved confidence level)	4,620,310.34 (99.9%)
Slope co-efficient	0.99
Auto-correlation	No

Based on the above results, the entity could conclude at the inception of the hedging relationship that it expects the hedging relationship to be highly effective for the future periods using the cumulative dollar offset method.

Retroactive Assessment

At the inception of the hedging relationship, Company AA decided to assess the effectiveness of the hedging relationship retroactively at the end of the every three months using the cumulative dollar offset method. It calculates the change in the fair value of the hypothetical and actual derivative for each of the following three months as follows:

	Fair Value of Hypothetical Derivative	Change from Previous Period	Fair Value of Actual Derivative	Change from Previous Period
1/31/200X	5,465	8,061	(17,521)	8,097
2/28200X	4,388	(1,077)	(18,651)	(1,130)
3/31/200X	7,747	3,359	(15,384)	3,267
Cumulative Change		10,343		10,234

This results in an effectiveness ratio of 10,343/10,234, or 1.01. Accordingly, Company AA can conclude that the relationship was sufficiently effective to qualify for hedge accounting over the first three months.

Illustration 6: Documenting a Hedging Relationship

Illustration 6 demonstrates how an entity might consider documenting various aspects of the hedging relationship assumed in Illustration 5, at the inception of the hedging relationship.

This illustration is not intended to provide a general template that can be used as the basis for documenting any hedging relationship. The appropriate hedge documentation required for any actual hedging relationship may include either more or less information than is illustrated here, depending on the particular circumstances. In all cases, reference should be made to the applicable requirements of the Guideline.

Reference: Hedge number 200X-X.

Risk Management Objective and Strategy: To offset the variability in the expected cash flows attributable to changes in interest rate on a floating rate debt with a "receive-floating, pay-fixed" interest rate swap. This is consistent with the documented risk management policies of the company, as described on page xx of the "Risk Management Policy Manual".

Hedged Item: Interest payments on a $1,000,000 non-amortizing floating rate loan from Bank X, entered into on January 1, 200X. Interest is calculated based on 3-month CDOR rate plus 200 bps. Interest is paid quarterly on March 31, June 30, September 30 and December 31. The final interest payment and principal repayment is due on December 31, 200Y. The day count convention is Actual/360. (For further details see loan documents located at xxx.)

Hedging Item: A 2-year non-amortizing receive-floating, pay-fixed interest rate swap as described in the attached swap confirmation from Bank Y dated January 1, 200X. This swap has a notional amount of $1,000,000. Fixed payments are based on an interest rate of 6.500%, and floating payments are based on 3-month CDOR Rate plus 200 bps. The interest rate resets on the floating leg of the swap quarterly, payments are due on a quarterly basis, and the final payment occurs on December 31, 200Y. Day count convention for the pay leg (i.e. fixed leg) and the receive leg (i.e. floating leg) is Actual/360. (See swap confirmation xxx.)

Hedged Risk Exposure: The risk of changes in expected future cash flows of the hedged item attributable to changes in the 3-month CDOR Rate.

Term of Hedging Relationship: January 1, 200X to December 31, 200Y.

Nature of Hedging Relationship: Cash flow hedge

Prospective Effectiveness Assessment Method: Linear regression. The variables in the regression are follows:

- Independent Variable (X): The change in the fair value of the hedging item (i.e. interest rate swap noted above).
- Dependent Variable (Y): The change in the fair value of the "hypothetical derivative". The hypothetical derivative used in the regression is the one that will match perfectly the terms of the underlying debt.

The hedging relationship will be considered to be highly effective when R^2 is 80% or greater, the slope coefficient is between 0.80 and 1.25 and the F-statistic is significant at 95% confidence level. We also will perform the Durbin-Watson autocorrelation test to ensure that the regression is statistically valid. If autocorrelation is detected, the Prais-Winsten Two-Step procedure will be carried out to estimate and correct for autocorrelation. A regression will be performed at the inception of the hedging relationship and at the beginning of every quarter thereafter based on the most recent 2 years of monthly historical interest rate data. The "fair value" of the hypothetical and actual swap will be calculated based on the historical interest rate curves in effect at the end of each of the preceding 24 months. The change in fair value for each period will be computed as the difference between consecutive pairs of these "fair values".

Retroactive Effectiveness Assessment Method: At the end of each quarter, the cumulative dollar offset approach will be used to assess effectiveness retroactively; i.e. the cumulative change in the fair value of the hypothetical derivative from the inception of the hedging relationship will be compared to the cumulative change in the fair value of the actual derivative.

The Perfect Hypothetical Derivative: The perfect hypothetical derivative that will be used in the regression has been determined as follows:

	Hedged Item	**Perfect Hypothetical Derivative**
Instrument	Debt	Receive-float, pay-fixed swap
Face amount/Notional amt	$ 1,000,000	$ 1,000,000
Inception date	January 1, 200X	January 1, 200X
Maturity date	December 31, 200Y	December 31, 200Y
Swap fair value at inception	N/A	Nil
Reset frequency	Quarterly	Quarterly
Payment frequency	Quarterly	Quarterly
Debt payment/floating leg – Interest rate – Credit spread	 3-mo CDOR 200 bps	 3-mo CDOR 200bps
Fixed leg interest rate	N/A	5.304%

(The entity should also consider the need to document the method for determining fair values and changes in fair values.)

Method of Accounting for the Hedging Relationship:

Provided that the hedging relationship is demonstrated to be highly effective, the hedging relationship will be accounted for using "synthetic instrument" accounting. Under this method, interest expense will be recognized as if the combined cash flows of the hedged item and hedging item arose from a single instrument.

Approval:

Illustration 7: Assessing Effectiveness Using Proxy Data

Illustration 7 demonstrates circumstances under which it is possible to assess the effectiveness of a hedging relationship using proxy data rather than actual or estimated changes in the fair value of the hedged item and hedging item attributable to the risk being hedged.

The Guideline requires an entity to assess effectiveness retrospectively and prospectively. In some cases it will be possible to perform effectiveness assessments using proxy data such as changes in prices, interest rates or some other variable rather than actual changes in fair value or cash flows. However, care must be taken to ensure that proxy data reflects all sources of ineffectiveness in the hedging relationship.

On October 1, 200X, SubCo, a Colorado-based subsidiary of a Canadian mining company has 10 million pounds of copper inventory on hand at an average cost of 65 cents per pound. SubCo has a functional currency of U.S. dollars. To protect the inventory from possible decline in copper prices, SubCo hedges its position by selling 400 copper contracts on the N.Y. COMEX (each copper contract is for 25,000 pounds) at 93 cents a pound for delivery in February 200Y to coincide with its expected physical sale of the copper. SubCo designates the hedge as a fair-value hedge (i.e. it is hedging changes in the inventory's fair value, not changes in cash flows from anticipated sales).

In order to assess the effectiveness of the hedging relationship, SubCo estimates the historical spot prices for the price of copper in Colorado at the inception of the hedging relationship. It does this by starting with most recent N.Y. COMEX prices at the beginning of each month for an appropriate period and adjusting them for differences that are due to changes in transportation costs, storage costs and regional supply and demand conditions. These additional costs were derived from an analysis of historical invoice prices actually paid by the company.

SubCo then calculates the change in spot prices for each month and, at the inception of the hedging relationship, uses regression as the basis for its prospective assessment of effectiveness. The regression shows that the changes in the Colorado spot price and the N.Y. COMEX price are highly correlated. Accordingly, SubCo concludes that it is reasonable to expect that changes in the fair value of the inventory and the futures contracts will offset sufficiently in the future.

SubCo decides that it also will use regression for its retroactive assessment of effectiveness. Accordingly, it documents that every quarter it will calculate the monthly change in the Colorado and N.Y. COMEX spot price for the quarter. This data will be included in the regression and the oldest three months of data will be excluded from the analysis. As a result, the same regression will be used for both the prospective and retroactive assessment of effectiveness.

Illustration 8: Hedge of a Net Investment in a Self-Sustaining Foreign Operation

Illustration 8 demonstrates how an entity might assess the hedge of a net investment in a self-sustaining foreign operation for effectiveness.

The Guideline provides no guidance on how to evaluate hedges of net investments in self-sustaining foreign operations for effectiveness. Hedges of such investments do not technically qualify either as fair value hedges or as cash flow hedges because the entity is not hedging changes in the fair value or cash flows of a net investment but rather gains and losses arising from the translation of the net investment based on the carrying value of the dissimilar net assets of the foreign operations. In the absence of authoritative guidance, we believe that it would be appropriate for entities to apply the guidance in the relevant implementation guidance to FAS 133, such as DIG Issues H7 and H8.

Under the U.S. guidance, ineffectiveness will not arise in a hedge of a net investment in a foreign operation if all of the following conditions are met:

- **The notional amount of the instrument designated as a hedge of the net investment matches the portion of the net investment in the self-sustaining operation designated as being hedged (based on the beginning balance of the net investment at the start of the assessment period);**
- **If a derivative is used to hedge the net investment, the variable on which the payout of the derivative is based relates solely to the foreign exchange rate between the functional currency of the hedged net investment and the currency of measurement of the parent; and**
- **If a non-derivative instrument, such as a foreign currency debt, is used to hedge the net investment, the non-derivative instrument is denominated in the same currency as the functional currency of the self-sustaining foreign operation.**

Assume Company AA, whose functional currency is the Canadian dollar, has a net investment in a U.S. dollar self-sustaining foreign operation. Company AA's net investment in the subsidiary at January 2, 200X is U.S. $500,000. On that day, Company AA enters into a U.S.dollar forward contract to hedge its net investment in the subsidiary under which it will exchange U.S. $500,000 in exchange for a fixed number of Canadian dollars. The fair value of the forward at the inception of the hedging relationship is nil. Alternatively, instead of a forward or other derivative, the company could have designated a foreign currency denominated liability as a hedge of the net investment.

At the inception of the hedging relationship, Company AA documents that it will assess the effectiveness of the hedging relationship based on the beginning balance of its net investment. If the net investment changes during the year, Company AA should consider the need to re-designate the hedging relationship to indicate what the hedging instrument is and what numerical portion of the current net investment is the hedged portion. For example, if the net investment increases over the quarter (e.g. to U.S. $600,000), the entire forward contract, or the debt, could be designated prospectively as hedging only a portion of the beginning balance of the net investment for the upcoming quarter. 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 (in this illustration, 5/6 of the U.S. $600,000 net investment). If the net investment decreases over the quarter (e.g. to U.S. $400,000), only a percentage of the forward or the debt would be designated prospectively as hedging the entire beginning balance of the next quarter (80% in this case). The percentage of the forward not designated prospectively as the hedging instrument could be designated as a hedging instrument in a different hedging relationship or, alternatively, it simply could be measured at fair value with changes in fair value subsequent to the de-designation date recognized currently in earnings.

If ineffectiveness exists in a hedging relationship, the assessment of the magnitude of the ineffectiveness will depend on the circumstances. For example, if the hedging derivative has a different notional amount than the portion of the net investment designated as being hedged, ineffectiveness might be assessed based on a comparison of the change in the fair value of the actual derivative and the change in the fair value of a hypothetical derivative that has a notional amount that is equal to the portion of the net investment designated as being hedged.

It would not be appropriate to designate the ending balance of the net investment as being the hedged item because this effectively would result in net earnings of the self-sustaining operation being hedged, which would be contrary to the Guideline.

Illustration 9: Cash Flow Hedge of Purchase Denominated in a Foreign Currency

Illustration 9 demonstrates circumstances in which it is possible to use the all critical terms match method in a cash flow hedge of foreign exchange risk.

The all critical terms match method is only applicable when all the terms of the hedging and hedged item that might affect the effectiveness of the hedging relationship are exactly the same. This includes the conditions that the fair value of the forward contract is zero at inception of the hedging relationship, and that effectiveness is assessed on a spot-to-spot or forward-to-forward basis.

Entities considering using this method in Fair Value hedging relationships should consult with their professional advisors.

On March 15, 200Y the entity enters a forward contract to purchase U.S. $10,000 on April 15, 200Y. The contract has a fair value of zero. The entity designates and documents the forward contract as a hedge of the first U.S. $10,000 of inventory purchases occurring on or after April 15, 200Y. It has placed a purchase order with its supplier with scheduled delivery on April 15, for U.S. $15,000, and that this supplier has a history of delivering in accordance with the purchase order. Accordingly, the entity documents that the probability of the anticipated U.S. $10,000 purchase is high.

The entity documents that it will assess the effectiveness of the hedging relationship based on changes in forward exchange rates. It reaches the conclusion that there will be no ineffectiveness in the hedging relationship, and documents its reasons as follows:

- The forward contract is for the purchase of the same quantity of the same foreign currency as the hedged anticipated purchase;
- The fair value of the forward contract at inception is zero; and
- The change in expected cash flows on the anticipated transaction is based on the forward foreign exchange rate.

The entity can satisfy the requirements for ongoing assessment of the effectiveness of the relationship by confirming that there have been no changes in the critical terms of the hedging relationship or in the probability of counterparty non-performance. These assessments should be documented.

Illustration 10: Cash Flow Hedge of Debt Denominated in a Foreign Currency

Illustration 10 demonstrates the circumstances in which it is possible for an entity whose currency of measurement is the Canadian dollar to hedge a debt denominated in a foreign currency.

This is one of the most common hedging relationships entered into by Canadian companies, and one where it will sometimes be possible to conclude that there will be no ineffectiveness.

On February 15, 200X, the entity purchased U.S. $20,000 in inventory and as a result, has a liability for that amount owed to its supplier. The entity expects to settle the liability on April 15, 200X. On February 16, it enters into a forward contract to buy U.S. $20,000 for a fixed number of Canadian dollars on April 15, in order to hedge its foreign currency exposure. The fair value of the forward contract at inception of the hedging relationship is nil.

In this situation, it should be possible for the entity to reach a conclusion that there will be no ineffectiveness in the hedging relationship. The forward contract and the liability settle on exactly the same date, the liability is denominated in the same currency as the forward contract is for the purchase of, and at inception the forward contract has a fair value of nil. Consequently, if the entity designates that it will assess effectiveness based on either a "spot to spot" or "forward to forward" comparison, and documents the relationship accordingly, the relationship should qualify for hedge accounting under the "all critical terms match" criteria.

If the forward contract were for a different notional amount than the liability, then the entity might still have been able to reach a conclusion that there was no ineffectiveness in the hedging relationship, if it were to designate only the appropriate percentage of the forward or liability as the hedging or hedged item, as the case might be. For example, if the forward were for the purchase of U.S. $25,000, the entity could designate only 80% of it as a hedge of the U.S. dollar liability. In this case, the percentage of the derivative not designated as a hedge would be subject to the mark-to-fair value requirement of EIC 128.

If there were any differences in critical terms, then the entity would be required to do more extensive prospective and retroactive effectiveness testing in order to qualify the relationship for hedge accounting. This testing could take the form of dollar-offset tests, or regression (or other statistical) analysis along the lines of that demonstrated in Illustrations 5 and 6.

Cross-References to AcG-13 and CICA Implementation Guide

This monograph is based on Accounting Guideline 13 as it exists at October 31, 2003 and the related CICA Implementation Guide, dated September, 2002. The following provides a cross-reference from the paragraphs in the monograph to applicable requirements in AcG-13 and the Implementation Guide.

	Implementation Guide Reference	AcG-13 Reference
Purpose and Scope	1.01-1.04	.03-.05
Hedge Accounting		.05(d)
Deferring Recognized Gains and Losses		
Accounting for Derivative Instruments Using the Cost or Accrual Method		
Synthetic Instrument Accounting	1.01	.18
Conditions for Applying Hedge Accounting		.06
Hedged Item and Hedging Item Affect Earnings		.06(c)(iii)
Gains and Losses on the Hedged Item and Hedging Item Both Affect Earnings		.19(c)
Hedged Item and Hedging Item Must Affect Earnings in a Different Period	1.03	.03
Risk Exposures an Entity Can Hedge		.09-.10
Hedging the Risk of Favourable and Unfavourable Changes in Fair Values or Cash Flows		
Conditions for Hedging Risk Exposures		.06(a)(i), .06(c)(i)
Table 1: Financial Instrument Risks that Can Be Hedged		
Examples of Risk Exposures that Often are Hedged		
Table 2: Common Risk Exposures that Entities Often Hedge		
Risk Exposures Hedged by a Parent but Arising in a Subsidiary		
Identification of Risk Exposures in Synthetic Instruments		
The Hedged Item		.05(b)
Meaning of Anticipated Transaction		.05(f)
Portions of Assets, Liabilities and Anticipated Transactions		.05(b)
Groups of Assets, Liabilities and Anticipated Transactions		.13-.16
When Items in a Group Are Similar		.13
Exceptions to the Rules on Grouping Items		.17, .19(a)
Items Ineligible for Hedge Accounting		.19
Special Rules for Anticipated Transactions		.33-.36
Firm Commitments		.34(a)
Anticipated but Uncommitted Transactions		.35-.36

	Implementation Guide Reference	AcG-13 Reference
The Hedging Item		.05(c)
Offsetting Risk Exposure		.05(c)
Eligible Sources of Risk Exposure		.08-.12
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The Concept of Effectiveness		.05(c)
The Requirements for Assessing Effectiveness	2.04	.24
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Retroactive Assessments		.24
Table 5: Cumulative versus Discrete Method – Dollar Offset		
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Hedges Involving a Recognized Interest-bearing Asset or Liability and an Interest Rate or Cross-currency Swap under Paragraphs A5 and A6 – the "Shortcut Method"		.A5-.A6
Partial Term Hedges		
Designation and Documentation		.06(a), .06(b)
Specific Documentation Requirements		.06(b)
Documentation when All Critical Terms Match		
Documentation under the Shortcut Method		
Discontinuing Hedge Accounting		.38-.39
Accounting for the Discontinuance of Hedge Accounting		.39
Table 7: Accounting when Hedge Accounting Is Discontinued		
Discontinuing Hedge Accounting when the Hedging Item is a Derivative Financial Instrument Anticipated Transactions		.33
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Effectiveness Assessment at Transition		
Macro Hedges on Transition	7.01	
Applying the Shortcut Method on Transition		
Hedging Relationships not in Compliance with the Guideline at Transition		.42

Appendix – Regression Analysis

Regression analysis is a statistical technique used to analyze the relationship between one variable (the dependent variable) and one or more other variables (known as independent variables). A regression model is a formal means of expressing a tendency of the dependent variable to vary with the independent variable in a systematic fashion.

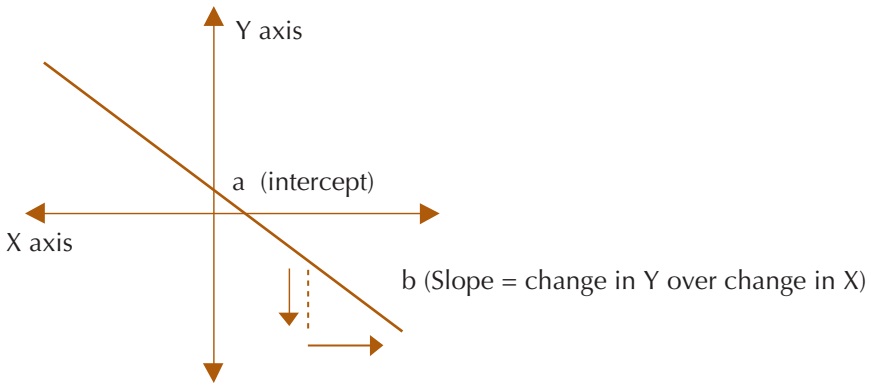
In the context of a hedge effectiveness assessment, the primary objective is to determine if changes to the hedged item and the hedging item attributable to a particular risk are highly correlated and, thus, supportive of the assertion that there will be a high degree of offset in changes in fair values or cash flows achieved by the hedge. For example, if a $10 change in the dependent variable (i.e. the hedging item) were accompanied by a $10.01 change in the independent variable (i.e. hedged item) and if further changes in the dependent variable were accompanied by similar magnitude changes in the independent variable, then there would be a strong correlation because approximately 100% of the change in the dependent variable can be "explained" by the change in the independent variable.

The degree of explanatory power or correlation between the dependent and independent variables is measured by the coefficient of determination or R^2. The R^2 indicates the proportion of variability in the dependent variable that can be explained by variation in the independent variable. By way of illustration, an R^2 of .95 indicates that 95% of the movement in the dependent variable is "explained" by variation in the independent variable. R^2 values will always be positive (as it is a squared number) and can never exceed 1 (i.e. it is not possible to explain more than 100% of the movement in the dependent variable). R^2 is one of the key statistical considerations when a regression analysis is used to support hedge accounting.

For effectiveness assessment, the analysis usually will involve a simple linear regression. A *simple* linear regression models the linear relationship between two variables (i.e. one dependent and one independent variable). The linear equation estimated in a simple regression is commonly expressed as:

$$Y = a + bX + e$$

Y: The dependent variable
X: The independent variable
a: The intercept, where the line crosses the Y axis
b: The slope coefficient or the slope of the line
e: The random error term



In a graphical sense, the values of the X and Y variables are plotted and a "best fitting" line drawn. A pictorial representation of the variables in the standard regression equation is illustrated below.

Regression analysis uses the "least squares" method to fit a line through the set of observations. This method determines the intercept and slope that minimize the size of the squared differences between the actual Y observations and the predicted Y values (i.e. the vertical differences between plotted observations and the regression line). The differences between the observed and predicted values are called errors or *residuals*.

The slope coefficient is the slope of the straight line that the regression analysis determines "best fits" the data. The slope is determined by computing the change in Y value over the change in X value or "rise" over "run". The figure above depicts a negative slope, as the change in Y is negative and the change in X is positive. In effective 1 for 1 hedging relationships, the slope coefficient will approximate a value of -1. The slope is a very important component when developing a highly effective hedging relationship. The slope coefficient generally should be negative because the hedging item is expected to offset changes in the hedge item. In other words, to be an effective hedging relationship, the hedging item and the hedged item must move in an inverse manner. If the analysis yields a positive slope coefficient it means that when the hedged item goes up in value, the hedging item goes up in value, which is not a hedge.

There is one exception to this. If an entity chooses to compare a perfect hypothetical derivative (that will completely offset the changes in the hedged item) against the actual hedging derivative, then the slope coefficient should be positive because one would expect the actual hedging derivative to move in the same direction as the perfect hypothetical derivative.

The accounting literature does not define the term highly effective or the extent to which the derivative and hedged item must move in an inverse manner. For purposes of assessing the slope coefficient resulting from a regression analysis, a range between -0.80 and -1.25 should be used when evaluating the hedge results (0.80 and 1.25 for regressions using the perfect hypothetical derivative method).

The error term indicates the relationship is *statistical* and not *functional*. A *functional* relationship is a relationship where one variable always perfectly predicts the other. In hedging relationships, the hedging item and the hedged item do not typically define or perfectly track one another and, thus, there will be differences in the amount of change, albeit sometimes small differences, due to factors such as differences in basis (e.g., B.A. rate vs Prime rate), underlying terms of the hedged item and hedging item, and credit risk.

The Inputs into the Model

As we have explained, an entity can use historical data to demonstrate that a hedging item was (retroactive evaluation) or likely will be (prospective consideration) highly effective at offsetting the changes in fair value or cash flow of a hedged item attributable to a particular risk. The inputs will be a series of matched-pair observations for the hedged item and hedging item. For example, the inputs could be the weekly change in price of the hedged item and hedging item observed each Monday for a period beginning on January 1, 2003 and ending on July 2, 2003. It is important to note that an entity should include in their hedge documentation prepared at the inception of the hedging relationship the data input parameters (i.e. changes in the price of the hedging item and the hedged item determined each Monday on a weekly basis beginning on January 1, 2003 and ending on July 2, 2003) that will be used in the regression analysis. This determination and documentation of the data input parameters becomes an accounting election for the particular hedging strategy and should be consistently followed throughout the hedging relationship.

The Number of Data Points To Use

It is important to use a sufficient number of data points to ensure a statistically valid regression analysis. As the sample size increases, the interpretations of the model and conclusions that can be drawn improve. We expect most regression analyses conducted to test hedge effectiveness will be based on more than 30 observations. However, as a "rule of thumb", no less than 12 observations should be used.

One output of a regression model will be an F-statistic, which is useful in determining whether there is a statistically significant relationship between the dependent and independent variables. A non-significant F-statistic indicates there is no statistically significant relationship between the dependent and independent variables. The significance of the F-statistic varies with the number of observations in the regression. The F-statistics are available from any statistics textbook or other statistics reference material. We believe that a 95% confidence level or higher is generally appropriate for evaluating the statistical validity of a regression model using the F-statistic.

If the resulting F-statistic from a regression analysis falls short of the confidence level (e.g., 95%), it suggests one of three possibilities: (1) there were data input errors (it is always a good idea to investigate the possibility of input errors); (2) the overall regression model lacks sufficient explanatory power (in a simple regression setting, this can sometimes be resolved by adding more observations); or (3) the hedging relationship is not prospectively or retroactively highly effective.

Using Daily, Monthly or Annual Data

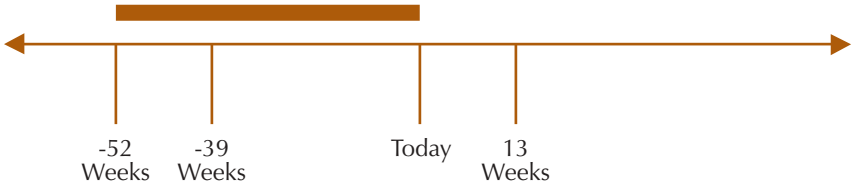
We believe there is flexibility in the frequency period of the selection of data points. Generally, the selection of a frequency period should consider:

- The nature of the hedged item.
- The nature of the hedging instrument.
- Whether certain data points will most appropriately represent the interaction of the hedged item versus the hedging instrument.
- The availability of the data.

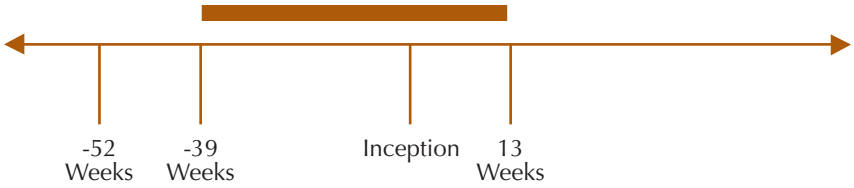
As long as the frequency period selected is used consistently and yields a statistically significant model, an entity is free to choose whatever period is desired.

Using a Single Regression for both Prospective and Retroactive Effectiveness Assessments

It will be possible to use a single regression to perform prospective and retroactive assessments of hedge effectiveness. For example, assume today is the inception of the hedging relationship and weekly observations for the preceding year are used as input for a regression analysis. Analysis of these derivative and hedged item observations will determine whether there is an expectation at the inception of the hedging relationship that the hedging relationship will be highly effective.



The standard requires that effectiveness be assessed at least quarterly; therefore the regression analysis must be updated every three months. If one method is being used for both prospective and retroactive analyses, the same number of data points should be used in the subsequent assessment. After 3 months, the regression analysis should include the 52 most recent weeks of data (13 weeks after the initial assessment and the 39 weeks before inception). As such, thirteen weeks of the oldest data will be excluded from the regression analysis. Accordingly, the regression analysis will always contain the same number of data points. The line graph below illustrates the above discussion.



This approach is not the only acceptable method to determine inputs for regression analysis. Other alternatives could include using the method above for the prospective considerations and then performing the retroactive evaluation by running the regression analysis using actual data for only the past quarter (i.e. a discrete three-month period) or using actual data for the cumulative period from the inception of the hedge through the current period (i.e. the cumulative approach). However, whether a discrete three-month period or a cumulative retroactive evaluation is used, an entity should incorporate the same number of data points in its analysis. For example, if an entity decides to use the cumulative approach, it must document upfront how many data points will be used in the analysis and how the data points will be determined throughout the hedging relationship.

Interpreting Results

At a minimum, the F-statistic, R^2 statistic, and the slope coefficient should be assessed to evaluate the results of a regression analysis. In order for a hedging relationship to be considered highly effective, a regression analysis of the relationship must yield acceptable levels for all three factors. The acceptable levels are detailed below.

- The F-statistic should be significant at a 95% or greater confidence level. Reference should be made to an F-statistic table from an appropriate statistics reference book.
- The R^2 statistic should be 80% (.8) or greater.
- The slope coefficient should be between -.8 and -1.25.

It is important to note that it is not appropriate to only look at the R^2 statistic when evaluating whether a hedging relationship is expected to be (or was) highly effective. The two other factors discussed above should also be considered when determining whether a hedging relationship is expected to be (or was) highly effective over the designated hedging period. For example, a regression analysis may produce an R^2 statistic

of 99% but an F-statistic that is not significant at the 95% threshold. In this example, it is not possible to conclude that there is a statistically significant relationship between the hedged item and the hedging item and, therefore, the hedging relationship is not considered effective. As another example, assume a company establishes a 1 for 1 hedge and the regression analysis yields an R^2 of 98%, an F-statistic that is significant at the 95% threshold, but a slope coefficient of only -0.7. In this example, the hedging relationship would be ineffective because, on average, it would achieve a dollar offset of only 70% of the hedged item. However, if the entity adjusted its hedge ratio from 1 to 1 to reflect the slope (i.e. .7 to 1) in order to achieve a higher dollar offset, hedge accounting would be permitted.

If an entity's analysis results in one or more of the factors not falling within the acceptable bounds, hedge accounting is likely not appropriate for the relevant period(s) without performing further analysis.

Autocorrelation

One of the assumptions underlying ordinary least squares regression is that the residuals are uncorrelated. Correlated residuals are referred to as autocorrelation and can cause the R^2, F-statistic, and slope coefficient to be misstated. In time series data, autocorrelation can be caused by the prolonged influence of shocks in the economy (e.g. the effects of war or strikes can affect several periods). Autocorrelation can also be artificially inducted through the use of overlapping observations. For example, if the hedging period is 24 months, overlapping inputs would result if the first observation is the change in value from January 1, 2003 to March 31, 2003 and the second observation is the change in value from February 1, 2003 to April 30, 2003, and so on. The use of overlapping inputs creates a dependency in the input variables because, as can be seen in this example, 2 of the 3 months of each observation are the same. Because it is often not possible to fully estimate and remove autocorrelation, the use of overlapping variables should be avoided. For further information on autocorrelation, reference should be made to statistical publications or reference books that address the issue.

There are various statistical procedures available to detect, and attempt to correct for, autocorrelation. The most common test for autocorrelation is the Durbin-Watson test. If the Durbin-Watson test indicates there is autocorrelation, one may apply the Prais-Winsten Two-Step procedure to estimate and correct for autocorrelation in the regression results. If the Prais-Winsten procedure produces acceptable results (i.e. R^2>80%, slope coefficient between -.8 and -1.25, and F-statistic significant at the 95% level), then the hedging relationship is considered highly effective for hedge accounting purposes. If the original results are acceptable, but the Durbin-Watson test indicates that there is an autocorrelation problem and the Prais-Winsten results are not acceptable, then the regression model may not be statistically valid.

Documentation

Consistent with the hedge documentation requirements in the Guideline, an entity's regression policy should contain specific and sufficient documentation. The policy should provide discussion of the relevant inputs such as the number and frequency of data points to be used, the periods over which the data is to be obtained, the sources for the data inputs, and whether prices or changes in prices are being regressed. Additionally, the documentation should include the methods to be used in assessing both prospective considerations and retroactive evaluations and how the results from the hedge effectiveness test are to be interpreted.