Accounting for Derivatives
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Course Description

A derivative is a financial instrument or other contract that derives its value from the movement of prices, interest rates, or exchange rates associated with an underlying item. Uncertainty about the future fair value of assets and liabilities or about future cash flows exposes firms to risk. One way to manage the risk associated with fair value and cash flow fluctuations is through the use of derivatives. This course addresses the accounting and disclosure requirements related to derivative financial instruments (derivatives). Also addressed are selected disclosure requirements for other financial instruments, primarily those related to fair value and concentrations of credit risk.

Field of Study          Accounting
Level of Knowledge       Basic to Intermediate
Prerequisite             Basic Accounting
Advanced Preparation     None
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Accounting for Derivatives

Learning Objectives:

After studying this section you will be able to:

1. Identify the attributes of conventional and derivative financial instruments.
2. Recognize the risks associated with derivatives.
3. Identify the accounting requirements for different derivatives and the related disclosure requirements.

A derivative is a financial instrument or other contract that derives its value from the movement of prices, interest rates, or exchange rates associated with an underlying item. A derivative is a bet on whether the value of something will go up or down. The purpose is either to speculate (incur risk) or to hedge (avoid risk). The value of a derivative changes as the value of the specified variable changes. For example, an option to buy a piece of land is a derivative. The option itself increases in value as the piece of land increases in value. A corn farmer can guarantee the price of his annual corn production using a derivative. In this case, the derivative is a hedge against the changes in the price of corn (to avoid risk). Uncertainty about the future fair value of assets and liabilities or about future cash flows exposes firms to risk. One way to manage the risk associated with fair value and cash flow fluctuations is through the use of derivatives or hedging.

Hedging is defined as a defensive strategy designed to protect an entity against the risk of adverse price or interest-rate movements on certain of its assets, liabilities, or anticipated transactions. A hedge is used to avoid or reduce risks by creating a relationship by which losses on certain positions are expected to be counterbalanced in whole or in part by gains on separate positions in another market.

This course addresses the accounting and disclosure requirements related to derivative financial instruments (derivatives). Also addressed are selected disclosure requirements for other financial instruments, primarily those related to fair value and concentrations of credit risk.
Background

ASC 825 Financial Instruments (ASC Glossary—“Financial Instrument”), defines a financial instrument as cash (including currencies of other countries), evidence of an ownership interest in another company (e.g., common or preferred stock), or a contract that both:

- Imposes on one company the obligation to (1) deliver cash or another financial instrument to another company or (2) exchange financial instruments with another company on potentially unfavorable terms, and
- Conveys to the other company the right (1) to receive cash or another financial instrument from the first company, or (2) exchange other financial instruments on potentially favorable terms with the first company.

Conventional assets and liabilities (e.g. accounts and notes receivable, accounts and notes payable, investment in equity and debt securities, and bonds payable) are deemed to be financial instruments. The definition also encompasses many derivative contracts, such as options, swaps, caps, and futures. Exhibit 1 provides examples of conventional and derivative financial instruments.

### Exhibit 1: Conventional and Derivative Financial Instruments

<table>
<thead>
<tr>
<th>Conventional Financial Instruments</th>
<th>Derivative Financial Instruments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate bonds and notes</td>
<td>Interest rate swaps and options</td>
</tr>
<tr>
<td>Commercial loans</td>
<td>Credit default swaps</td>
</tr>
<tr>
<td>Corporate equities</td>
<td>Stock-index futures and options</td>
</tr>
<tr>
<td>Municipal bonds</td>
<td>Fixed rate loan commitments</td>
</tr>
<tr>
<td>Mortgages</td>
<td>Mortgage servicing rights</td>
</tr>
<tr>
<td>Foreign currencies</td>
<td>Currency futures and options</td>
</tr>
<tr>
<td>Accounts receivable and payable</td>
<td>Swaptions</td>
</tr>
<tr>
<td>Bank certificates of deposit</td>
<td>Commodity futures and options</td>
</tr>
<tr>
<td>Treasury bonds, bills and notes</td>
<td>Interest rate caps, floors, and collars</td>
</tr>
</tbody>
</table>
Exhibit 2 summarizes between conventional and derivative financial instruments.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Conventional Financial Instrument (Trading Security)</th>
<th>Derivative Financial Instrument (Call Option)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Payment Provision</td>
<td>Stock price times the number of shares.</td>
<td>Change in stock price (underlying) times number of shares.</td>
</tr>
<tr>
<td>Initial Investment</td>
<td>Investor pays full cost.</td>
<td>Initial investment is much less than full cost.</td>
</tr>
<tr>
<td>Settlement</td>
<td>Deliver stock to receive cash.</td>
<td>Receive cash equivalent, based on changes in stock price times the number of shares.</td>
</tr>
</tbody>
</table>

**Derivative Financial Instruments and Hedging**

A derivative financial instrument has all of the following characteristics: (1) it has (a) one or more underlyings and (b) it has one or more notional amounts or payment provisions, or both; (2) it requires either no initial net investment or an immaterial net investment; and (3) it requires or permits net settlement. An underlying may be a specified interest rate, equity price, commodity price, foreign exchange rate, index of prices or rates, or other variable. A notional amount is a number of currency units, shares, bushels, pounds, or other units specified. Settlement of a derivative is based on the interaction of the notional amount and the underlying. The purchase of the forward contract as a hedge of a forecasted need to purchase wheat meets the criteria prescribed by ASC 815.

A primary purpose of using derivative financial instruments is to hedge (avoid risk), such as risk of changes in market price of interest rates, currency exchange rates, and fluctuations in commodity prices. Derivatives are contracts that may hedge the company from adverse movement in the underlying base.

However, derivatives are not without their own risks. If used for speculation (incurring risk), they can be extremely risky. If leveraged, minor adverse price or interest rate changes can result in huge gains or losses. Leverage significantly multiplies return or losses.
Other risks besides leverage exist, such as:

- **Credit risk**: The risk of accounting loss from a financial instrument because of the possibility that a loss may occur from the failure of another party to perform according to the terms of a contract.
- **Market risk**: The risk that arises from the possibility that future changes in market prices may make a financial instrument less valuable or more onerous.
- **Operational (business) risk**: The risk of internal operational errors (such as failure to accurately reflect counterparty obligations) or poor internal controls.
- **Legal risk**: A judge may rule the contract illegal or invalid.
- **Valuation risk**: The risk that an unrealized profit or loss from a transaction is misstated.
- **Liquidity risk**: Inability to sell a financial instrument quickly because of an illiquid market.
- **Correlation risk**: Risk that the value of a hedge (e.g., in derivatives, conventional securities) will not react in the same manner as the item being hedged.
- **Systemic risk**: A problem with a particular instrument that may disrupt the entire market.
- **Settlement risk**: Risk of not receiving timely payment on a contract.

Derivatives can be either on the balance sheet or off the balance sheet (recorded as a commitment). They include:

- Options
- Forward contracts
- Futures
- Option contracts
- Fixed-rate loan commitments
- Interest rate caps and floors
- Interest rate collars
- Forward interest rate agreements
- Swaps
- Instruments with similar characteristics

**Note:**

1. A **call option** is the right to buy a common share at a set price for a specified time period. If the underlying share has a lower market value, the call option is less, not more, valuable. The lower the exercise price, the more valuable the call option. The exercise price is the price at which the call holder has the right to purchase the underlying share. A **put option** allows the purchaser to benefit from a decrease in the price of the underlying. The gain is the excess of the exercise price over the market price. The purchaser pays a premium for the opportunity to benefit from the depreciation in the underlying.

2. A **forward contract** is an executory contract in which the parties involved agree to the terms of a purchase and a sale of a stated amount of a commodity, foreign currency, or financial instrument, but
delivery or settlement is at a stated future date. Accordingly, a forward contract involves a commitment today to purchase a product on a specific future date at a price determined today. Futures contracts are usually standardized and exchange traded. They are therefore less risky than forward contracts. Further, unlike forward contracts, futures contracts rarely result in actual delivery. The parties customarily make a net settlement in cash on the expiration date.

3. An interest-rate swap is an exchange of one party’s interest payments based on a fixed rate for another party’s interest payments based on a variable (floating) rate. The risks inherent in an interest-rate swap include both credit risk and market risk. Market risk includes the risk that changes in interest rates will make the swap agreement less valuable or more onerous.

The FASB’s current definition of derivatives excludes on-balance-sheet receivables and payables, such as:

- Principal-only (“zero coupon”) obligations.
- Interest-only (“strips”) obligations.
- Indexed debt.
- Mortgage-backed securities.
- Other optional attributes incorporated within those receivables and payables (e.g., convertible debt conversion or call provisions).

The FASB definition of a derivative excludes (1) security purchases and sales on exchanges that provide standard settlement terms, (2) normal purchases and sales of something other than a financial instrument, (3) certain insurance contracts, and (4) financial guarantees.

A company enters into derivative contracts for either trading (speculative) or hedging purposes. However, only certain hedges qualify to be treated as hedges for accounting purposes. Therefore, a company may enter into a derivative contract as an economic hedge of an item that is not carried at fair value, but the contract is required to be marked to market. For such contracts, the timing of the recognition of the mark-to-market value of the derivative will not match the timing of the recognition of the changes in value of the hedged item. If the hedge is serving its intended purpose, eventually these timing differences will offset, although it will be in different reporting periods.

If the derivative is entered into for trading purposes or hedge accounting is not allowed, then the instrument is recorded at fair value (marked to market) and any unrealized gain or loss is recorded in income. Generally, an end user of derivatives will obtain the fair value of a derivative by getting a quote from a market maker. Market makers will use either observed market transaction prices or models based on discounted cash flows to calculate fair value. If the cash instrument underlying the derivative is illiquid, market risk adjustments may be used to reduce the model-derived value to net realizable value. In addition, valuation adjustments, or holdbacks, may be used to take into account operational costs or
changes in counterparty credit risk that are not contemplated in the models. Fair values are also used to evaluate hedge effectiveness.

Accounting loss may arise from writing off a contractual right or from settling a contractual obligation applicable to a financial instrument. An accounting loss that may arise from credit or market risk is required to be footnoted. Credit risk is the possibility that a loss may occur because of the failure of another party to carry out the terms of a derivatives contract. An example is a derivative counterparty's failure to pay the net settlement amount on a contract when due. Market risk is the possibility that future changes in market prices may cause a financial instrument to decline in value. An example is a decline in the price of a financial futures contract.

It is possible that accounting risk associated with a financial instrument may already be reflected in the balance sheet. In other instances, the risk exceeds the amount recorded, which is called unrecorded risk, or off-balance-sheet risk. An example is a guarantee of another company's debt. The estimated amount of potential credit losses is set up as an allowance for bad debts on the balance sheet. For recorded risks, the bad debt allowance is shown as a contra asset. For unrecorded risks, the allowance is classified in liabilities. Credit risk is generally limited to the amount recorded on the balance sheet, whereas market risk is unlimited. Exhibit 3 lists certain derivative financial instruments with off-balance-sheet risk.

Cash positions (e.g., securities, loans) have little or no off-balance-sheet risk, although they expose the company to credit and market risks. Accounting loss is limited to the amount recorded on the balance sheet. Thus, there can be no present credit loss if no asset is recorded. However, market risk often exists—that is, the market value the next day may be lower, thereby causing the company to record a loss. Many disclosures relate to communicating risk of loss to financial statement users.

In recent years, the market for credit derivatives products has grown substantially. Simply stated, a credit derivative contract is an agreement between two counterparties to transfer the risk of default of an obligor (as in a commercial loan made by a bank or a corporate bond) from the holder of the instrument (e.g., loan) to another entity that, for a fee, is willing to accept that risk. The fair value of a credit derivative is based on the changing credit risk of the underlying financial instrument. In practice, credit default swaps are the most frequently traded of the various credit derivative products. The main participants in the credit derivatives markets are insurance companies, banks, pension funds, corporations, and hedge funds. As with interest rate derivative products, credit derivatives may be used to reduce the risk of holding a financial instrument, or can be entered into for speculative purposes. It should be remembered that the holder (purchaser) of a credit derivative is now exposed to the credit risk of the protection seller, should the protection seller be unable to pay in the event of a credit default by the obligor on the underlying financial instrument.

An embedded derivative refers to either implicit or explicit terms that affect some or all of the cash flows or the value of other exchanges required by a contract in a manner similar to a derivative instrument. An
example is the conversion feature of a convertible bond into shares of common stock. It is a call option on the issuer’s common stock.

In Accounting Standards Update (ASU) No. 2010-11 (March 2010) (ASC 815, Derivatives and Hedging), Scope Exception Related to Embedded Credit Derivatives, the following items do not meet the scope exception for embedded credit derivatives:

1. The possible future payments due to factors excluding subordination.

2. A derivative characteristic applied to a different risk included in a securitized security.

(ASC 815-15-15-9)

A company may select the fair value option for a securitized security. A change in fair value over an accounting period is recognized in the income statement. (ASC 815-10-65-5)

ASC 815 abandons the historical accounting approach in that it no longer permits companies to defer gains and losses on derivatives, even on hedge contracts.

<table>
<thead>
<tr>
<th>Financial Instrument</th>
<th>Risk of Accounting Loss to Reporting Company</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Credit Risk</td>
</tr>
<tr>
<td>Over-the-Counter Contracts—marked to market</td>
<td></td>
</tr>
<tr>
<td>In a gain position (i.e., receivable)</td>
<td>Yes</td>
</tr>
<tr>
<td>In a loss position (i.e., payable)</td>
<td>No</td>
</tr>
<tr>
<td>Over-the-Counter Contracts, settled net under a qualifying netting arrangement</td>
<td></td>
</tr>
<tr>
<td>In a net gain position</td>
<td>Yes</td>
</tr>
<tr>
<td>In a net loss position</td>
<td>No</td>
</tr>
<tr>
<td>Exchange-Traded Contracts—marked to market</td>
<td></td>
</tr>
<tr>
<td>In a gain position</td>
<td>Yes, but minimal credit risk if margin settles daily</td>
</tr>
<tr>
<td>In a loss position</td>
<td>No</td>
</tr>
</tbody>
</table>
Hedge Accounting

_Hedge accounting_ is a tool of accounting where entries for the ownership of a security and the opposing hedge are treated as one. Hedge accounting attempts to reduce the volatility created by the repeated adjustment of a financial instrument's value, known as marking to market. This reduced volatility is done by combining the instrument and the hedge as one entry, which offsets the opposing movements. For example, when accounting for complex financial instruments, such as derivatives, the value is adjusted by marking to market; this creates large swings in the profit and loss account. Hedge accounting treats the reciprocal hedge and the derivative as one entry so that the large swings are balanced out. Hedge accounting represents a number of provisions within FAS 133 (ASC 815) that allow companies to match the changes in fair value of their hedge contracts to the changes in fair value of the item being hedged.

Hedge accounting rules enable companies to either:

1. Defer the income/loss impact of a hedge contract to a future period, or
2. Bring forward the income/loss impact of a hedged item to an earlier period.

For instance, if you enter a forward contract to hedge a debtor that will arise in six months time, you can defer the P&L impact of that hedge contract in a hedge reserve in equity until the debtor is recognized in the general ledger. Hedge accounting will only be permitted in the accounts if each hedge contract is documented as follows:

- Risk management objective
- Risk management strategy
- Type of hedge relationship
- Nature of hedged item
- Nature of hedging instrument
- How effectiveness will be assessed

Concentrations of Credit Risk for All Financial Instruments

GAAP requires certain entities to disclose the fair value of financial instruments, whether or not they are recognized in the balance sheet, if it is practicable to estimate such fair values. (Certain nonpublic entities and certain instruments, such as leases and insurance contracts, are exempt from the disclosure requirements). If estimating fair value is not practicable, disclosures include information pertinent to
estimating the fair value of the financial instrument or class of financial instruments, such as the carrying amount, effective interest rate, and maturity. The reasons that estimating the fair value is not practicable should also be disclosed.

It also requires disclosure of all significant concentrations of credit risk for most financial instruments (except for obligations for deferred compensation, certain instruments of a pension plan, insurance contracts, warranty obligations and rights, and unconditional purchase obligations).

A company must footnote the following for each category of financial instrument with off-balance-sheet credit risk:

- The company's collateral policy and access to the collateral. (Disclosure includes a summary description of the collateral plus any other information that may prove useful in helping to understand the extent of market risk.) And,

- The amount of accounting loss due to a party's failure to perform, after consideration of the value of available collateral. Additional disclosures are encouraged.

A distinction is to be made between financial instruments held or issued for trading purposes from those held or issued for other purposes for credit risk disclosures.

A company must disclose concentrations of credit risk for financial instruments that could cause the company to be adversely impacted by economic conditions. Examples of credit risk concentrations are sales to companies concentrated in one industry or locality. In this case, disclosures includes:

- The amount of possible accounting loss,

- The policy regarding security or collateral, and

- Particulars regarding the area of concentration (e.g., economic sector, class of customer, geographic region, and activity).

The amount of possible accounting loss must be presented on a gross basis, before consideration of netting agreements. The company then will be required to disclose the nature of netting agreements and how they impact the credit exposure. See the discussion later in this course regarding netting agreements under “Offsetting Assets and Obligations.”

**ASC 815, Derivatives and Hedging**

The following is required by accounting for derivatives under GAAP:
1. Derivatives are recognized in the financial statement as assets and liabilities.

2. All derivatives are recorded at fair value—that is, marked to market.

3. Changes (gains and losses) resulting from speculation in derivatives are recognized immediately in income.

4. Changes in the fair value of derivatives must be recognized in the financial statements as they occur:
   - Changes in value of qualified hedges of foreign currency translation exposure are reported as part of comprehensive income (not as part of the income statement).
   - Changes in value of other qualified hedges will be recognized in income along with an offsetting adjustment to the item being hedged.
   - Changes in value of all other derivatives are recognized income.

Three types of qualified hedges are discussed in ASC 815-20, Derivatives and Hedging: Hedging—General, fair value hedges, cash flow hedges, and foreign currency hedges.

Simply stated, a fair value hedge is protection against adverse changes in the value of an existing asset, liability, or unrecognized firm commitment. Such a hedge minimizes the risk associated with fixed cash flows. A firm commitment is an agreement with an unrelated party, binding on both parties and usually legally enforceable, that specifies all significant terms and includes a disincentive for nonperformance.

A cash flow hedge protects against changes in the value of future cash flows— for instance, interest payments on fixed rate debt, if the company is concerned about falling interest rates and the fact that it would not be able to renegotiate the terms of the debt to capitalize on lower rates.

Gains or losses on cash flow hedges are recorded in equity, as part of other comprehensive income (OCI).

A foreign currency hedge protects against adverse movement of exchange rates impacting any foreign currency exposure. A foreign currency hedge can, for example, involve either fair value or cash flow hedges in foreign currency or a net investment in a foreign business activity when there is concern over the impact that a devaluation of a foreign currency would have on the company's investment in an overseas subsidiary.

In all of these three hedges, a hedge effectiveness test must be met in order to achieve hedge accounting. This test is described in further detail in the next section, where illustrations of the accounting are provided.

Exhibit 4 lists some common derivative-like contracts, along with whether they are covered by ASC 815.
Exhibit 4: Impact of ASC 815 on Selected Financial Instruments

What financial instruments are covered by ASC 815?

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest rate caps, floor, collars</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Interest rate and currency swaps</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Financial guarantees</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Financial futures contracts</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Forward contracts with no net settlement</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Mortgage backed security</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Option to purchase securities</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Adjustable rate loan</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Variable annuity contract</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Swaptions</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Commodities</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

ASC 815 requires that many derivatives that are components of a compound instrument be bifurcated (separated into component parts) and accounted for under the new rules. An exception is provided if:

- The instrument is subject to mark-to-market accounting,
- The embedded derivative does not meet the definition of a derivative, or
- The embedded derivative is “clearly and closely” related to the embedded cash instrument. For example, if a deposit pays an interest rate based on a stock index, the deposit must be bifurcated such that the deposit is separated from the embedded stock index because the embedded derivative is not “clearly and closely” related.

Fair Value Hedges

If a hedge qualifies as reducing the risk of changes in value of an on-balance sheet asset or liability or an unrecognized firm commitment, both the hedge and the underlying risk exposure are marked to market through the income statement. In the case of a qualifying hedge, the gain or loss on the hedging derivative instrument will offset the impact of the valuation of the exposure that is being hedged. For a nonqualifying hedge, any “breakage” between the valuation of the hedge and the underlying risk exposure will flow through earnings. A fair-value hedge includes a hedge of an exposure to changes in the fair value of a recognized asset or liability or of an unrecognized firm commitment. Such a hedge minimizes the risk associated with fixed cash flows. Changes in both (1) the fair value of a derivative that qualifies and is
designated as a fair-value hedge and (2) the fair value of the hedged item attributable to the hedged risk are included in earnings in the period of change. Thus, the net effect on earnings is limited to the ineffective portion, i.e., the difference between the changes in fair value.

Gains and losses arising from changes in fair value of a derivative classified as a fair value hedge are included in the determination of earnings in the period of change. They are offset by losses or gains on the hedged item attributable to the risk being hedged. Thus, earnings of the period of change are affected only by the net gain or loss attributable to the ineffective portion of the hedge.

The following example illustrates the ASC 815 accounting for interest rate swaps used to hedge the fair value of fixed-rate debt.

**EXAMPLE**

On June 1, 2X12, ABC Corporation enters into an agreement with its bank to borrow $10 million over 3 years at a fixed interest rate of 7%, with no prepayment permitted. ABC wishes to convert this debt to floating rate so as to not run the risk of paying an above market interest rate, if the general level of interest rate declines.

An interest rate swap is structured that will require ABC's counterparty to pay it a fixed rate of interest (assumed to be 7%) equal to what ABC owes its bank. In return, ABC will pay its counterparty a floating market rate of interest based on a six-month LIBOR. This effectively converts ABC's fixed-rate debt to floating-rate debt. The expiration of the swap matches the maturity of the borrowing, and the periodic payments under the swap are made with the same frequency as payments required under the borrowing agreement.

The changes in fair value of the fixed-rate debt and the interest rate swap are assumed to move in equal and opposite directions. When interest rates rise, the fair value of the fixed-rate debt increases (ABC is receiving cheaper funding than the market level of interest rates) while the fair value of the interest rate swap decreases (ABC is paying a market interest rate—LIBOR—that is higher than when the swap was originally contracted).

The following value of the swap and the debt is assumed:

<table>
<thead>
<tr>
<th></th>
<th>Value of Swap</th>
<th>Value of Debt</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 30, 2X12</td>
<td>+$200,000</td>
<td>$10,200,000</td>
</tr>
<tr>
<td>December 31, 2X12</td>
<td>-$100,000</td>
<td>$9,900,000</td>
</tr>
</tbody>
</table>

The calculation of the periodic six-month settlements on the interest rate swap, assuming LIBOR rates in effect as indicated, is:
<table>
<thead>
<tr>
<th>Date</th>
<th>Pay Month LIBOR</th>
<th>Six-Receive Rate</th>
<th>Fixed Notional Amount</th>
<th>Net Settlement</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 2X12</td>
<td>6%</td>
<td>7%</td>
<td>$10 million</td>
<td>$ 50,000</td>
</tr>
<tr>
<td>July 2X12—December 2X12</td>
<td>7½%</td>
<td>7%</td>
<td>$10 million</td>
<td>$(12,500)</td>
</tr>
</tbody>
</table>

**Accounting Entries**

**June 30, 2X12:**

Dr. Interest expense $350,000  
Cr. Accrued interest payable $350,000  
*To accrue six months contractual interest due on outstanding debt.*

Dr. Funds borrowed $200,000  
Cr. Gain on valuation of debt $200,000  
*To record gain in the value of fixed-rate debt in a rising interest rate environment.*

Dr. Loss on swap hedge $200,000  
Cr. Swap hedge (balance sheet liability) $200,000  
*To record loss in value of the qualifying swap hedge contract that is marked to market.*

Dr. Cash $50,000  
Cr. Interest expense $50,000  
*To record six-month settlement of the swap as a reduction of interest expense.*

**December 31, 2X12:**

Dr. Interest expense $350,000  
Cr. Accrued interest payable $350,000  
*To record contractual interest due.*

Dr. Loss on valuation of debt $300,000  
Cr. Funds borrowed $300,000  
*To record the cumulative loss in the value of the fixed-rate debt in a falling interest rate environment.*

Dr. Swap hedge (balance sheet asset) $300,000  
Cr. Gain on swap hedge $300,000  
*To record gain in value of swap hedge contract that is marked to market.*

**December 31, 2X12:**

Dr. Interest expense $12,500  
Cr. Cash $12,500  
*To record cash payment on semi-annual settlement of the swap as an adjustment to (i.e., increase in), interest expense.*
Cash Flow Hedges

Companies are often interested in protecting (hedging) the value of future cash flows that they will either receive or pay. The nature of cash flows that require protection is one where there is variability/uncertainty of what those future flows will be. In some instances transactions that are hedged relate to contractual future cash flows, whereas in other instances they may relate to forecasted transactions. A cash flow hedge is a hedge of an exposure to variability in the cash flows of a recognized asset or liability or a forecasted transaction. The accounting treatment of gains and losses arising from changes in fair value of a derivative designated as a cash flow hedge varies for the effective and ineffective portions. The effective portion initially is reported as other comprehensive income. It is reclassified into earnings when the forecasted transaction affects earnings. The ineffective portion of the hedge is recognized in current earnings. The changes accumulated in other comprehensive income are reclassified to earnings in the period(s) the hedged transaction affects earnings. For example, accumulated amounts related to a forecasted purchase of equipment are reclassified as the equipment is depreciated.

Examples of transactions that may be eligible for cash flow hedge treatment include:

- A hedge of future cash interest outflows associated with floating rate debt.
- A hedge of a forecasted future purchase of a commodity to protect against rising prices.
- A hedge to protect against rising rates for prime-based mortgages.
- A hedge to lock in the future cost of borrowing for the company.
- A hedge to anticipate future repricings of certificates of deposit.

Accounting for cash flow hedges involves reporting the effective portion of the hedge in Other Comprehensive Income. It is later reclassified into earnings in the same period as the contractual or forecasted cash flow affects earnings. Any ineffective portion of the hedge is reported as earnings. This will be clear in the example below.

EXAMPLE

XYZ Corporation has issued $100 million of six-month fixed-interest-rate commercial paper that is rolled over at each expiration date. Rising interest rates will increase its cost of funds when the commercial paper comes up for repricing and this is an exposure XYZ wishes to minimize.

Because XYZ is attempting to take action to protect its future cash interest outflows, in this example there is a cash flow hedge. To hedge its interest rate risk, XYZ sells 100 Treasury bill futures contracts (sold in contract units of $1 million). Management has determined that this strategy meets the hedge effectiveness test—discussed later in this course—and thereby qualifies for hedge accounting treatment under ASC-815.
The following changes in interest rates and their impact on future cash flows are assumed:

- Six-month commercial paper is issued January 1, 2X12 at 6% interest, due June 30.
- At June 30, 2X12, interest rates increase to 6.5%, resulting in an additional cost of funds of 5% or $250,000 for the second half of the year.
- The future contract is removed at June 30 and has a gain of $240,000.

For simplicity purposes, this example does not deal with any initial or variation margin that would be required on the futures contract.

The following financial accounting entries reflect this transaction:

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 1, 2X12</td>
<td>Dr. Cash $100,000,000 Cr. Commercial paper outstanding $100,000,000 To record issuance of commercial paper.</td>
</tr>
<tr>
<td>June 30, 2X12</td>
<td>Dr. Interest expense $3,000,000 Cr. Accrued interest payable $3,000,000 To record contractual interest due for six months. Dr. Cash $240,000 Cr. Other comprehensive income $240,000 To record gain on the settlement of the futures contract. The entire futures contract is assumed to be an effective hedge.</td>
</tr>
<tr>
<td>July 31, 2X12</td>
<td>Dr. Interest expense $541,667 Cr. Accrued interest payable $541,667 To record one month of interest after the rollover of the commercial paper to 6.5%. Dr. Other comprehensive income $40,000 Cr. Interest income $40,000 To reclassify one month of hedge gain as a reduction of interest expense on the rolled over commercial paper debt.</td>
</tr>
</tbody>
</table>

The result of the cash flow hedge is that interest expense beginning at the rollover date of the commercial paper has been reduced from what it otherwise would have been if the hedge had not been put in place. In the example, the effective interest rate after the rollover comes to 6.02% (6.5% - .48% hedge gain).
IFRS Treatment

Under IFRS, companies record unrealized holding gains or losses on cash flow hedges as adjustments to the value of the hedged item, not as "Other comprehensive income."

Foreign Currency Hedges

With respect to foreign currency hedges:

1. ASC 815 permits the company to hedge forecasted transactions with foreign currency forward contracts, and
2. It permits the company to hedge an exposure with a tandem currency, assuming hedge effectiveness can be proven.

A foreign currency fair value hedge includes a hedge of a foreign currency exposure of either an unrecognized firm commitment or a recognized asset or liability (including an available-for-sale security). Gains and losses arising from changes in fair value of a derivative classified as either a fair value or a foreign currency fair value hedge are included in the determination of earnings in the period of change. They are offset by losses or gains on the hedged item attributable to the risk being hedged. Thus, earnings of the period of change are affected only by the net gain or loss attributable to the ineffective portion of the hedge.

The hedge of the foreign currency exposure of a forecasted transaction is designated as a cash flow hedge. The effective portion of gains and losses associated with changes in fair value of a derivative instrument designated and qualifying as a cash flow hedging instrument is reported as a component of other comprehensive income.

Qualifying Hedge Criteria

In order to receive the benefit of hedge accounting, there must be a highly effective relationship between the item to be hedged and the hedging instrument. This effective relationship must exist both at the initiation of the hedge, and throughout the life of the hedge. The relationship must be evaluated quarterly and whenever financial statements for the company are issued.

The company must indicate how hedge effectiveness is defined and measured, and then stay with the criteria. It must also be able to measure the ineffective part of the hedge. Statistical methods, including regression analysis, are a means of assessing initial and ongoing effectiveness. For a hedging relationship to
qualify as “highly effective,” the change in fair value or cash flows of the hedge must fall between 80% and 125% of the opposite change in fair value or cash flows of the exposure that is hedged.

If a transaction no longer meets the “highly effective” test, hedge accounting is to be terminated.

**IFRS Treatment**

IFRS qualifying hedge criteria are similar to those used in U.S. GAAP.

**Disclosure Requirements**

Both qualitative and quantitative disclosures are required under ASC 815. The company must provide qualitative disclosures of:

- The business reason for holding or issuing derivatives, for both trading and hedging. Discussion of hedging should differentiate by hedge type (fair value hedge, cash flow hedge, and hedges of a foreign currency exposure of a net investment in a foreign operation).

- The company’s risk management strategy and which risks (such as Interest rate risk, credit risk, and equity price risk) are hedged with derivatives. The discussion should differentiate by hedge type and detail the items or transactions for which the company hedges risks. A discussion of the company’s overall risk management strategy is encouraged. How hedge effectiveness is determined and assessed.

- The net gain or loss reported for the period for fair value hedges and where in the financial statements it is reported.

Similar separate qualitative disclosures should be made for non-derivative instruments used for hedging purposes.

Exhibit 5 presents Oshkosh’s disclosure for derivative financial instruments and hedging activities.

**Exhibit 5:**

Oshkosh

2011 Annual Report
14. Derivative Financial Instruments and Hedging Activities

The Company has used forward foreign currency exchange contracts ("derivatives") to reduce the exchange rate risk of specific foreign currency denominated transactions. These derivatives typically require the exchange of a foreign currency for U.S. dollars at a fixed rate at a future date. At times, the Company has designated these hedges as either cash flow hedges or fair value hedges under FASB ASC Topic 815, Derivatives and Hedging, as follows:

Fair Value Hedging Strategy — The Company enters into forward foreign exchange contracts to hedge certain firm commitments denominated in foreign currencies, primarily the Euro. The purpose of the Company’s foreign currency hedging activities is to protect the Company from risk that the eventual U.S. dollar-equivalent cash flows from the sale of products to international customers will be adversely affected by changes in the exchange rates.

Cash Flow Hedging Strategy — To protect against an increase in the cost of forecasted purchases of foreign-sourced component parts payable in Euro, the Company has a foreign currency cash flow hedging program. The Company hedges portions of its forecasted purchases denominated in Euro with forward contracts. When the U.S. dollar weakens against the Euro, increased foreign currency payments are offset by gains in the value of the forward contracts. Conversely, when the U.S. dollar strengthens against the Euro, reduced foreign currency payments are offset by losses in the value of the forward contracts.

At September 30, 2011 and 2010, the Company had no forward foreign exchange contracts designated as hedges.

To manage a portion of the Company’s exposure to changes in LIBOR-based interest rates on its variable-rate debt, the Company entered into an amortizing interest rate swap agreement that effectively fixes the interest payments on a portion of the Company’s variable-rate debt. The swap has been designated as a cash flow hedge of 3-month LIBOR-based interest payments and, accordingly, derivative gains or losses are reflected as a component of accumulated other comprehensive income (loss) and are amortized to interest expense over the respective lives of the borrowings. During fiscal 2011, 2010 and 2009, $16.6 million, $41.6 million and $48.3 million of expense, respectively, was recorded in the Consolidated Statements of Operations as amortization of interest rate derivative gains and losses. At September 30, 2011, $2.1 million of net unrealized losses remained deferred in “Accumulated other comprehensive income (loss).” See Note 11 of the Notes to Consolidated Financial Statements for information regarding the interest rate swap.

The Company has entered into forward foreign currency exchange contracts to create an economic hedge to manage foreign exchange risk exposure associated with non-functional currency denominated payables resulting from global sourcing activities. The Company has not designated these derivative contracts as hedge transactions under ASC Topic 815, and accordingly, the mark-to-market impact of these derivatives is recorded each period in current earnings. The fair value of foreign currency related derivatives is included in the Consolidated Balance Sheets in “Other current assets” and “Other current liabilities.” At
September 30, 2011, the U.S. dollar equivalent of these outstanding forward foreign exchange contracts totaled $154.5 million in notional amounts, including $69.1 million in contracts to sell Euro, $65.0 million in contracts to sell Australian dollars, $18.2 million in contracts to sell U.K. pounds sterling and buy Euro with the remaining contracts covering a variety of foreign currencies.

The pre-tax effects of derivative instruments on the Consolidated Statements of Operations consisted of the following (in millions):

<table>
<thead>
<tr>
<th>Classification of Gains (Losses)</th>
<th>Fiscal Year Ended September 30,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2011</td>
</tr>
<tr>
<td><strong>Cash flow hedges:</strong></td>
<td></td>
</tr>
<tr>
<td>Reclassified from other comprehensive income (effective portion):</td>
<td></td>
</tr>
<tr>
<td>Interest rate contracts</td>
<td>Interest expense</td>
</tr>
<tr>
<td>Foreign exchange contracts</td>
<td>Cost of sales</td>
</tr>
<tr>
<td><strong>Not designated as hedges:</strong></td>
<td></td>
</tr>
<tr>
<td>Interest rate contracts</td>
<td>Interest expense</td>
</tr>
<tr>
<td>Foreign exchange contracts</td>
<td>Miscellaneous, net</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$(14.6)</td>
</tr>
</tbody>
</table>

The company's quantitative disclosures for derivatives and non-derivatives by hedge type (for cash flow hedges and fair value hedges) should include the amount of gains or losses recognized in earnings because:

1. They are a result of hedge ineffectiveness, or
2. They are related to the derivative but are excluded in assessing hedge effectiveness. The company should disclose the income statement classification. In addition:

1. For fair value hedges, the company should disclose the amount recognized that resulted from previously hedged firm commitments that are no longer firm along with the amount of hedge ineffectiveness.

2. For cash flow hedges, the company should disclose the amount of gains or losses currently included in other comprehensive income that is expected to be recognized in the income statement within the next 12 months. The disclosure should include a discussion of the: (1)
events that would cause the earnings to be recognized, and (2) expected maximum duration of hedges of forecasted transactions other than those related to outstanding floating-rate financial instruments. The company should disclose the amount recognized that resulted from previously hedged firm commitments that are no longer firm. The company's comprehensive earnings include the net gain or loss on derivative instruments designated and qualifying as cash flow hedging instruments. Consistent with ASC 220, *Comprehensive Income*, the company must present a reconciliation of changes in the accumulated derivative gain or loss, including, the net change related to hedging transactions, and the net amount recognized in earnings.

For hedges of the net investment in a foreign operation, the company should disclose the amount of gains or losses included in the cumulative translation adjustment.

The company is encouraged to provide quantitative disclosures that provide the context for derivatives by activity.
Exhibit 6 presents Kellog’s disclosure.

Exhibit 6:

Kellogg’s
2008 Annual Report

Note 12. Financial Instruments and Credit Risk Concentration

The carrying values of the Company's short-term items, including cash, cash equivalents, accounts receivable, accounts payable and notes payable approximate fair value. The fair value of long-term debt is calculated based on incremental borrowing rates currently available on loans with similar terms and maturities. The fair value of the Company's long-term debt at January 3, 2009 exceeded its carrying value by approximately $246 million.

The Company is exposed to certain market risks which exist as a part of its ongoing business operations. Management uses derivative financial and commodity instruments, where appropriate, to manage these risks. In general, instruments used as hedges must be effective at reducing the risk associated with the exposure being hedged and must be designated as a hedge at the inception of the contract. In accordance with SFAS No. 133, the Company designates derivatives as cash flow hedges, fair value hedges, net investment hedges, or other contracts used to reduce volatility in the translation of foreign currency earnings to U.S. dollars. The fair values of all hedges are recorded in accounts receivable, other assets, other current liabilities and other liabilities. Gains and losses representing either hedge ineffectiveness, hedge components excluded from the assessment of effectiveness, or hedges of translational exposure are recorded in other income (expense), net. Within the Consolidated Statement of Cash Flows, settlements of cash flow and fair value hedges are classified as an operating activity; settlements of all other derivatives are classified as a financing activity.

Cash flow hedges

Qualifying derivatives are accounted for as cash flow hedges when the hedged item is a forecasted transaction. Gains and losses on these instruments are recorded in other comprehensive income until the underlying transaction is recorded in earnings. When the hedged item is realized, gains or losses are reclassified from accumulated other comprehensive income to the Consolidated Statement of Earnings on the same line item as the underlying transaction. For all cash flow hedges, gains and losses representing either hedge ineffectiveness or hedge components excluded from the assessment of effectiveness were insignificant during the periods presented.

The cumulative net loss attributable to cash flow hedges recorded in accumulated other comprehensive income at January 3, 2009, was $24 million, related to forward interest rate contracts settled during 2001 and 2003 in conjunction with fixed rate long-term debt issuances, 10-year natural gas price swaps entered into in 2006, and commodity price cash flow hedges, partially offset by gains on foreign currency cash flow.
hedges. The interest rate contract losses will be reclassified into interest expense over the next 23 years. The natural gas swap losses will be reclassified to cost of goods sold over the next 8 years. Gains and losses related to foreign currency and commodity price cash flow hedges will be reclassified into earnings during the next 18 months.

**Fair value hedges**

Qualifying derivatives are accounted for as fair value hedges when the hedged item is a recognized asset, liability, or firm commitment. Gains and losses on these instruments are recorded in earnings, offsetting gains and losses on the hedged item. For all fair value hedges, gains and losses representing either hedge ineffectiveness or hedge components excluded from the assessment of effectiveness were insignificant during the periods presented.

**Net investment hedges**

Qualifying derivative and nonderivative financial instruments are accounted for as net investment hedges when the hedged item is a nonfunctional currency investment in a subsidiary. Gains and losses on these instruments are included in foreign currency translation adjustments in other comprehensive income.

**Other contracts**

The Company also periodically enters into foreign currency forward contracts and options to reduce volatility in the translation of foreign currency earnings to U.S. dollars. Gains and losses on these instruments are recorded in other income (expense), net, generally reducing the exposure to translation volatility during a full-year period.

**Foreign exchange risk**

The Company is exposed to fluctuations in foreign currency cash flows related primarily to third-party purchases, intercompany transactions and nonfunctional currency denominated third-party debt. The Company is also exposed to fluctuations in the value of foreign currency investments in subsidiaries and cash flows related to repatriation of these investments. Additionally, the Company is exposed to volatility in the translation of foreign currency earnings to U.S. dollars. Management assesses foreign currency risk based on transactional cash flows and translational volatility and enters into forward contracts, options, and currency swaps to reduce fluctuations in net long or short currency positions. Forward contracts and options are generally less than 18 months duration. Currency swap agreements are established in conjunction with the term of underlying debt issues.

For foreign currency cash flow and fair value hedges, the assessment of effectiveness is generally based on changes in spot rates. Changes in time value are reported in other income (expense), net.

**Interest rate risk**
The Company is exposed to interest rate volatility with regard to future issuances of fixed rate debt and existing issuances of variable rate debt. The Company periodically uses interest rate swaps, including forward starting swaps, to reduce interest rate volatility and funding costs associated with certain debt issues, and to achieve a desired proportion of variable versus fixed rate debt, based on current and projected market conditions.

Variable-to-fixed interest rate swaps are accounted for as cash flow hedges and the assessment of effectiveness is based on changes in the present value of interest payments on the underlying debt. Fixed-to-variable interest rate swaps are accounted for as fair value hedges and the assessment of effectiveness is based on changes in the fair value of the underlying debt, using incremental borrowing rates currently available on loans with similar terms and maturities.

**Price risk**

The Company is exposed to price fluctuations primarily as a result of anticipated purchases of raw and packaging materials, fuel, and energy. The Company has historically used the combination of long-term contracts with suppliers, and exchange-traded futures and option contracts to reduce price fluctuations in a desired percentage of forecasted raw material purchases over a duration of generally less than 18 months. During 2006, the Company entered into two separate 10-year over-the-counter commodity swap transactions to reduce fluctuations in the price of natural gas used principally in its manufacturing processes.

Commodity contracts are accounted for as cash flow hedges. The assessment of effectiveness for exchange-traded instruments is based on changes in futures prices. The assessment of effectiveness for over-the-counter transactions is based on changes in designated indexes.

**Credit risk concentration**

The Company is exposed to credit loss in the event of nonperformance by counterparties on derivative financial and commodity contracts. This credit loss is limited to the cost of replacing these contracts at current market rates. In some instances the Company has reciprocal collateralization agreements with counterparties regarding fair value positions in excess of certain thresholds. These agreements call for the posting of collateral in the form of cash, treasury securities or letters of credit if a fair value loss position to the Company or its counterparties exceeds a certain amount. There were no collateral balance requirements at January 3, 2009 or December 29, 2007.

Financial instruments, which potentially subject the Company to concentrations of credit risk are primarily cash, cash equivalents, and accounts receivable. The Company places its investments in highly rated financial institutions and investment-grade short-term debt instruments, and limits the amount of credit exposure to any one entity. Management believes concentrations of credit risk with respect to accounts receivable is limited due to the generally high credit quality of the Company's major customers, as well as the large number and geographic dispersion of smaller customers. However, the Company conducts a
disproportionate amount of business with a small number of large multinational grocery retailers, with the five largest accounts comprising approximately 30% of consolidated accounts receivable at January 3, 2009.
Review Questions – Section 1

1. A call option on a common share is more valuable when there is a lower
   A. Market value of the underlying share.
   B. Exercise price on the option.
   C. Time to maturity on the option
   D. Variability of market price on the underlying share.

2. A forward contract involves
   A. A commitment today to purchase a product on a specific future date at a price to be determined sometime in the future.
   B. A commitment today to purchase a product some time during the current day at its present price.
   C. A commitment today to purchase a product on a specific future date at a price determined today.
   D. A commitment today to purchase a product only when its price increases above its current exercise price.

3. Herbert Corporation was a party to the following transactions during November and December 2X12. Which of these transactions most likely resulted in an investment in a derivative subject to the accounting prescribed by ASC 815-20, Derivatives and Hedging: Hedging—General, (FAS-133, Accounting for Derivative Instruments and Hedging Activities)?
   A. Purchased 1,000 shares of common stock of a public corporation based on the assumption that the stock would increase in value.
   B. Purchased a term life insurance policy on the company's chief executive officer to protect the company from the effects of an untimely demise of this officer.
   C. Agreed to cosign the note of its 100%-owned subsidiary to protect the lender from the possibility that the subsidiary might default on the loan.
   D. Based on its forecasted need to purchase 300,000 bushels of wheat in 3 months, entered into a 3-month forward contract to purchase 300,000 bushels of wheat to protect itself from changes in wheat prices during the period.

4. The effective portion of a gain arising from an increase in the fair value of a derivative is included in earnings in the period of change if the derivative is appropriately designated and qualifies as a hedge of
A. A foreign currency exposure of a net investment in a foreign operation.
B. A foreign currency exposure of a forecasted transaction.
C. A foreign currency exposure of an available-for-sale security.
D. The variable cash flows of a recognized asset or liability.

5. GAAP requires certain entities to disclose the fair value of financial instruments for which it is practicable to estimate fair value. Which of the following is a financial instrument?

A. Merchandise inventory.
B. Deferred subscription revenue.
C. A note payable in U.S. Treasury bonds.
D. A warranty payable.

6. X Corporation has entered into a binding agreement with Y Company to purchase 400,000 pounds of Colombian coffee at $2.53 per pound for delivery in 90 days. This contract is accounted for as a

A. Financial instrument.
B. Firm commitment.
C. Forecasted transaction.
D. Fair value hedge.
Offsetting of Assets and Obligations

Offsetting (netting) of assets and liabilities is not permitted unless all of the following four criteria are satisfied:

1. Each of two parties owes the other determinable amounts.
2. The company has the right to set off the amount it owes with the amount owed by the other party.
3. The company intends to set off.
4. The right of set-off is enforceable under law.

ASC 210-20-45-1 states that the requirements for offsetting also relate to conditional contracts and to exchange contracts, such as options, currency swaps, forward contracts, and interest rate swaps, caps, or collars. In a conditional contract, obligations or rights depend on a future occurrence. In an exchange contract, these will be a future exchange of assets or liabilities. Unless the criteria for the right of setoff are satisfied, the fair value of conditional contracts in a gain position should not be offset against other contracts with a loss position. In a similar vein, if accrued receivables and accrued payables are recognized in conditional or exchange contracts, they should not be offset against each other except if the preceding four conditions are met.

Recorded amounts, whether accrued or at fair value associated with conditional or exchange contracts, are assets and liabilities in their own right. The fair value of conditional or exchange contracts recognized and executed with the same counterparty may be offset under a master netting agreement. In a master netting arrangement, a reporting company has multiple contracts, with one counterparty stipulating net settlement of all contracts in a single sum in one currency if default or cancellation of any one contract takes place. The contracts need not be of the same type. The offsetting in a master netting situation results in recording the fair value of one asset or liability constituting the net fair value of all positions for all contracts with one counterparty.

ASC 210-20-45-11 permits (but does not require) offsetting of payables under repurchase arrangements against receivables under reverse repurchase agreements if all six of the following criteria are satisfied:

1. The securities underlying the repurchase and reverse repurchase contracts are in “book entry” form.
2. The repurchase and reverse repurchase agreements are with the same counterparty.
3. The repurchase and reverse repurchase agreements are executed under a master netting arrangement.
4. The company expects to use the same account at the clearing bank on the settlement date in transacting the cash flows from both the reverse repurchase agreement and the offsetting repurchase agreement.
5. The repurchase and the reverse repurchase agreements have the same settlement date when initiated.

6. The repurchase and reverse repurchase agreements will be settled on a qualifying securities transfer system that allows for daylight overdrafts or a comparable settlement facility.

The company’s offsetting policy must be consistently followed.

Transfers and Servicing of Financial Assets and Extinguishments of Liabilities

Most transfers of financial assets involve the transfer of control over an asset to the buyer/transferee and are accounted for as sales and purchases by the respective parties. Each company recognizes the financial and servicing assets it controls and derecognizes liabilities it extinguishes. The transferor may continue to be involved with assets transferred either through servicing arrangements or agreements to repurchase assets prior to maturity. ASC 860-50-25, Transfers and Servicing: Servicing Assets and Liabilities, provides accounting guidance with respect to certain mortgage servicing rights and collateral pledged in repurchase agreements and securities lending arrangements.

**Accounting Standards Update (ASU) No. 2011-03 (April 2011) (ASC 860, Transfers and Servicing), Reconsideration of Effective Control for Repurchase Agreements**, removes from the evaluation of effective control the criterion mandating the transferor to have the ability to repurchase financial assets on agreed terms, even when the transferee defaults. A transferor is considered to have kept effective control over transferred financial assets (and therefore has to account for the transaction as a secured borrowing) for agreements that require the transferor to repurchase financial assets before their maturity date if all of the following conditions exist:

- The agreement is made in contemplation of the transfer.
- The repurchase will be made prior to maturity at a determinable price.
- The repurchased financial assets are the same as those transferred.

This update withdraws the previous requirement that the transferor have sufficient collateral to fund most of the cost to buy replaced financial assets. The update also improves the accounting for repurchase agreements (repos).
Mortgage Servicing Rights

Typical transfer and servicing transactions include collateralized mortgage obligations, securitizations, options for repurchase, transfers of loans with recourse, loan participations, and factoring arrangements. For example, a bank that has mortgages may wish to sell those receivables to another financial institution.

A pool of mortgages that are bundled together to form a negotiable instrument is referred to as a mortgage-backed security. Car loans, credit cards, and other assets pooled together are called asset-backed securities. However, in selling these receivables, the bank may retain the rights to service the loans (collect the principal, interest, and escrow payments and pay taxes and insurance payments from the escrow). Servicing activities that generate revenue in excess of the costs of the servicing activity are called servicing assets, and they are termed servicing liabilities if the costs are more than the revenues. Therefore, the financial components of a loan receivable might include as assets the following: cash, calls or puts, servicing assets, and swaps. The liability components may include servicing liabilities and recourse obligations.

If the company is required to service financial assets, it should record a servicing asset or a servicing obligation for the servicing contract. Servicing may include such activities as collecting principal, interest and escrow payments from the borrower, following up on delinquencies, remitting taxes and insurance out of escrow accounts. Accounting for the servicing of financial assets is as follows:

- Servicing assets or servicing liabilities are recorded at fair value.
- The balance sheet should present separately servicing assets and servicing liabilities.
- Servicing assets retained in the sale or securitization of the assets being serviced are presented at their allocated previous carrying amount based on proportionate fair values.
- Servicing assets are amortized proportionately to, and over the period of, estimated net servicing income.
- Impairment of servicing assets are recorded in a valuation allowance account and adjusted subsequently as measurement of the impairment changes. This can occur when the future servicing costs exceeds future servicing income.
- Servicing liabilities are amortized proportionately to estimated net servicing loss. However, if later events cause an increase in the fair value of the servicing liability, an expense provision should be made. An example is a sudden and drastic increase in servicing expenses.
- Rights to future interest income derived from serviced assets exceeding agreed-upon servicing fees should be shown separately from servicing assets.

In the case of previously recognized servicing receivables exceeding fees specified in the contract, they should be reclassified as interest-only strips receivable.
The company must disclose the following information for its servicing assets and servicing liabilities: (1) amounts recognized and amortized, (2) fair values, (3) risk factors of the underlying financial assets, and (4) movement of the balances in the valuation allowance for impaired activities.

**Collateral Pledged in Repurchase Agreements and Securities Lending Arrangements**

The principal question with a repurchase agreement is whether it should be treated as a sale or as a collateralized borrowing by the transferor of the securities. In a typical transaction, an entity will “sell” financial assets to a counterparty with an agreement to purchase the same or equivalent assets before their contractual maturity. Financial assets subject to these agreements are typically securities issued by the U.S. Treasury, mortgage-backed securities, or corporate debt. For the transferor, it is an efficient way to raise cash on a short-term basis. If the transferor maintains effective control of the collateral, a sale has not taken place.

Under ASC 860, assets received as collateral in repurchase agreements and securities lending arrangements are considered assets of the company (secured party) if:

- The company is able to sell or repledge the collateral, and
- The party pledging the collateral does not have the ability to redeem the collateral on short notice by substituting other collateral or terminating the contract.

In that case, the company recognizes the collateral and an obligation to return the collateral, and the pledging party reclassifies the securities pledged as securities receivable, as in Exhibit 7.

**Exhibit 7: Accounting for Collateral in Certain Repurchase Transactions**

<table>
<thead>
<tr>
<th>Secured Party (Reverse Repo)</th>
<th>Pledging Party (Repo)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Securities Purchased under Resale Agreements</td>
<td>Cash → Dr. Cash</td>
</tr>
<tr>
<td>Cr. Cash</td>
<td>Cr. Securities Sold under Repurchase Agreements</td>
</tr>
<tr>
<td>Dr. Trading Securities—Collateral Received</td>
<td>← Collateral (Securities are reclassified to a segregated Securities Pledged Asset account)</td>
</tr>
<tr>
<td>Cr. Trading Liabilities-Liability to Return Collateral</td>
<td></td>
</tr>
</tbody>
</table>

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In April 2011, as a result of the FASB's study of the impact on financial reporting by companies during the “Great Recession” of 2007-2008 in the United States, a significant change (prospective application effective for fiscal years ending on or after December 15, 2011) was adopted. Specifically the FASB has eliminated from the definition of effective control, the criterion requiring the transferor to have the ability to repurchase or redeem the financial assets on substantially the agreed terms and the collateral maintenance implementation guidance related to that criterion. This appears to be a specific response by the FASB to the Lehman Brothers “Repo 105 transactions,” which were treated as sales (rather than borrowings) by Lehman because of their over-collaterization of the money they were obligated to return under repurchase agreements. (ASC 860-10-40-22 through ASC 860-10-40-26) The result is that effective control should focus on a transferor's contractual rights or obligations with respect to the transferred assets, not on whether the transferor has the practical ability to perform in accordance with those rights and obligations.

Options on Issuer's Securities

A company may sign contracts that are tied to, and/or settled in, its own stock. Examples are written put or call options, purchased put or call options, and forward sale or purchase contracts. These contracts may be settled using various the following approaches:

- **Physical settlement**: The buyer pays cash while the seller delivers the shares.
- **Net cash settlement**: The party incurring a loss delivers to the party having a gain the cash payment equal to the gain.
- **Net share settlement**: The party incurring a loss delivers to the party having a gain the shares with a current fair value equal to the gain.
- A combination of the preceding.

Such derivatives are excluded from the scope of ASC 815 if they are indexed to the company's stock and classified in Stockholders' Equity.

Authoritative Literature

ASC 480-10-65-1 clarifies the difference between liabilities and equity. It mandates an issuing company to classify the financial instruments as liabilities or, when applicable, assets:

- A financial instrument of mandatorily redeemable shares that involves an unconditional obligation requiring the issuing entity to redeem it by transferring assets.
A financial instrument, not in the form of an outstanding share, that when issued represents a commitment to reacquire the issuer's stock, or is indexed to such an obligation, and mandates that the issuer satisfy that obligation by transferring assets. Examples are a written put option or forward purchase contract on the issuing company's equity shares that is to be settled in cash or with other assets.

A financial instrument other than an outstanding share that the issuer is unconditionally obligated to settle by issuing a variable number of equity shares provided that the value of the obligation is based on (1) factors inversely tied to changes in the fair value of the issuer's stock (e.g., a written put option), (2) variations in something except the fair value of the issuer's stock (e.g., a financial instrument indexed to the Dow Jones 30 Average), or (3) a fixed dollar amount stated at inception.

Forward contracts to reacquire a company's equity securities that must be settled in cash are initially recorded at the fair value of the shares at inception.

ASC 480-10 is not applicable to features embedded in a financial instrument that is not fully derivative.

Disclosure should be made of the terms of the financial instruments and alternative settlement arrangements. This includes the number of shares, along with their fair values, that would have to be issued and the amount of payments required. In the case of a forward contract or option, disclosure must be made of the forward price or option strike price, the number of the issuer's shares indexed under the contract, and the contractual settlement dates.

Note: Many financial instruments that were previously classified as equity are now considered liabilities under ASC 480-10.

ASC 480-10-55-33 states that freestanding warrants and other similar instruments on shares that are puttable or mandatorily redeemable include obligations to transfer assets and should be accounted for as liabilities. In the case of puttable shares, the issuer is contingently obligated to transfer assets if the warrant is exercised and the shares are put to the issuer. For mandatorily redeemable shares, the issuer is contingently liable to transfer assets when the holder exercises the warrant. In both instances, the warrant should be accounted for as a liability.

Accounting for Certain Hybrid Financial Instruments

ASC 815-15-25-4 and 25-5 allows for the fair value option to be elected for the measurement of any hybrid instrument containing an embedded derivative that otherwise would require bifurcation. This Codification section clarifies which principal-only and interest-only strips are not subject to the requirements of ASC 815. ASC 815-155 states that concentration of credit risk in the form of subordination is not embedded derivatives. The statement requires the appraisal of interests in securitized financial assets to identify interests that are freestanding derivatives or that are hybrid financial instruments having an embedded derivative requiring bifurcation.


Accounting for Servicing of Financial Assets

ASC 860-50-35-3 deals with respect to the accounting for separately recognized servicing assets and liabilities. A servicing asset (liability) is a contract to service financial assets under which the estimated future revenues from specified servicing fees, late charges, and other ancillary revenues are not expected to more than compensate for performing services.

A company recognizes a servicing asset or liability each time it is obligated to service a financial asset by agreeing to a service contract in any of the following cases:

- An acquisition or committing to an obligation to service a financial asset that does not apply to financial assets of the servicer or its consolidated affiliates.
- A transfer of the servicer’s financial assets that satisfies the requirements for sale accounting.
- A transfer of the servicer’s financial assets to a special-purpose entity in a guaranteed mortgage securitization in which the transferor keeps all of the securities and classifies them as either trading or available-for-sale. (Securitization is the process by which financial assets are transformed into securities).

ASC 860-10-65-3 requires that all separately recognized servicing assets and liabilities be initially measured at fair value if practicable. The company is allowed to use one of the following subsequent measurement methods:

- **Fair value method.** The fair value of the servicing assets or liabilities is used for each reporting date. A change in fair value during the period is recognized in earnings.
- **Amortization method.** Servicing assets or liabilities is amortized in proportion to and over the period of estimated net servicing income (loss). At the end of each reporting period, servicing assets or liabilities must be checked for any impairment or increased obligation based on fair value.

ASC 860-50-50-3 mandates separate presentation of servicing assets and liabilities subsequently measured at fair value on the balance sheet. Appropriate disclosures should also be made for separately recognized servicing assets and liabilities.

A change that utilizes derivatives to reduce the risks associated with servicing assets and liabilities must account for those derivative instruments at fair value.

An interest-only strip is the right to receive the interest due on a bond, mortgage loan, or other interest-bearing financial asset.

A transfer is the conveyance of a noncash financial asset by and to someone other than the issuer of that financial asset. Therefore, a transfer includes selling a receivable, collateralizing a receivable, or putting the receivable into a securitization trust. However, the term *transfer* excludes the origination of a receivable,
the settlement of a receivable, or the restructuring of a receivable into a securitization in a troubled debt restructuring.

**ASC, FASB, and Difference between GAAP and IFRS**

<table>
<thead>
<tr>
<th>Topic</th>
<th>FASB Accounting Standards Codification (ASC)</th>
<th>Original FASB Standard</th>
<th>Corresponding IASB Standard</th>
<th>Differences between U.S. GAAP and IFRS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting for derivatives</td>
<td>ASC 815</td>
<td>FAS No. 133</td>
<td>IAS 39</td>
<td>No substantial differences at the conceptual level</td>
</tr>
</tbody>
</table>

**Summary of Derivatives Accounting**

Exhibit 8 summarizes the accounting treatment for derivatives and hedging transactions.

**Exhibit 8: Accounting Treatment for Derivatives and Hedging Transactions**

<table>
<thead>
<tr>
<th>Derivative Use</th>
<th>Accounting for Derivative</th>
<th>Accounting for Hedged Item</th>
<th>Common Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speculation</td>
<td>Not applicable</td>
<td>At fair value with gains and losses recorded in income.</td>
<td>Call or put option on an equity security.</td>
</tr>
<tr>
<td>Hedging</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fair Value</td>
<td>At fair value with gains and losses recorded in income.</td>
<td>At fair value with gains and losses recorded in income.</td>
<td>Put option to hedge an equity investment.</td>
</tr>
<tr>
<td>Cash Flow</td>
<td>At fair value with unrealized holding gains and losses from the hedge recorded in other comprehensive income, and reclassified in income when the hedged transaction's cash flows affect earnings.</td>
<td>Use other generally accepted accounting principles for the hedged item.</td>
<td>Use of a future contract to hedge a forecasted purchase of inventory.</td>
</tr>
</tbody>
</table>
Review Questions – Section 2

7. On October 1, 2X12, Bojarsky, Inc., a calendar year-end firm, invested in a derivative designed to hedge the risk of changes in fair value of certain assets, currently valued at $1.5 million. The derivative is structured to result in an effective hedge. However, some ineffectiveness may result. On December 31, 2X12, the fair value of the hedged assets has decreased by $350,000, and the fair value of the derivative has increased by $325,000. Bojarsky should recognize a net effect on 2X12 earnings of

A. $0
B. ($25,000)
C. $325,000
D. ($350,000)

8. According to ASC 815 (FAS-133), Accounting for Derivative Instruments and Hedging Activities, as amended by ASC 815 (FAS-138), Accounting for Certain Derivative Instruments and Certain Hedging Activities, the effective portion of a loss associated with a change in fair value of a derivative instrument shall be reported as a component of other comprehensive income only if the derivative is appropriately designated as a

A. Cash flow hedge of the foreign currency exposure of a forecasted transaction.
B. Fair value hedge of the foreign currency exposure of an unrecognized firm commitment.
C. Fair value hedge of the foreign currency exposure of a recognized asset or liability for which a foreign currency transaction gain or loss is recognized in earnings.
D. Speculation in a foreign currency.

9. Whether recognized or unrecognized in an entity's financial statements, disclosure of the fair values of the entity's financial instruments is required when

A. It is practicable to estimate those values.
B. The entity maintains accurate cost records.
C. Aggregated fair values are material to the entity.
D. Individual fair values are material to the entity.
10. Which of the following is a required disclosure regarding an entity's derivative instruments?

A. Objectives for holding or issuing the instruments
B. Information on each instrument's top three underlying risk exposures
C. Instruments distinguished between those used for internal management and other purposes
D. Details as to the underlying source of the derivative instruments

11. Which of the following is NOT a required disclosure for instruments designated as hedging instruments?

A. A description distinguishing derivative instruments designated as fair value hedging instruments
B. A description distinguishing derivative instruments designated as foreign entity related hedging instruments
C. A description distinguishing derivative instruments designated as cash flow hedging instruments
D. A description distinguishing derivative instruments designated as foreign currency hedging instruments

12. Which of the following is NOT an example of overall risk exposures that a qualitative disclosure about an entity's objectives and strategies for using derivative instruments may include?

A. Interest rate risk
B. Transaction risk
C. Credit risk
D. Equity price risk
Glossary

**Accounting Loss.** Loss recorded on the financial books due to changes in the market, credit, or other risk arising from a financial instrument.

**Arbitrage.** The simultaneous purchase and sale of similar financial instruments with the purpose of taking advantage of perceived disparities in the relative value of these instruments.

**Cap, Collar, or Floor.** An option contract that provides the purchaser with protection against price movements outside a predefined range (e.g., an interest rate cap protects the purchaser from interest rate increases above a certain level).

**Carrying Amount (Carrying Value).** Amount recorded on the financial books.

**Compound Instrument.** A financial instrument that contains two or more embedded financial instruments. For example, a callable bond consists of a bond and a call option.

**Comprehensive Income.** Change in equity (net asset) arising from either transactions or other occurrences with non-owners.

**Contractual Rights and Obligations.** Specific legal obligations of the parties to an agreement. Based on the contract terms, rights may result in an asset being recorded, obligations may result in a liability, or an off-balance-sheet contingency may exist.

**Counterparty Risk.** Counterparty (default) risk is the risk to each contract participant that the counterparty will not abide to its commitments. Such risk applies to each individual or entity in an agreement such as a sales contract. Counterparty risk may be controlled by utilizing a central counterparty.

In counterparty risk there is the risk that a business entity will not pay a bond, credit derivative, or other type of transaction. It is also possible that a company that has purchased credit insurance still has the uncertainty that the insurer will not be able to pay because of financial problems.

An example of counterparty risk is when company X lends funds to company Y. The default risk is that company Y will not pay back the loan or company X will cease giving further loans. Another example is when a company fails to provide agreed-upon securities.

**Credit Derivatives.** Bilateral financial contracts that isolate specific aspects of credit risk from an underlying instrument and can be used to transfer risk of default from the holder of the instrument to a counterparty that will be compensated for assuming that risk.

**Credit Risk.** Risk of a loss caused by the failure of a counterparty to perform as per contractual terms.
Derivative Financial Instrument (derivative). Contract in which the value is tied to the return on stocks, debt, currencies, or commodities. Thus, there may be an underlying interest rate, commodity price, stock price index, foreign exchange rate, or other variable.

Duration. The expected actual life, in years, that an asset or a liability will be outstanding. For example, when long-term interest rates are declining, prepayments of home mortgages will significantly shorten their expected duration.


Fair Value. A price set in the ordinary course of business by willing buyers and sellers who are not under duress to buy or sell. The best measure of fair value is a quoted market price when the market is liquid. If a quoted price does not exist, an estimate of fair value is used. When possible, such estimate should take into account quoted market prices for comparable instruments. If comparable instruments with quoted prices are not available, other valuation approaches can be used, including the discounted value of expected future cash flows (using a suitable discount rate), or model-derived prices (option-pricing models, matrix pricing, fundamental analysis, option-adjusted spread models). In arriving at a valuation, consideration should be given to expectations regarding: future revenues, future expenses, interest rates, and volatility. In valuing foreign currency forward contracts by discounting techniques, expected cash flows generally are based on the forward rate (not the spot rate). In valuing liabilities by discounting, the discount rate generally is based on a rate the company would need to pay a financially sound third party to assume a similar obligation.

Financial Asset. Cash, an ownership interest in another company, or a contract to receive cash or another asset from a third party.


Financial Liability. Obligation to deliver cash or another financial asset to a third party.

Firm Commitment. Legal agreement or other binding obligation to perform. The failure to perform results in possible damages. The terms of the commitment should be stated, such as price, date and amount.

Forecasted Transaction. Expected transaction, but without firm commitment. A forecasted transaction does not give the company current rights to later benefits or duties for future sacrifices.

Forward Contract. An over-the-counter contract similar to futures. Unlike a futures contract, a forward contract is not uniform or standardized, and is not traded on an exchange. In such a contract, the contract is settled when the underlying is actually delivered or received at a future date—or, if the parties agree, settlement may be in cash, based on the change in value of the underlying. A forward contract may be based on a commodity or a financial instrument. The contract fixes the quantity, price, and date of purchase or sale. In most cases, money is not paid until the delivery date.
**Forward Exchange Rate.** Agreed-upon rate at which two currencies will be exchanged at some future date, usually 30, 90, or 180 days from the day the forward exchange contract is entered into.

**Futures Contract.** Agreement to buy or sell a specified amount of a commodity or financial instrument at a particular future date at a given price. With futures, physical delivery of the underlying asset almost never occurs; the position instead is closed out by the purchase of an offsetting contract. The contracts are standardized and traded on an exchange, usually subject to daily margin requirements. Examples of the underlying include commodities, debt instruments, composite stock indexes, or foreign currencies.

**Hedge.** An action taken to reduce risk, e.g., exposure to market price volatility. For example the purchase of an equity put option can protect the holder against a declining stock price.

**Interest Rate Swap.** Agreement to exchange future cash flows based on a reference rate. In a single currency interest rate swap, one party pays a fixed interest rate and one party pays a floating interest rate (e.g., LIBOR plus a spread) based on a notional principle amount.

**LIBOR.** London Inter-Bank Offered Rate. Floating-rate index that can be contrasted with the prime rate in the U.S.

**Market Risk.** Risk associated with changes in market value of financial instruments.

**Market Risk Valuation Adjustments.** A valuation adjustment may be used to account for uncertainty in a market price or model-derived value. Such uncertainties include high concentrations in a particular security, or liquidity concerns when trading for a particular security is thin.

**Notional Amount.** Number of shares, currency, or goods stated in a contract (e.g., the number of bushels in a corn futures contract).

**Option Contract.** Giving buyers the right, but not the obligation, to purchase (“call”) or sell (“put”) a specified amount of an asset at a set price for a given time period. The value of an option is typically a minor percentage of the underlying value of the asset.

**Permanent Impairment.** Decline in the market price of an asset viewed to be other than temporary. The permanent impairment reduces the carrying value of the asset, and establishes a new “cost” basis.

**Realized Gain (Loss).** Excess (or deficiency) in selling price relative to carrying value of a financial instrument. For instruments that are not marked to market, realized gains or losses are included in net income in the year of the sale.

**Repurchase Agreement (Repo).** Contract in which the company sells a security to a third party for cash and at the same time commits to repurchase that security at a later date at a stated price plus interest. Interest is due for the period of transfer. Examples of securities involved might be mortgage-backed securities and
U.S. Treasuries. “Dollar roll” repurchase agreements are contracts to sell and repurchase similar but not identical securities; the securities are collateralized by different, but similar, mortgage pools and will typically have different principal amounts. These transactions are also referred to as collateralized borrowings.

**Reverse Repo.** A security purchased under the agreement to resell. A repurchase agreement contract from the perspective of the company that purchases the security.

**Risk of Accounting Loss.** Likelihood of loss arising from changes in credit, market or operational risks.

**Spot (or Cash) Rate.** Exchange rate for a foreign currency for immediate delivery in accordance with normal market conventions.

**Securities Lending.** Similar to a repurchase agreement except that the company that lends (sells) the security may accept other securities or other financial instruments as collateral, instead of cash.

**Swap.** Contractual agreement to exchange something, usually obligations to pay streams of money. Typically, there is no exchange of the underlying instrument itself. A swap may be tied to various underlying financial instruments, indices, or commodities. Examples are currency swaps and interest rate swaps. A swap is not publicly traded on an exchange.

**Swaption.** Option on a swap giving the holder the right but not the obligation to enter into a swap at a particular future date at specified terms or to lengthen or terminate an existing swap.

**Underlying.** Price, interest rate, share price, foreign exchange rate, index of prices, or other variable applied to a notional amount to compute cash settlement or other exchange per the derivative contract provisions. Although an underlying may be the price of an asset or liability, it is not itself an asset or liability of the derivative holder.

**Unrealized Gain (Loss).** Difference between market price and carrying (book) value of an unsold financial instrument.

**Valuation Adjustments (holdbacks).** Adjustments to model-derived values to arrive at fair value. This can be necessary because of such factors as systems limitations, structural complexity of the instrument, hedging costs. For derivatives that are marked to market, models that are used to derive fair value often do not take into account changes in the counterparties' creditworthiness, or certain operational costs. For example, a portion of the initial model-generated mark-to-market may be deferred to take into account potential credit losses. This deferred income is recognized in revenue over time to create a matching of revenue and expense at the portfolio level. A similar treatment may be used to account for normal, recurring operations costs that are not factored into the valuation model.
**Value at Risk.** A measure of expressing a potential gain or loss on a financial instrument due to market risk over a period of time with a degree of probability.

**Warrants.** Refers to a call option in the company's stock. Typically, warrants have longer terms than other call options.
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Appendix - Annual Report References

Note: Skim through this section for more annual report references

Arvinmeritor 2010
Annual Report

17. Financial Instruments

The company's financial instruments include cash and cash equivalents, short-term debt, long-term debt, interest rate swaps, interest rate cap and foreign exchange forward contracts. The company uses derivatives for hedging and non-trading purposes in order to manage its interest rate and foreign exchange rate exposures.

Foreign Exchange Contracts

As a result of the company's substantial international operations, it is exposed to foreign currency risks that arise from normal business operations, including in connection with transactions that are denominated in foreign currencies. In addition, the company translates sales and financial results denominated in foreign currencies into U.S. dollars for purposes of its consolidated financial statements. As a result, appreciation of the U.S. dollar against these foreign currencies generally will have a negative impact on reported revenues and operating income while depreciation of the U.S. dollar against these foreign currencies will generally have a positive effect on reported revenues and operating income. For fiscal years 2008 and 2010, the company's reported financial results have benefited from depreciation of the U.S. dollar against foreign currencies whereas during fiscal year 2009, reported financial results have been adversely affected by appreciation of the U.S. dollar against foreign currencies.

The company has a foreign currency cash flow hedging program to reduce the company's exposure to changes in exchange rates on foreign currency purchases and sales. The company uses foreign currency forward contracts to manage the company's exposures arising from foreign currency exchange risk. Gains and losses on the underlying foreign currency exposures are partially offset with gains and losses on the foreign currency forward contracts. Under this foreign currency cash flow hedging program, the company has designated the foreign exchange contracts (the “contracts”) as cash flow hedges of underlying forecasted foreign currency purchases and sales. The effective portion of changes in the fair value of the contracts is recorded in Accumulated Other Comprehensive Loss (AOCL) in the consolidated balance sheet and is recognized in operating income when the underlying forecasted transaction impacts earnings. The terms of the foreign exchange contracts require the company to place cash on deposit as collateral if the
fair value of these contracts represents a liability for the company at any time. The fair values of the foreign exchange derivative instruments and any related collateral cash deposits are presented on a net basis as the derivative contracts are subject to master netting arrangements. The company's foreign exchange contracts generally mature within twelve months.

At September 30, 2010, the company had no foreign exchange contracts outstanding under its foreign currency cash flow hedging program. At September 30, 2009, the company had outstanding contracts with notional amounts of $89 million. These notional values consisted primarily of contracts for the European euro, Australian dollar and Swedish krona, and are stated in U.S. dollar equivalents at spot exchange rates at the respective dates. At September 30, 2010 there was no income or loss recorded in AOCL and at September 30, 2009 there was a loss of $2 million recorded in AOCL.

The company classifies the cash flows associated with the contracts in cash flows from operating activities in the consolidated statement of cash flows. This is consistent with the classification of the cash flows associated with the underlying hedged item.

The company generally has not hedged against its foreign currency exposure related to translations to U.S. dollars of financial results denominated in foreign currencies. In the fourth quarter of fiscal year 2010, due to the volatility of the Brazilian real as compared to the U.S. dollar, the company entered into foreign currency option contracts to reduce volatility in the translation of Brazilian real earnings to U.S. dollars. Gains and losses on these option contracts are recorded in other income (expense), net, in the consolidated statement of operations, generally reducing the exposure to translation volatility during a full-year period. The impact of these option contracts was not significant to the company's fiscal year 2010 results of operations or financial position.

**Fair Value**

Fair values of financial instruments are summarized as follows (in millions):

<table>
<thead>
<tr>
<th></th>
<th>September 30, 2010</th>
<th></th>
<th>September 30, 2009</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Carrying Value</td>
<td>Fair Value</td>
<td>Carrying Value</td>
<td>Fair Value</td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>$343</td>
<td>$343</td>
<td>$95</td>
<td>$95</td>
</tr>
<tr>
<td>Foreign exchange contracts—asset (liability)</td>
<td>-</td>
<td>-</td>
<td>(3)</td>
<td>(3)</td>
</tr>
<tr>
<td>Short-term debt</td>
<td>-</td>
<td>-</td>
<td>97</td>
<td>97</td>
</tr>
<tr>
<td>Long-term debt</td>
<td>1,029</td>
<td>1,132</td>
<td>995</td>
<td>885</td>
</tr>
</tbody>
</table>

*Cash and cash equivalents*—All highly liquid investments purchased with an original maturity of three months or less are considered to be cash equivalents. The carrying value approximates fair value because of the short maturity of these instruments.
Foreign exchange forward contracts—The company uses foreign exchange forward purchase and sale contracts with terms of one year or less to hedge its exposure to changes in foreign currency exchange rates. The fair value of foreign exchange forward contracts is based on a model which incorporates observable inputs including quoted spot rates, forward exchange rates and discounted future expected cash flows utilizing market interest rates with similar quality and maturity characteristics.

Short-term debt and long-term debt—Fair values are based on interest rates that would be currently available to the company for issuance of similar types of debt instruments with similar terms and remaining maturities.

16. Financial Instruments and Commodity Contracts

Derivative Financial Instruments

We use derivative financial instruments as part of our overall interest rate, foreign currency and commodity risk management strategies to reduce our interest rate exposure, to potentially increase the return on invested funds, to reduce exchange rate risk for transactional exposures denominated in currencies other than the functional currency and to minimize commodity price volatility. From time to time, we use foreign currency forward and option contracts to manage the risk of exchange rate movements that would reduce the value of our foreign currency cash flows. Foreign currency exchange rate movements create a degree of risk by affecting the value of sales made and costs incurred in currencies other than the functional currency. From time to time, we also use commodity forward contracts to manage variability related to exposure to certain commodity price risk. In connection with the sale of the Convertible Notes, the Company purchased call options for $125 million. The call options are intended to minimize share dilution associated with the Convertible Notes. As the call options and warrants are indexed to our common stock, we recognized them in permanent equity in Additional paid in capital, and will not recognize subsequent changes in fair value as long as the instruments remain classified as equity. For additional information on the purchased call options, see Note 12, Debt. We generally do not enter into derivative financial instruments for speculative or trading purposes and did not during the years ended October 31, 2010, 2009, or 2008. None of our derivatives qualified for hedge accounting treatment in 2010, 2009, or 2008.

Certain of our derivative contracts contain provisions that require us to provide collateral only if certain thresholds are exceeded. No collateral was provided at October 31, 2010 and 2009. Collateral is not required to be provided by our counter-parties for derivative contracts. We manage exposure to counterparty credit risk by entering into derivative financial instruments with various major financial institutions that can be expected to fully perform under the terms of such agreements. We do not anticipate nonperformance by any of the counterparties. Our exposure to credit risk in the event of
nonperformance by the counter-parties is limited to those gains that have been recorded, but have not yet been received in cash. At October 31, 2010 and 2009, our exposure to credit risk was $10 million and $38 million, respectively.

Our financial services operations manage exposure to fluctuations in interest rates by limiting the amount of fixed rate assets funded with variable rate debt. This is accomplished by funding fixed rate receivables utilizing a combination of fixed rate and variable rate debt and derivative financial instruments to convert variable rate debt to fixed. These derivative financial instruments may include interest rate swaps, interest rate caps, and forward contracts. The fair value of these instruments is estimated by discounting expected future monthly settlements and is subject to market risk, as the instruments may become less valuable due to changes in market conditions, interest rates, or credit spreads of counterparties. Notional amounts of derivative financial instruments do not represent exposure to credit loss.

The fair values of all derivatives are recorded as assets or liabilities on a gross basis in our Consolidated Balance Sheets. At October 31, 2010 and 2009, the fair values of our derivatives and their respective balance sheet locations are presented in the following table:

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<thead>
<tr>
<th></th>
<th>Asset Derivatives</th>
<th>Liability Derivatives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>Location in</td>
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<tr>
<td></td>
<td>Consolidated</td>
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<td>Balance Sheets</td>
<td>Balance Sheets</td>
</tr>
<tr>
<td></td>
<td>Fair Value</td>
<td>Fair Value</td>
</tr>
<tr>
<td>As of October 31, 2010</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(in millions)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign Currency</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contracts:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Current portion</td>
<td>Other current assets</td>
</tr>
<tr>
<td></td>
<td>Other current</td>
<td>$ 8</td>
</tr>
<tr>
<td></td>
<td>assets</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Noncurrent</td>
<td>Other noncurrent</td>
</tr>
<tr>
<td></td>
<td>portion</td>
<td>liabilities</td>
</tr>
<tr>
<td></td>
<td>Commodity contracts</td>
<td>Other current assets</td>
</tr>
<tr>
<td></td>
<td>Other current</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>liabilities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total fair value</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Less: Current</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>portion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Noncurrent</td>
<td>$ -</td>
</tr>
</tbody>
</table>

| As of October 31, 2009  |                   |                       |
| (in millions)           |                   |                       |
| Foreign Currency         |                   |                       |
| Contracts:               |                   |                       |
|                         | Current portion   | Other current assets  |
|                         | Other current     | $ 8                   |
|                         | assets            |                       |
|                         | Noncurrent        | Other noncurrent      |
|                         | portion           | liabilities           |
|                         | Commodity contracts | Other current assets  |
|                         | Other current     | 2                     |
|                         | liabilities       |                       |
|                         | Total fair value  | 10                    |
|                         | Less: Current     | 10                    |
|                         | portion           |                       |
|                         | Noncurrent        | $ -                   |
The location and amount of gain (loss) recognized in income on derivatives are as follows for the years ended October 31:

<table>
<thead>
<tr>
<th>Location in Consolidated Statements of Operations</th>
<th>Amount of Gain (Loss) Recognized (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2010</td>
</tr>
<tr>
<td>Interest rate swaps</td>
<td>$ (5)</td>
</tr>
<tr>
<td>Interest rate caps purchased</td>
<td>(3)</td>
</tr>
<tr>
<td>Interest rate caps sold</td>
<td>3</td>
</tr>
<tr>
<td>Foreign currency contracts</td>
<td>8</td>
</tr>
<tr>
<td>Commodity forward contracts</td>
<td>1</td>
</tr>
<tr>
<td>Total gain (loss)</td>
<td>$ 4</td>
</tr>
</tbody>
</table>

**Interest Rate Swaps and Caps**

In September 2008, we entered into two floating-to-floating interest rate swaps (“basis swaps”) to economically hedge a portion of the floating interest rate associated with our $1.5 billion five-year term loan facility and synthetic revolving facility. The basis swaps had an aggregate notional amount of $1.1 billion and became effective October 30, 2008. The basis swaps matured on January 30, 2009. For the year ended October 31, 2009, we recognized a loss of $2 million under these arrangements.

In June 2005, TRIP entered into a $500 million revolving facility that matured and was paid in June 2010. Under the terms of this agreement, TRIP purchases and holds fixed rate retail notes and finance
leases from NFC. TRIP finances such purchases with its revolving facility. TRIP purchased interest caps with a notional amount of $500 million to protect it against the potential of rising commercial paper interest rates. To offset the economic cost of these caps, NFC sold identical interest rate caps. As of October 31, 2010, there were no interest rate caps outstanding.

NFC previously entered into various interest rate swap agreements in connection with the sale of retail notes and lease receivables. The purpose and structure of these swaps is to convert the floating rate portion of the asset-backed securities into fixed rate swap interest to match the interest basis of the receivables pool sold to the owner trust in those periods, and to protect NFC from interest rate volatility. As of October 31, 2009, the aggregate notional amount of the outstanding interest rate swaps was $3.4 billion. As of October 31, 2010, there were no interest rate swaps outstanding.

*Foreign Currency Contracts*

In 2010, we entered into forward exchange contracts as economic hedges of anticipated cash flows denominated in Canadian dollars, Indian rupees, and Euros. In 2009, we also entered into forward exchange contracts as economic hedges of anticipated cash flows denominated in Indian rupees and South African rand. All of these contracts were entered into to protect against the risk that the eventual cash flows resulting from such transactions will be adversely affected by changes in exchange rates between the U.S. dollar and the respective foreign currency. In 2009, we entered into put option contracts for Canadian dollars as economic hedges of anticipated cash flows denominated in Canadian dollars to also protect the revenue of certain contracts denominated in Canadian dollars. The put option contracts for Canadian dollars had staggered maturity dates, and the final contract matured in June 2010. As of October 31, 2010, we had outstanding forward exchange contracts with notional amounts of €49 million Euros and C$24 million Canadian dollars and maturity dates ranging from January 2011 to May 2011.

*Commodity Forward Contracts*

In 2010, we entered into commodity forward contracts as economic hedges of exposure to variability of commodity prices for diesel fuel, lead, and steel. These contracts were entered into to protect against the risk that the eventual cash flows related to purchases of the commodities will be adversely affected by future changes in prices. As of October 31, 2010, we had outstanding diesel fuel contracts with aggregate notional values of $21 million, outstanding lead contracts with aggregate notional values of $1 million, and outstanding steel contracts with aggregate notional values of $80 million. As of October 31, 2009, we had outstanding diesel fuel commodity forward contracts with aggregate notional amounts of $2 million and outstanding steel contracts with aggregate notional amounts of $39 million. The commodity forward contracts have several maturity dates ranging from February 2011 to October 2011.
The company manages its exposure to various risks relating to its ongoing business operations according to a risk management policy. The primary risks managed with derivative instruments are interest rate risk and foreign exchange risk.

The following table summarizes the gross fair value of the company's derivative positions as of October 2, 2010:

<table>
<thead>
<tr>
<th></th>
<th>Current Assets</th>
<th>Other Assets</th>
<th>Other Accrued Liabilities</th>
<th>Other Long-Term Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Derivatives designated as hedges</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign exchange</td>
<td>$ 78</td>
<td>$ 65</td>
<td>$(210)</td>
<td>$(104)</td>
</tr>
<tr>
<td>Interest rate</td>
<td>13</td>
<td>218</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Derivatives not designated as hedges</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign exchange</td>
<td>80</td>
<td>181</td>
<td>(140)</td>
<td>(36)</td>
</tr>
<tr>
<td>Interest rate</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(22)</td>
</tr>
<tr>
<td>Other</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Gross fair value of derivatives</td>
<td>171</td>
<td>464</td>
<td>(350)</td>
<td>(162)</td>
</tr>
<tr>
<td>Counterparty netting</td>
<td>(121)</td>
<td>(85)</td>
<td>130</td>
<td>76</td>
</tr>
<tr>
<td>Total Derivatives(1)</td>
<td>$ 50</td>
<td>$ 379</td>
<td>$(220)</td>
<td>$(86)</td>
</tr>
</tbody>
</table>

The following table summarizes the gross fair value of the company's derivative positions as of October 3, 2009:

<table>
<thead>
<tr>
<th></th>
<th>Current Assets</th>
<th>Other Assets</th>
<th>Other Accrued Liabilities</th>
<th>Other Long-Term Liabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Derivatives designated as hedges</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign exchange</td>
<td>$ 84</td>
<td>$ 111</td>
<td>$(115)</td>
<td>$(55)</td>
</tr>
<tr>
<td>Interest rate</td>
<td>4</td>
<td>186</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Derivatives not designated as hedges</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreign exchange</td>
<td>37</td>
<td>127</td>
<td>(70)</td>
<td>(37)</td>
</tr>
<tr>
<td>Interest rate</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(18)</td>
</tr>
<tr>
<td>Other</td>
<td>-</td>
<td>-</td>
<td>(2)</td>
<td>-</td>
</tr>
<tr>
<td>Gross fair value of derivatives</td>
<td>125</td>
<td>424</td>
<td>(187)</td>
<td>(110)</td>
</tr>
<tr>
<td>Counterparty netting</td>
<td>(98)</td>
<td>(72)</td>
<td>103</td>
<td>67</td>
</tr>
<tr>
<td>Total Derivatives(1)</td>
<td>$ 27</td>
<td>$ 352</td>
<td>$(84)</td>
<td>$(43)</td>
</tr>
</tbody>
</table>

(1) Refer to note 16 for further information on derivative fair values and counterparty netting.
Interest rate risk management

The company is exposed to the impact of interest rate changes primarily through its borrowing activities. The company's objective is to mitigate the impact of interest rate changes on earnings and cash flows and on the market value of its borrowings. In accordance with its policy, the company targets its fixed-rate debt as a percentage of its net debt between a minimum and maximum percentage. The company typically uses pay-floating and pay-fixed interest rate swaps to facilitate its interest rate management activities.

The company designates pay-floating interest rate swaps as fair value hedges of fixed-rate borrowings effectively converting fixed-rate borrowings to variable rate borrowings indexed to LIBOR. As of October 2, 2010 and October 3, 2009, the total notional amount of the company's pay-floating interest rate swaps was $1.5 billion and $1.6 billion, respectively. The following table summarizes adjustments related to fair value hedges included in net interest expense in the consolidated statements of income.

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gain (loss) on interest rate swaps</td>
<td>$ 41</td>
<td>$ 105</td>
</tr>
<tr>
<td>Gain (loss) on hedged borrowings</td>
<td>(41)</td>
<td>(105)</td>
</tr>
</tbody>
</table>

The company may designate pay-fixed interest rate swaps as cash flow hedges of interest payments on floating-rate borrowings. Pay-fixed swaps effectively convert floating rate borrowings to fixed-rate borrowings. The unrealized gains or losses from these cash flow hedges are deferred in accumulated other comprehensive income (AOCI) and recognized as the interest payments occur. The company did not have pay-fixed interest rate swaps that were designated as cash flow hedges of interest payments at October 2, 2010 nor at October 3, 2009.

Foreign exchange risk management

The company transacts business globally and is subject to risks associated with changing foreign currency exchange rates. The company's objective is to reduce earnings and cash flow fluctuations associated with foreign currency exchange rate changes, enabling management to focus on core business issues and challenges.

The company enters into option and forward contracts that change in value as foreign currency exchange rates change to protect the value of its existing foreign currency assets, liabilities, firm commitments and forecasted but not firmly committed foreign currency transactions. In accordance with policy, the company hedges its forecasted foreign currency transactions for periods generally not to exceed five years within an established minimum and maximum range of annual exposure. The gains and losses on these contracts offset changes in the U.S. dollar equivalent value of the related forecasted transaction, asset, liability or firm commitment. The principal currencies hedged are the euro, British pound, Japanese yen and Canadian dollar. Cross-currency swaps are used to effectively convert foreign currency-denominated borrowings into U.S. dollar denominated borrowings.
The company designates foreign exchange forward and option contracts as cash flow hedges of firmly committed and forecasted foreign currency transactions. As of both October 2, 2010 and October 3, 2009, the notional amount of the company's net foreign exchange cash flow hedges was $2.8 billion. Mark to market gains and losses on these contracts are deferred in AOCI and are recognized in earnings when the hedged transactions occur, offsetting changes in the value of the foreign currency transactions. Gains and losses recognized related to ineffectiveness for the years ended October 2, 2010 and October 3, 2009 were not material. Deferred losses recorded in AOCI for contracts that will mature in the next twelve months totaled $132 million. The following table summarizes the pre-tax adjustments to AOCI for foreign exchange cash flow hedges.

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gain (loss) recorded in AOCI</td>
<td>$(187)</td>
<td>$ 81</td>
</tr>
<tr>
<td>Reclassification of (gains) losses from AOCI into revenues and costs and expenses</td>
<td>(7)</td>
<td>(183)</td>
</tr>
<tr>
<td>Net change in AOCI</td>
<td>$(194)</td>
<td>$(102)</td>
</tr>
</tbody>
</table>

Foreign exchange risk management contracts with respect to foreign currency assets and liabilities are not designated as hedges and do not qualify for hedge accounting. The notional amount of these foreign exchange contracts at October 2, 2010 and October 3, 2009 was $2.2 billion and $2.1 billion, respectively. For the years ended October 2, 2010 and October 3, 2009, the company recognized a net gain of $102 million and $140 million, respectively, in costs and expenses on these foreign exchange contracts which offset a net loss of $173 million and $137 million of the related economic exposures for the years ended October 2, 2010 and October 3, 2009, respectively.

**Commodity price risk management**

The company is subject to the volatility of commodities prices and designates certain commodity forward contracts as cash flow hedges of forecasted commodity purchases. Mark to market gains and losses on these contracts are deferred in AOCI and are recognized in earnings when the hedged transactions occur, offsetting changes in the value of commodity purchases. The fair value of commodity hedging contracts was not material at October 2, 2010.

**Risk management—other derivatives not designated as hedges**

The company enters into certain other risk management contracts that are not designated as hedges and do not qualify for hedge accounting. These contracts, which include pay fixed interest rate swaps, commodity swap contracts and credit default swaps, are intended to offset economic exposures of the company and are carried at market value with any changes in value recorded in earnings.
The notional amount of these contracts at October 2, 2010 and October 3, 2009 was $218 million and $253 million, respectively. The gains or losses recognized in income for fiscal 2010 and fiscal 2009 were not material.

Contingent features

The company's derivative financial instruments may require the company to post collateral in the event that a net liability position with a counterparty exceeds limits defined by contract and that vary with Disney's credit rating. If the company's credit ratings were to fall below investment grade, such counterparties would have the right to terminate our derivative contracts, which could lead to a net payment to or from the company for the aggregate net value by counterparty of our derivative contracts. The aggregate fair value of all derivative instruments with credit-risk-related contingent features that are in a net liability position by counterparty on October 2, 2010 and October 3, 2009 were $306 million and $125 million, respectively.
Review Question Answers

Section 1

1. A call option on a common share is more valuable when there is a lower

   A. Incorrect. A call option is the right to buy a common share at a set price for a specified time period. If the underlying share has a lower market value, the call option is less, not more, valuable.
   B. Correct. The lower the exercise price, the more valuable the call option. The exercise price is the price at which the call holder has the right to purchase the underlying share.
   C. Incorrect. A call option is less, not more, valuable given less time to maturity. When the option has less time to maturity, the chance that the share price will rise is smaller.
   D. Incorrect. A call option is less, not more, valuable if the price of the underlying share is less variable. Less variability means a lower probability of a price increase.

2. A forward contract involves

   A. Incorrect. The price of a forward contract is determined on the day of commitment, not some time in the future.
   B. Incorrect. Performance is deferred in a forward contract, and the price of the product is not necessarily its present price. The price can be any price determined on the day of commitment.
   C. Correct. A forward contract is an executory contract in which the parties involved agree to the terms of a purchase and a sale, but performance is deferred. Accordingly, a forward contract involves a commitment today to purchase a product on a specific future date at a price determined today.
   D. Incorrect. A forward contract is a firm commitment to purchase a product. It is not based on a contingency. Also, a forward contract does not involve an exercise price (exercise price is in an option contract).

3. Herbert Corporation was a party to the following transactions during November and December 2X12. Which of these transactions most likely resulted in an investment in a derivative subject to the accounting prescribed by ASC 815-20, Derivatives and Hedging: Hedging—General, (FAS-133, Accounting for Derivative Instruments and Hedging Activities?)
A. Incorrect. It involves a net investment equal to the fair value of the stock.
B. Incorrect. It is based on an identifiable investment, not a derivative.
C. Incorrect. It is based on an identifiable event, not an underlying.
D. **Correct.** ASC 815 defines a derivative as a financial instrument or other contract that (1) has (a) one or more underlyings and (b) one or more notional amounts or payment provisions, or both; (2) requires either no initial net investment or an immaterial net investment; and (3) requires or permits net settlement. An underlying may be a specified interest rate, security price, commodity price, foreign exchange rate, index of prices or rates, or other variable. A notional amount is a number of currency units, shares, bushels, pounds, or other units specified. Settlement of a derivative is based on the interaction of the notional amount and the underlying. The purchase of the forward contract as a hedge of a forecasted need to purchase wheat meets the criteria prescribed by ASC 815.

4. The effective portion of a gain arising from an increase in the fair value of a derivative is included in earnings in the period of change if the derivative is appropriately designated and qualifies as a hedge of

A. Incorrect. The effective portion of gains and losses on a hedge involving a net investment in a foreign operation is reported as a component of the cumulative translation adjustment in the other comprehensive income section of owners' equity.
B. Incorrect. The hedge of the foreign currency exposure of a forecasted transaction is designated as a cash flow hedge. The effective portion of gains and losses on these hedges is included in other comprehensive income until periods in which the hedged item affects earnings.
C. **Correct.** A fair value hedge includes a hedge of an exposure to changes in the fair value of a recognized asset or liability or an unrecognized firm commitment. Such a hedge minimizes the risk associated with fixed cash flows. A foreign currency fair value hedge includes a hedge of a foreign currency exposure of either an unrecognized firm commitment or a recognized asset or liability (including an available-for-sale security). Gains and losses arising from changes in fair value of a derivative classified as either a fair value or a foreign currency fair value hedge are included in the determination of earnings in the period of change. They are offset by losses or gains on the hedged item attributable to the risk being hedged. Thus, earnings of the period of change are affected only by the net gain or loss attributable to the ineffective portion of the hedge.
D. Incorrect. The effective portion of gains and losses on a cash flow hedge is included in other comprehensive income. It is reclassified in earnings when the forecasted transaction affects earnings.

5. GAAP requires certain entities to disclose the fair value of financial instruments for which it is practicable to estimate fair value. Which of the following is a financial instrument?
A. Incorrect. Although the sale of inventory could result in the receipt of cash, the holder of the inventory has no current contractual right to receive cash.

B. Incorrect. Deferred subscription revenue is an obligation that will result in the delivery of goods or services eventually, so it is not a financial instrument.

C. Correct. GAAP defines a financial instrument as cash, evidence of an ownership interest in an entity, or a contract that both (1) imposes on one entity a contractual obligation (A) to deliver cash or another financial instrument to a second entity or (B) to exchange financial instruments on potentially unfavorable terms with the second entity, and (2) conveys to that second entity a contractual right (A) to receive cash or another financial instrument from the first entity or (B) to exchange other financial instruments on potentially favorable terms with the first entity. A note payable in U.S. Treasury bonds gives the holder the contractual right to receive and imposes on the issuer the contractual obligation to deliver bonds that are themselves financial instruments. Thus, given that one entity has a contractual obligation to deliver another financial instrument and the second entity has a contractual right to receive another financial instrument, the note payable in U.S. Treasury bonds meets the definition of a financial instrument.

D. Incorrect. Warranty obligations will result in the delivery of goods and/or services at a later period, not the delivery of cash or another financial instrument. Therefore it doesn’t match the definition of a financial instrument.

6. X Corporation has entered into a binding agreement with Y Company to purchase 400,000 pounds of Colombian coffee at $2.53 per pound for delivery in 90 days. This contract is accounted for as a

A. Incorrect. A financial instrument does not involve the actual delivery of a product.

B. Correct. A firm commitment is an agreement with an unrelated party, binding on both parties and usually legally enforceable, that specifies all significant terms and includes a disincentive for nonperformance.

C. Incorrect. A forecasted transaction is a transaction that is expected to occur for which no firm commitment exists.

D. Incorrect. The purchase commitment is an exposure to risk, not a hedge of an exposure to risk.

Section 2

7. On October 1, 2X12, Bojarsky, Inc., a calendar year-end firm, invested in a derivative designed to hedge the risk of changes in fair value of certain assets, currently valued at $1.5 million. The derivative is structured to result in an effective hedge. However, some ineffectiveness may result. On December 31,
2X12, the fair value of the hedged assets has decreased by $350,000, and the fair value of the derivative has increased by $325,000. Bojarsky should recognize a net effect on 2X12 earnings of

A. Incorrect. The effect on earnings is equal to the ineffective portion of the hedge.
B. Correct. A hedge of an exposure to changes in the fair value of a recognized asset or liability is classified as a fair value hedge. Gains and losses arising from changes in fair value of a derivative classified as a fair value hedge are included in the determination of earnings in the period of change. They are offset by losses or gains on the hedged item attributable to the risk being hedged. Thus, earnings of the period of change are affected only by the net gain or loss attributable to the ineffective aspect of the hedge. The ineffective portion is equal to $25,000 ($350,000 - $325,000).
C. Incorrect. The increase in the fair value of the derivative is a gross effect that does not get reflected on the 2X12 earnings. The net effect on earnings is limited to the ineffective portion, i.e., the difference between the changes in fair value.
D. Incorrect. The decrease in the fair value of the hedged assets is a gross effect. Only the net gain or loss is reflected in earnings.

8. According to ASC 815 (FAS-133), Accounting for Derivative Instruments and Hedging Activities, as amended by ASC 815 (FAS-138), Accounting for Certain Derivative Instruments and Certain Hedging Activities, the effective portion of a loss associated with a change in fair value of a derivative instrument shall be reported as a component of other comprehensive income only if the derivative is appropriately designated as a

A. Correct. The hedge of the foreign currency exposure of a forecasted transaction is designated as a cash flow hedge. The effective portion of gains and losses associated with changes in fair value of a derivative instrument designated and qualifying as a cash flow hedging instrument is reported as a component of other comprehensive income.
B. Incorrect. A hedge of the foreign currency exposure of either an unrecognized firm commitment or of a recognized asset or liability for which a foreign currency transaction gain or loss is recognized in earnings may be a cash flow hedge (if cash flows are variable) or a fair value hedge. The effective portion of gains and losses arising from changes in fair value of a derivative classified as a fair value hedge is included in earnings of the period of change. It is offset by losses and gains on the hedged item that are attributable to the risk being hedged.
C. Incorrect. A hedge of the foreign currency exposure of either an unrecognized firm commitment or of a recognized asset or liability for which a foreign currency transaction gain or loss is recognized in earnings may be a cash flow hedge (if cash flows are variable) or a fair value hedge. The effective portion of gains and losses arising from changes in fair value of a derivative classified as a fair value hedge is included in earnings of the period of change. It is offset by losses and gains on the hedged item that are attributable to the risk being hedged.
D. Incorrect. Gains and losses associated with changes in fair value of a derivative used as a speculation in a foreign currency are included in earnings of the period of change.

9. Whether recognized or unrecognized in an entity's financial statements, disclosure of the fair values of the entity's financial instruments is required when

   A. Correct. GAAP requires certain entities to disclose the fair value of financial instruments, whether or not they are recognized in the balance sheet, if it is practicable to estimate such fair values. If estimating fair value is not practicable, disclosures include information pertinent to estimating the fair value of the financial instrument or class of financial instruments, such as the carrying amount, effective interest rate, and maturity. The reasons that estimating the fair value is not practicable should also be disclosed.

   B. Incorrect. The disclosure requirement is based on a practicability standard, not record keeping.

   C. Incorrect. The disclosure requirement is based on a practicability standard, not materiality.

   D. Incorrect. The disclosure requirement is based on a practicability standard, not materiality.

10. Which of the following is a required disclosure regarding an entity's derivative instruments?

   A. Correct. ASC 815 requires that the objectives for holding or issuing the entity's derivative instruments be disclosed, including the content needed to understand those objectives, and its strategies for attaining those objectives.

   B. Incorrect. Information on each instrument's primary underlying risk exposure is required, not the top three risks.

   C. Incorrect. ASC 815 requires disclosure of instruments distinguished between those used for risk management and other purposes, not internal management purposes.

   D. Incorrect. Although the use and complexity of derivative instruments and hedging activities have increased significantly over the past several years, there is no required disclosure about the details as to the underlying source of the derivative instruments.

11. Which of the following is NOT a required disclosure for instruments designated as hedging instruments?

   A. Incorrect. A description distinguishing derivative instruments designated as fair value hedging instruments is a required disclosure. For derivative instruments not designated as hedging instruments additional descriptions are required.

   B. Correct. A description distinguishing derivative instruments designated as foreign entity related hedging instruments is not a required disclosure. Merely because a derivative instrument is related
to a foreign entity, rather than a U.S. entity, does not mean that it will require additional disclosures.

C. Incorrect. Derivative instruments used for risk management purposes include those designated as hedging instruments. A description distinguishing derivative instruments designated as cash flow hedging instruments is a required disclosure.

D. Incorrect. A description distinguishing derivative instruments designated as foreign currency hedging instruments is a required disclosure. Derivative instruments used for risk management purposes include those used as economic hedges and for other purposes related to the entity's risk exposures.

12. Which of the following is NOT an example of overall risk exposures that a qualitative disclosure about an entity's objectives and strategies for using derivative instruments may include?

A. Incorrect. Interest rate risk is one example provided by GAAP, as it clearly relates to derivative instruments. Interest rate risk is the risk (variability in value) borne by an interest-bearing asset due to variability of interest rates.

B. Correct. Transaction risk is not an example given by AC 815, as it generally does not relate to the objectives and strategies for using derivatives or the overall related risk exposures.

C. Incorrect. Credit risk is identified as an example of a risk that may be included in the disclosure. Credit risk is the level of probability that a debtor will not meet its repayment obligations.

D. Incorrect. Equity price risk is one of the risks identified by ASC 815. Equity price risk is the risk that one's investments will depreciate because of stock market dynamics causing one to lose money.