Balance Sheet: Reporting Assets

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All numerical values in this course are examples subject to change. The current values may vary and may not be valid in the present economic environment.

Course Description

This course discusses generally accepted accounting principles (GAAP) for reporting assets on the balance sheet. It includes a discussion of accounts and loans receivable, inventory, prepaid expenses, fixed assets, capitalized interest, exchange of assets, impairment of assets, involuntary conversion, intangibles, and transfer of financial assets. Promulgated GAAP for current assets is provided in ASC 210-10-45-1 through 45-3, *Balance Sheet: Overall*. Current assets have a life of one year or the normal operating cycle of the business, whichever is greater. The accounting policies and any restrictions on current assets must be disclosed.

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

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Chapter 1:

Cash and Receivables

Learning Objectives:

After completing this chapter, you should be able to:

- Recognize how to properly account for and classify assets.
- Indicate how cash and related items are reported.
- Recognize receivables and how to correctly factor and assign them.
- Identify correct disclosure requirements for receivables.

Assets are recorded at the price paid plus normal incidental costs necessary to bring that asset into existing use and location. Examples of incidental costs include installation, freight, insurance, tooling, testing, instruction, flooring, and taxes. As a general rule, costs incurred before an asset is put into use for the first time is capitalized to the asset. If an asset is bought in exchange for the issuance of stock, the asset is recorded at the fair value of the stock issued. If the fair value is not known, such as in the case of a closely held company, the asset is presented at its appraised value. If an asset is acquired because of the incurrence of long-term debt, the asset is recorded at the present (discounted) value of future payments.

EXAMPLE

Equipment is bought in exchange for making ten $30,000 payments at an interest rate of 10%. The asset should be recorded at:

$$\$30{,}000 \times 6.145 = \$184{,}350$$

*Factor using the present value of an ordinary annuity table for $n = 10$, $i = 10\%$.

The asset is recorded at the principal amount excluding the interest payments.

Some assets are recorded at net realizable value, which equals the amount of cash expected to be obtained for them in the ordinary course of business less any direct costs associated with their conversion to cash.

Cash

Cash includes money, available cash funds on deposit, and bank drafts. Petty cash is typically presented with other cash accounts.

Note: Bank overdrafts are presented under current liabilities, typically accounts payable. Bank overdrafts are usually not offset against the cash account. However, offsetting is allowed for two or more accounts at the same bank.

Note: Certificates of deposit and similar types of deposit are classified as temporary investments rather than cash because they contain restrictions or penalties if cashed in before maturity. However, cash restricted as to withdrawal or use for other than current operations will not be presented as a current asset.

Cash *restricted* for specified purposes may be segregated and may be presented as a current asset if it is the basis to pay a current liability. If not, the restricted cash will be presented under noncurrent assets. Further, cash may be presented as a noncurrent asset if it is to be used to pay long-term debt, or if the cash is to be used to buy or construct a noncurrent asset.

The amount of cash constituting a compensating balance has to be segregated and presented under noncurrent assets if the related debt is noncurrent. If, however, the debt is current, the compensating balance may be shown separately as a current asset.

The cash surrender value of life insurance policies is classified under noncurrent investments unless the policy will be cashed in within one year from the balance sheet date.

Any restrictions or commitments on cash must be disclosed. Compensating balance requirements must be noted.

Footnote disclosure is required of off-balance-sheet risk of loss as applied to cash, such as possible theft of cash in an unsecured location or high crime area. Such disclosure would be required of a company keeping more than $100,000 in a bank account and therefore having off-balance-sheet risk, because amounts on deposits exceeding $100,000 are not insured by the Federal Deposit Insurance Corporation.

Exhibit 1 summarizes the classification of cash-related items.

EXHIBIT 1

CLASSIFICATION OF CASH-RELATED ITEMS

Classification of Cash, Cash Equivalents, and Noncash Items		
Item	Classification	Comment
Cash	Cash	If unrestricted, report as cash. If restricted, identify and classify as current and noncurrent assets.
Petty cash and change funds	Cash	Report as cash.
Short-term paper	Cash equivalents	Investments with maturity of less than 3 months, often combined with cash.
Short-term paper	Temporary investments	Investments with maturity of 3 to 12 months.
Postdated checks and IOU's	Receivables	Assumed to be collectible.
Travel advances	Receivables	Assumed to be collected from employees or deducted from their salaries.
Postage on hand (as stamps or in postage meters)	Prepaid expenses	May also be classified as office supplies inventory.
Bank overdrafts	Current liability	If right of offset exists, reduce cash.
Compensating balances	Cash separately classified as a deposit maintained as compensating balance	Classify as current or noncurrent in the balance sheet. Disclose separately in notes details of the arrangement.

Receivables

Receivables may consist of accounts receivable, notes receivable, trade acceptances, travel advances and loans receivable. Postdated checks and IOUs are classified as receivables.

Nontrade receivables include advances to officers and employees, advances to subsidiaries or affiliated companies, receivables from stockholders, third-party instruments, deposits owed the company (e.g., deposits to cover product damages or guarantees of performance), interest and dividends receivable, and claims against others (e.g., insurance recoveries, tax refunds, returned items, damaged goods in transit by carrier). Nontrade receivables should be segregated from trade receivables in the balance sheet. **Note:** ARB No. 43, chapter 1A, covers receivables from officers, employees, or affiliated companies.

Unearned discounts (excluding for cost or volume), finance charges, and interest included in the face of receivables should be subtracted therefrom to determine net receivables.

Accounts Receivable

Accounts receivable are presented in the balance sheet at net realizable value. Net realizable value equals the gross receivable less the allowance for bad debts. Bad debts may be recognized under the allowance method or direct write-off method. The *allowance method* recognizes bad debt expense in the year of sale. Under the allowance method, uncollectible accounts are estimated in two ways. One emphasizes asset valuation, the other income measurement. The method that emphasizes asset valuation is based on an aging of the receivables to determine the balance in the allowance for uncollectible accounts. Bad debt expense is the amount necessary to adjust the allowance account to this estimated balance. The method emphasizing the income statement calculates bad debt expense as a percentage of sales. A company may estimate bad debt percentage based on several factors, such as past experience, the experience of other companies in the industry, or current economic conditions. The allowance method is the only one required in financial reporting. The write-off of an uncollectible account results in a credit to accounts receivable and a debit to the allowance for uncollectible accounts. It does not affect expense or the net amount of accounts receivable. When an account receivable is written off, both accounts receivable and the allowance for uncollectible accounts are decreased. When an account previously written off is collected, the account must be reinstated by increasing both accounts receivable and the allowance. The account receivable is then decreased by the amount of cash collected.

The *direct write-off* method records bad debt expense only when a customer's balance is uncollectible. This method is **not allowed** for financial reporting purposes because it does not match expenses against sales in the year of sale. However, the direct write-off method is required for tax reporting purposes.

An accrual should also be made in the year of sale for estimated returns and allowances due to product deficiency. Collection expenses may be accrued by debiting collection expenses and crediting allowance for collection expenses. An allowance for trade discounts should also be provided. The allowance account is a contra to gross accounts receivable to determine net accounts receivable.

EXAMPLE

If a company sells on terms of 4/15, net 30, and 30% of its customers take advantage of the discount on sales of $90,000, the allowance for discounts will be $1,080 ($90,000 × .30 × .04).

EXAMPLE

Harris Company presents the following data related to its accounts receivable for 2X13:

Accounts receivable, 1/1/2X13	$325,000
Credit sales	1,350,000
Sales returns	37,500
Accounts written off	20,000
Collections from customers	1,075,000

Gross accounts receivable equals $542,500, computed as follows:

Accounts receivable—1/1/2X13	$325,000
Credit sales	1,350,000
Sales returns	(37,500)
Accounts written off	(20,000)
Customer collections	(1,075,000)
Total	$ 542,500

EXAMPLE

Mavis Company's allowance for bad debts has a credit balance of $48,000 at December 31, 2X11. During 2X12, the company wrote off customer accounts of $192,000. The aging of accounts receivable shows that a $200,000 allowance account is needed at December 31, 2X13.

Bad debts for 2X13 should be $344,000, computed as follows:

Allowance—12/31/2X11	$ 48,000
Accounts written off in 2X12	(192,000)
Debit balance before year-end adjustment	$ (144,000)
Desired credit balance (based on aging)	200,000
Year-end adjustment (increase in expense)	$ 344,000

EXAMPLE

Erlach Company computed its net value of accounts receivable at December 31, 2X13 as $162,500 based on aging the receivable. Additional information for 2X13 follows:

Allowance for bad debts—1/1/2X13	$ 15,000
Uncollectible accounts written off	9,000
Uncollectible accounts recovered	1,000
Accounts receivable—12/31/2X13	175,000

Bad debts for 2X13 will be $5,500, computed as follows:

Allowance—1/1/2X13	$ 15,000
Accounts written off	(9,000)
Recovery of accounts written off	1,000
Balance before adjustment	7,000
Desired allowance balance ($175,000 - $162,500)	12,500
Bad debts	$ 5,500

The *pledging* of accounts receivable involves using accounts receivable as *security* for a loan. The company retains title to the receivable but must disclose the pledging agreement in the footnotes. The agreement usually stipulates that as collections are received they must be used to reduce the loan. The pledged accounts receivable must be identified as such in the current asset section. The related debt must be identified as being collateralized by the pledged receivable. Customers whose accounts have been pledged are usually not informed of it. They continue to mail their payments to the company.

An *assignment* of account receivable involves using the receivable as collateral for a loan. Typically, less than the face value of the receivable (e.g., 80%) will be advanced to the borrower by the lender, depending on the credit worthiness of the borrower and the quality of the customer base. Accounts receivable that are assigned are presented in the current asset section and are required to be disclosed as such. The assignment of accounts receivable usually involves both a finance charge and interest on the note. Prepaid finance charges are deferred and amortized over the period of the agreement.

EXAMPLE

Levsee Company assigns $1,000,000 of its accounts receivable to Levine Bank as collateral for a loan of $800,000 made by the bank on January 1. The loan agreement provides that Levsee's credit customers will not be notified of the arrangement and the company will continue to collect payments on account as usual. Levine Bank charges a finance charge of 2% of the accounts receivable assigned and Levsee is required to pay 10% interest on the amount borrowed. The bank requires that collections on the accounts receivable that were assigned and interest payments on the outstanding debt be remitted monthly.

The following are the entries made by Levsee Company:

Issuance of the note for the loan of $800,000:

Cash	780,000	
Finance expense (2% × $1,000,000)	20,000	
Notes payable		800,000

Sales discounts and sales returns for the month of January were $1,000 and $2,000, respectively:

Sales discounts	1,000	
Sales returns	2,000	
Accounts receivable		3,000

Collections of accounts receivable net of discounts and returns for the month of January amounted to $500,000:

Cash	500,000	
Accounts receivable		500,000

Remitted collections on accounts receivable plus interest owed on note to Levine Bank for the month of January are as follows:

Notes payable	500,000	
Interest expense	6,667 (800,000 × 10% × 1/12)	
Cash		506,667
During February, $25,000 was written off as uncollectible:		
Allowance for doubtful accounts	25,000	
Accounts receivable		25,000

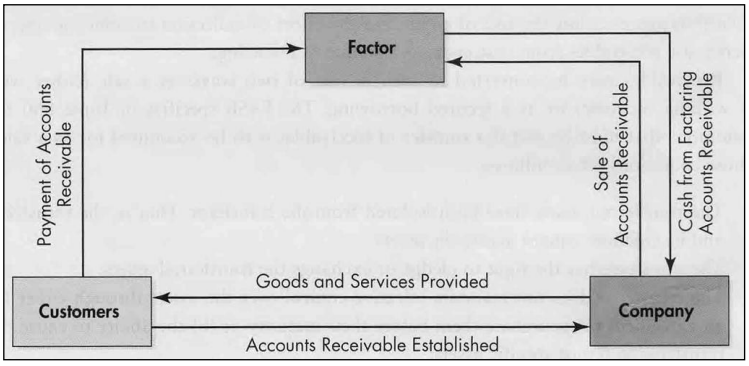
Remaining collections of receivables net of uncollectible accounts amounted to $472,000 for February. The balance of the note payable plus accrued interest for the month was remitted to Levine Bank by Levsee Company:

Cash	472,000	
Accounts receivable		472,000
Note payable	300,000	
Interest expense	2,500 (300,000 × 10% × 1/12)	
Cash		302,500

In a *factoring* arrangement, accounts receivable are, in effect, sold to a financial institution (factor). Title is transferred. Notification is usually made to customers, and remissions are made directly to the factor. Factoring is accomplished usually without recourse, meaning the risk of uncollectibility of the customer's account resides in the lender (factor). Interest is based on how long it is expected to take the factor to collect on customer balances. A fee is also assessed based on expected bad debts. The factor usually does the billing and collection.

The flow of activities involved in factoring is presented in Exhibit 2.

EXHIBIT 2
FLOW OF ACTIVITIES INVOLVED IN FACTORING



The difference between the factored receivable and the amount received constitutes a gain or loss as follows:

Cash
Loss (or gain)
    Accounts receivable

EXAMPLE

ABC Company sells its receivable without recourse to a factor. The total face value of the accounts receivable is $100,000. There is a 4% allowance provided. The interest rate is 12% and is to apply to a 60-day period before collection is expected. A 2% fee is provided for expected uncollectible balances. An 8% holdback is stipulated for expected customer returns of merchandise. The amount of merchandise actually returned was $3,000. The remaining holdback will be paid by the factor after the return privilege period expires. The journal entries for this factoring arrangement follow:

Cash	88,000	
Allowance for bad debts ($100,000 × .04)	4,000	
Interest expense ($100,000 × .12 × 60/360)	2,000	
Factoring fee ($100,000 × .02)	2,000	
Factor's holdback receivable ($100,000 × .08)	8,000	
Bad debts expense		4,000
Accounts receivable		100,000

Note: As an alternative, $4,000 may be charged to a loss on sale of receivable account based on the total interest and factoring charges.

Sales returns and allowances	3,000	
Factor's holdback receivable		3,000
Cash*	5,000	
Factor's holdback receivable		5,000

* When the return privilege period expires, the remaining holdback is due the borrower amounting to $5,000 ($8,000 - $3,000).

Footnote disclosure for accounts receivable includes:

- Receivables arising from major sources such as trade, officers, and employees.
- Year-end receivable balance and amounts received by the transferor during the period.
- Receivables that have been billed or unbilled.
- Loss contingencies on receivables.
- Collateralized or pledged receivables.
- Significant concentration of credit risk arising from receivables.
- Related-party receivables.
- Losses on receivables after year-end but before the financial statements are issued.

Note that in **Accounting Standards Update (ASU)** No. 2011-02 (April 2011) (ASC 310, *Receivables*), *A Creditor's Determination of Whether a Restructuring Is a Troubled Debt Restructuring*, in appraising if a restructuring is of troubled debt, the creditor must conclude that both the restructuring is a concession and the debtor is having financial problems.

Notes Receivable

A note receivable may be discounted at the bank to obtain the proceeds before the maturity date. The amount of cash (proceeds) received by the holder when the note is discounted equals the face value of the note plus interest income to maturity to obtain the maturity value less the discount based on the maturity value. The bank discount equals the maturity value of the note multiplied by the discount rate for the time period the note will be held by the bank. If the note is discounted with recourse, the company is contingently liable if the note is not paid. The discounted notes receivable account is a contra to notes receivable.

EXAMPLE

A $10,000, six-month note having a 12% interest rate is discounted at the bank after being held for two months. The bank discount rate is 15%. The cash received is:

Principal	$10,000
Interest ($10,000 × 6/12 × .12)	600
Maturity value	$10,600
Bank discount ($10,600 × 4/12 × .15)	530
Proceeds	$10,070

The journal entry is as follows:

Cash	10,070	
Notes receivable discounted		10,000
Interest income		70

EXAMPLE

Blake Company bought from David Company a $10,000, 8%, five-year note involving five equal annual year-end payments of $2,505. The note was discounted at 9% to Blake. At the purchase date, the note's present value was $9,743. Interest income earned over the life of the note will be $2,783, computed as follows:

Total cash receipts $2,505 × 5	$12,525
Less: acquisition cost of note	9,743

Interest revenue over life of note	$ 2,782

An installment note receivable should *not* be offset against a related bank debt in a note monetization situation.

A note received in payment for common stock issued should usually be deducted in the stockholders' equity section of the balance sheet.

Footnote disclosure for notes receivable include the amount of notes receivable discounted, description of the notes, face amount of the notes, and interest rate on the notes.

The assets sections of Colton Corporation's balance sheet in Exhibit 3 show many of the disclosures required for receivables.

EXHIBIT 3
DISCLOSURE OF RECEIVABLES

COLTON CORPORATION **BALANCE SHEET (PARTIAL)** **AS OF DECEMBER 31, 2010**		
Current assets		
Cash and cash equivalents		$ 1,870,250
Accounts and notes receivable (Note 2)	$10,509,673	
Less: Allowance for doubtful accounts	500,226	
	10,009,447	
Advances to subsidiaries due 9/30/11	2,090,000	
Federal income taxes refundable	146,704	
Dividends and interest receivable	75,500	
Other receivables and claims (including debit balances in accounts payable)	174,620	12,496,271
Total current assets		14,366,521
Noncurrent receivables		
Notes receivable from officers and key employees		376,090
Claims receivable (litigation settlement to be collected over four years)		585,000

Note 2: Accounts and Notes Receivable. In November 2010, the Company arranged with a finance company to refinance a part of its indebtedness. The loan is evidenced by a 9% note payable. The note is payable on demand and is secured by substantially all the accounts and notes receivable.

According to **Accounting Standards Update (ASU)** No. 2010-18 (April 2010) (ASC 310, *Receivables*), *Effect of a Loan Modification When the Loan Is Part of a Pool That Is Accounted for as a Single Asset*, it is possible that a purchased loan may have poor credit quality. An acquired asset that has similar risk attributes (e.g., credit risk) may be treated as a pool, which is considered an accounting unit. Pooled

loans do not involve allocation of the purchase discount to the specific loans; one pool rate applies to all the loans. The loan pool is evaluated for any impairment.

In some cases, modification of a loan may be considered a reworking of troubled debt. A loan modification for a pool does not constitute a loan removal from the pool, even when the loan restructuring is deemed troubled debt. Note that a troubled debt restructuring does not apply to a modification of a worker contract or lease modification (ASC 310-40-15-11).

In determining whether a loan impairment exists, anticipated future cash flows should be taken into account. In addition, the cost of purchased assets should be allocated based on fair market value at the time of acquisition (ASC 310-30-15-6).

If a loan is refinanced, except for a troubled debt restructuring, that loan is not considered a new loan (ASC 310-30-35-13).

A loan is only taken out of a pool if it is written-off or if assets are obtained in exchange for the loan. A removal of a loan should be at book value (ASC 310-30-40-1).

Loans Receivable

ASC 310-20-05-2, *Receivables: Nonrefundable Fees and Other Costs*, is applicable to both the incremental direct costs incurred in originating a loan and internally incurred costs that are directly related to loan or loan commitment activity. Loan origination fees are netted with the related loan origination costs and are accounted for as follows:

- For loans held for resale, the net cost is deferred and recognized at the time the loan is sold.
- For loans held for investment purposes, the net cost is deferred and amortized over the term of the loan by the interest method.
- Loan commitment fees are initially deferred and recognized in earnings as follows:
- If the commitment is exercised, the fee is recognized over the term of the loan by the interest method.
- If the commitment expires without exercise, the fee is recognized at the expiration date.
- If, based on past experience, exercise of the commitment is remote, the fee is amortized over the term of the commitment by the straight-line method.

Impairment of Loans

ASC 310-10-35-13, *Receivables: Overall*, is the primary authoritative guideline for recognizing impaired loans. A loan is a contractual right to receive cash either on demand or at a fixed or determinable date. Loans include accounts receivable and notes only if their term is longer than one year. If it is probable (likely to occur) that some or all of the principal or interest will not be collected, the loan is considered impaired. Any loss on an impaired loan should be recognized immediately by debiting bad debt expense and crediting the valuation allowance. Creditors may exercise their judgment and use their normal review procedures in determining the probability of collection.

Determining the Value of an Impaired Loan

If a loan is considered impaired, the loss is the difference between the investment in loan and the present value of the future cash flows discounted at the loan's effective interest rate. The investment in loan will generally be the principal and the accrued interest. Future cash flows should be determined using reasonable and supportable assumptions and projections. The discount rate will generally be the effective interest used at the time the loan was originally made. As a practical matter, the loan's value may be determined using the market price of the loan, if available. The loan's value may also be determined using the fair value of the collateral, less estimated costs to sell, if the loan is collateralized and the collateral is expected to be the sole source of repayment.

EXAMPLE

On December 31, 2X10, Debtor Inc. issues a five-year, $100,000 note bearing a 10% interest, payable annually, to Creditor Inc. The market interest rate for such loans is 12%. The present value of the principal, $100,000 discounted at 12% for five years, is $56,742. The present value of the interest payments of $10,000 (10% of $100,000) per year for five years discounted at 12% is $36,048. Therefore, the present value of the loan is $92,790. Discount on notes receivable is $7,210, and it will be amortized using the effective interest method. Creditor Inc. will record the note as follows:

Notes receivable	100,000	
Discount on notes receivable		7,210
Cash		92,790

The following table shows the amortization of the discount and the increase in the carrying amount of the note:

Year	*Interest Income*	*Cash Received*	*Discount Amortization*	*Discount Remaining*	*Carrying Amount*
12/31/X10				7,210	92,790
12/31/X11	11,135	10,000	1,135	6,075	93,925
12/31/X12	11,271	10,000	1,271	4,804	95,196
12/31/X13	11,424	10,000	1,424	3,380	96,620
12/31/X14	11,594	10,000	1,594	1,786	92,214
12/31/1X5	11,786	10,000	1,786	0	100,000

On December 31, 2X12, Creditor Inc. determines that it is probable that Debtor Inc. will only be able to repay interest of $8,000 per year (instead of $10,000 per year) and $70,000 (instead of $100,000) of the principal at maturity. This constitutes a loan impairment, and a loss should be recorded immediately. The present value of future cash flows should be discounted for three years at the historical effective interest rate of 12%. The present value of $70,000 discounted at 12% for three years is $49,824, and the present value of interest payments of $8,000 discounted at 12% for three years is $19,215. The total present value of future cash flows is $69,039:

Carrying amount of investment in loan on 12/31/X12	$95,196
Present value of future cash flows from loan	69,039
Loss due to impairment	$26,157

The entry to record the loss is as follows:

Bad debt expense	26,157	
Allowance for doubtful accounts		26,157

Evaluating Loan Collectibility

A loan is considered impaired if it is probable that the creditor will be unable to collect the entire principal and interest. The definition of *probable* is consistent with the definition given in ASC 450-20-25-2, *Contingencies: Loss Contingencies*. *Probable* does not mean certainty or virtual certainty; it means only that the impairment is likely to occur.

GAAP does not provide any specific guidance on how to determine collectibility of loans. Normal loan review procedures utilized by the creditor may be used to determine the collectibility of loans. The following items may be considered in making such judgments:

- The materiality of the loan amount.
- Previous loss experience.
- Reports of total loan amounts by borrower.
- Regulatory reports.
- Internal reports (e.g., "watch list," past due reports, loans to insiders, and listing of overdrafts).
- Borrower experiencing financial problems (e.g., operating losses, insufficient working capital, or inadequate cash flows).
- Borrower in unstable industry or country.
- Loans secured by collateral that is not readily marketable or is subject to decline in value.
- Compliance exception reports.
- Loan files containing missing or inadequate current financial data on borrowers or guarantors.

A loan is *not* considered impaired if:

- There is an insignificant delay or shortfall in collecting payments.
- The creditor expects, despite a delay, to collect the full amount plus accrued interest.

Income Recognition

Interest income from an impaired loan may be recognized using several methods, such as the cash basis method, the cost recovery method, or some combination. GAAP does not specifically recommend or prescribe a method for measuring, recording, or disclosing interest income from impaired loans (ASC 310-10-35-40). Use of some accounting methods, or the creditor charging off some part of the loan, may lead to recording an investment in an impaired loan at less than the present value of expected future cash flows. Hence, no additional impairment would need to be recognized.

Disclosure Requirements

The following information should be disclosed either in the body of the financial statements or in the notes that accompany them:

- The total investment in impaired loans as of the balance sheet date, including (1) the amount of investments for which there is a related valuation allowance, and (2) the amount of investments for which there is no valuation allowance.

- The creditor's policy for recognizing interest revenue on impaired loans, including the recording of cash receipts.
- For each period that is presented, the average recorded investment in impaired loans, the related interest income recognized while the loans were impaired, and, if possible, the amount of interest income recognized using the cash basis while the loans were impaired.

According to ASC 310-10-35-13, *Receivables: Overall*, the total allowance for credit losses related to impaired loans should be disclosed, including the beginning and ending valuation allowance account balance, additions charged to operations, direct write-downs charged against the valuation allowance, and recoveries of amounts previously charged off, if any.

In **Accounting Standards Update (ASU)** No. 2010-20 (July 2010), *Receivables* (ASC 310, *Receivables*), *Disclosures about the Credit Quality of Financing Receivables and the Allowance for Credit Losses*, the following should be disclosed:

- Allowance for credit losses from the beginning to year-end;
- Major purchases and sales of financing receivables;
- Nonaccrual of financing receivables;
- Investment in financing receivables;
- Aging of receivables;
- Receivables that have been impaired;
- Financing receivables that have defaulted;
- Troubled debt restructurings and their impact on the allowance for credit losses; and
- Indicators of credit quality.

Lending To or Financing the Activities of Others

ASC 310-10-35-47, *Receivables: Overall*, states that a company has a loan or trade receivable not held for sale when the expectation is to hold the loan or receivable for the foreseeable future or until the maturity date. These loans and receivables are to be reflected at the principal balance after adjustment for any charge-offs, bad debt provisions, deferred loan fees, and unamortized discounts or premiums for purchased loans.

A company must recognize credit losses attributable to off-balance-sheet exposures by debiting loss and crediting the associated liability.

A non-mortgaged loan held for sale should be presented at the lower of cost or fair value.

Footnote disclosure should be made of the company's accounting policies regarding its loans and trade receivables as well as its policies for credit losses and doubtful accounts, collateralized assets and their carrying values, accounting treatment for nonaccrual and past-due loans and trade receivables, foreclosed or repossessed assets, lease financings, classification policies, recognition method for interest income on loans and trade receivables, measurement and recognition for loan losses, and the gain or loss on the sale of loans and trade receivables.

Chapter 1 Review Questions

1. When the allowance method of recognizing uncollectible accounts is used, the entry to record the write-off of a specific account

A. Decreases both accounts receivable and the allowance for uncollectible accounts.

B. Decreases accounts receivable and increases the allowance for uncollectible accounts.

C. Increases the allowance for uncollectible accounts and decreases net income.

D. Decreases both accounts receivable and net income.

2. A method of estimating uncollectible accounts that emphasizes asset valuation rather than income measurement is the allowance method based on

A. Aging the receivables.

B. Direct write-offs.

C. Gross sales.

D. Credit sales minus returns and allowances.

3. When the allowance method of recognizing uncollectible accounts is used, the entries at the time of collection of a small account previously written off

A. Increase the allowance for uncollectible accounts.

B. Increase net income.

C. Decrease the allowance for uncollectible accounts.

D. Have no effect on the allowance for uncollectible accounts.

4. Wren Company had the following account balances at December 31: Accounts receivable = $900,000; Allowance for uncollectible accounts (before any provision for the year uncollectible accounts expense) = $16,000; Credit sales for the year = $1,750,000. Wren is considering the following methods of estimating uncollectible accounts expense for the year: Based on credit sales at 2%; based on accounts receivable at 5%. What amount should Wren charge to uncollectible accounts expense under each method?

A. $51,000 (percentage of credit sales), $45,000 (percentage of A/R)

B. $51,000 (percentage of credit sales), $29,000(percentage of A/R)

C. $35,000 (percentage of credit sales), $45,000 (percentage of A/R)

D. $35,000 (percentage of credit sales), $29,000 (percentage of A/R)

5. When the accounts receivable of a company are sold outright to a company that normally buys accounts receivable of other companies without recourse, the accounts receivable have been

A. Pledged.

B. Assigned.

C. Factored.

D. Collateralized.

Chapter 2:

Inventory

Learning Objectives:

After completing this chapter, you should be able to:

- Recognize how to account for inventories including different costs, consigned goods, financing product arrangements and lower of cost or market.
- Recognize how to computer inventory balances using the LIFO method.
- Identify proper disclosure requirements for inventory.

Inventory

The accounting, reporting, and disclosures associated with inventory are provided by various authoritative pronouncements, including ASC 250-10-55-1, *Accounting Changes and Error Corrections: Overall*, and ASC 330-10-55-3, *Inventory: Overall*.

Inventories consist of merchandise to be sold for a retailer. Inventories for a manufacturing company include raw materials, work in process (partially completed goods), finished goods, factory supplies, and ordinary maintenance parts.

Inventories are presented under current assets. However, if inventory consists of slow-moving items or excessive amounts that will not be sold within the normal operating cycle of the business, such excess amounts should be classified as noncurrent assets.

Inventory includes direct and indirect costs associated with preparing inventory for sale or use. Therefore, the cost of inventory to a retail store includes the purchase price, taxes paid, delivery charges, storage, and insurance. A manufacturer includes in its cost of inventory the direct materials (including the purchase price and freight-in), direct labor, and factory overhead (including factory utilities, rent, and insurance).

Inventory should be valued at the lower of cost or market value. The value of inventory may decrease because of being out-of-date, deteriorated, or damaged or because of price-level changes. Specialized inventory methods also exist including retail, retail lower of cost or market, retail last-in, first-out (LIFO), and dollar-value LIFO.

Footnote disclosure for inventory includes the valuation basis method, inventory categorization by major type, unusual losses, and inventory pledged or collateralized.

Purchases may be recorded gross or net of any cash discount, whether or not taken. If the discount is not taken, purchase discount lost is charged and is considered a financial expense.

ASC 845-10-05-8, *Nonmonetary Transactions: Overall*, addresses the situation in which one company both sells inventory to and buys inventory from another company in the same line of business. Such purchase and sale agreements may be under single or separate contracts.

Invoice issuance or the exchange of offsetting cash payments is not a consideration in deciding if two or more inventory transactions with the same counterparty should be considered as a single nonmonetary inventory transaction.

If an inventory transaction is legally contingent upon the performance of another inventory transaction with the same counterparty, the two are in contemplation of each other and should be combined.

An inventory transaction that does not legally depend on the performance of another inventory transaction is appraised based on the following factors to ascertain whether those transactions were made in contemplation of one another:

- The counterparties engaged in the inventory purchase and sale transactions at the same time.
- The contractual terms are at off-market rates at the inception of the agreements.
- The counterparties have a specific legal offset right applicable to the inventory purchase and sale transactions.
- There exists certainty of the occurrence of reciprocal inventory transactions.

As per ASC 845-10-05, *Nonmonetary Transactions: Overall*, nonmonetary exchange transactions of finished goods for work-in-process or raw materials in the same line of business are not exchange transactions that have commercial substance. However, a transaction is recognized at fair value if reasonable determination of fair value is possible and the transaction has commercial substance. All other nonmonetary exchanges of inventory in the same line of business (e.g., exchange of raw materials or work-in-process for raw materials, transfer of finished goods for finished goods) are accounted for at the carrying amount of the transferred inventory.

Purchase Contract Commitments

If a loss occurs on a purchase contract commitment, it should be recorded in the current year.

EXAMPLE

In 2X13, XYZ Company entered into a purchase contract to buy 10,000 units of product X at $2 per foot. At year-end, the price of the product declined to $1.50 per foot. The loss of $.50 per foot must be immediately recognized. The journal entry is:

Loss on purchase commitment-Unrealized	5,000	
Estimated liability resulting from purchase commitments loss		5,000

10,000 units × $.50 = $5,000

Freight Terms

If items are bought on terms of free-on-board (FOB) shipping point, title passes to the buyer when the goods are shipped by the seller. If items are bought on terms of FOB destination, title passes to the purchaser when the merchandise is received by the buyer.

EXAMPLE

Steve Company's inventory at December 31, 2X12, was $2,000,000 based on a physical count priced at cost and before any adjustments due to the following:

- Merchandise costing $60,000 was shipped FOB shipping point from the vendor on December 30, 2X12, but was received on January 4, 2X13.
- Goods in the shipping area were excluded from inventory even though shipment was not made until January 6, 2X13. The merchandise was billed to the customer FOB shipping point on December 29, 2X12. It had a cost of $140,000.

The amount of inventory to be reported on the December 31, 2X12, balance sheet is $2,200,000 ($2,000,000 + $60,000 + $140,000).

Consigned Goods

Consigned goods are included in the consignor's inventory in the balance sheet. The consignee holds the inventory as an agent to sell it on behalf of the consignor. When the consigned goods are sold, the sale is credited by the consignor. The consignee records commission revenue.

EXAMPLE

The following items were included in Travis Company's inventory account at December 31, 2X13:

Goods held on consignment by Travis	$10,000
Goods bought, in transit, shipped FOB shipping point	24,000
Goods out on consignment at sales price, including 30% markup on selling price	30,000

Travis Company's inventory account at December 31, 2X13, should be reduced by $19,000, computed as follows:

Goods held on consignment belonging to consignor	$10,000
Goods out on consignment $30,000 × .30	9,000*
Total reduction	$19,000

* The goods out on consignment are appropriately considered the property of Travis. However, they must be included in ending inventory at cost. Therefore, inventory should be reduced by the 30% markup on selling price.

The goods in transit bought FOB shipping point are correctly included in inventory.

Financing Product Arrangements

ASC 470-40-05-2, *Debt: Product Financing Arrangements*, states that a financing arrangement may be entered into for the sale and repurchase of inventory. Such an arrangement is reported as a borrowing, not a sale. In many situations, the product is kept on the company's (sponsor's) premises. In addition, a sponsor may guarantee the debt of the other company.

Typically, most of the financed product is ultimately used or sold by the sponsor. However, in some instances, minimal amounts of the product may be sold by the financing entity to other parties.

The company that provides financing to the sponsor is typically a creditor, nonbusiness entity, or trust. In a few cases, the financing entity may have been set up solely to furnish financing to the sponsor.

The sponsor should footnote the terms of the product financing arrangement.

Examples of the different forms of financing arrangements follow:

- The sponsor has another entity purchase the good on its behalf and agrees to repurchase the product from the other entity, usually over a specified time period at predetermined prices. The repurchase price includes the original selling price plus carrying and financing costs.
- The sponsor sells the product to another business and agrees to reacquire the product or one identical to it.
- The sponsor controls the distribution of the product that has been purchased by another company.
- A financing entity procures the funds remitted to the sponsor by borrowing from a financial institution, using the newly bought merchandise as collateral.

Regardless of the arrangement, the company (sponsor) either commits to repurchase the product at established prices over a designed time period or commits to resale prices to third parties. Although a financing institution may sell small amounts of the product, ASC 470-40-15-2 requires that most of the product be used or sold by the sponsor.

When the sponsor sells the good to the other company and in a related transaction commits to rebuy it, the sponsor records a liability when the proceeds are received. A sale should not be recorded and the product should be retained as inventory on the sponsor's books. (A product financing arrangement, irrespective of its legal form, is a financing deal, not a sale or purchase by the sponsor.)

When another company purchases the merchandise for the sponsor, inventory is debited and a liability is credited at the date of acquisition. The sponsor accrues the carrying and financing costs.

EXAMPLE

On January 1, 2X13, a sponsor borrows $50,000 from another and gives the inventory as collateral for the loan. The entry is:

Cash	50,000	
Liability		50,000

On December 31, 2X13, the sponsor pays back the other company. The collateralized inventory is returned. The interest rate is 10% and storage charges total $600. The entry is:

Liability	50,000	
Interest expense	500	
Holding charges	600	
Cash		51,100

EXAMPLE

A sponsor sells goods costing $5,000 to a purchaser for $6,000 and commits to repurchase the same goods for $6,200 in 60 days. The sponsor's journal entries are:

Cash (or receivable)	6,000	
Liability		6,000
Inventory under PFA*	5,000	
Inventory		5,000

* PFA = product financing arrangement.

EXAMPLE

A sponsor arranged for the purchaser to buy goods costing $6,000 from a third party and commits to purchase that inventory from the purchaser for $6,200 in 60 days. The sponsor's journal entry is:

Inventory under PFA	6,000	
Liability		6,000

EXAMPLE

A sponsor sells goods costing $900 to a purchaser for $1,000 and commits to a resale price of $1,200 to outside parties. The sponsor's journal entries are:

Cash (or receivable)	1,000	
Liability		1,000
Inventory under PFA	900	
Inventory		900

EXAMPLE

A sponsor arranges for a purchaser to buy inventory from an outside party for $850 and guarantees the resale price to outside parties for $1,000. The sponsor's journal entry is:

Inventory under PFA	850	
Liability		850

Financing Product Arrangements—Other Considerations

Product financing arrangements require the sponsor to purchase the product at specified prices that are not subject to change, except for fluctuations due to finance and holding costs. The payments that the other company will receive are established by the financing arrangement. These costs (which will be paid by sponsor) are required to be adjusted to cover all fluctuations in costs incurred by the other entity in purchasing and holding the product. This includes interest costs as well.

The requirement that the sponsor purchase the inventory at predetermined prices may be met if any of the following circumstances exists:

- The specified prices in the financing arrangement are in the form of resale price guarantees, under which the sponsor agrees to make up any difference between the specified price and resale price for products sold to third parties.
- The sponsor is not required to purchase the product but has an option that compels it to do so (e.g., the sponsor is penalized if it does not exercise the option to purchase the product).

- The sponsor is not required to purchase the product, but the other entity has an option whereby it can require the sponsor to purchase the product.

Lower of Cost-or-Market Value (LCM)

Inventories are recorded at their cost. However, if inventory declines in value below its original cost, a major departure from the historical cost principle occurs. Whatever the reason for a decline—obsolescence, price-level changes, or damaged goods—a company should write down the inventory to market to report this loss. A company abandons the historical cost principle when the future utility (revenue-producing ability) of the asset drops below its original cost. Companies therefore report inventories at the lower-of-cost-or-market at each reporting period.

Exhibit 4 shows how Whirlpool and Best Buy reported this information.

EXHIBIT 4
LOWER-OF-COST-OR-MARKET DISCLOSURES

Whirlpool

Notes to Financial Statements

The company reduces the carrying value to a lower-of-cost-or-market basis for those items that are excess, obsolete, or slow moving based on management's analysis of inventory levels and future sales forecasts.

Best Buy

Notes to Financial Statements

Merchandise inventories are recorded at the lower of average cost or market.

Inventory is valued at the lower of cost or market value applied on a total inventory basis, a category basis, or an individual basis. However, the individual basis is the most popular because it generates the most conservative valuation of inventory and is the only basis acceptable for tax purposes. Applying the LCM rule to each item of inventory produces the lowest valuation for each item and therefore the lowest and most conservative valuation for the total inventory. The reason is that aggregating items results in the inclusion of some items at amounts greater than LCM. For example, if item A (cost $2, market $1) and item B (cost $3, market $4) are aggregated for LCM purposes, the inventory valuation is $5. If the rule is applied separately to A and B, the LCM valuation is $4. Whichever approach is chosen, it must be applied consistently.

To compute the ending inventory under dollar-value LIFO, the ending inventory stated in year-end or current-year cost must be restated at base-year cost. The layers at base-year cost are computed using a LIFO flow assumption and then weighted (multiplied) by the relevant indexes to price the ending

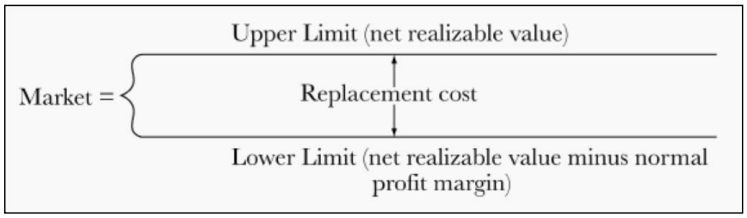
inventory. Consequently, dollar-value LIFO yields the lowest inventory valuation in a period of rising prices because it assumes the most recently acquired goods were the first to be sold.

In general, market is defined as replacement cost. Replacement cost is the cost to "replace" the product at a given point in time; for example, the cost to buy or manufacture the product at fiscal year-end. However, in computing the lower-of-cost-or-market valuation, replacement cost is constrained by an "upper limit" and "lower limit" (see the steps below).

The lower-of-cost-or-market valuation is computed by applying the following steps:

1. Market is initially viewed as the replacement cost of the product. (See Exhibit 5.)
2. Market cannot exceed the upper limit of net realizable value (net realizable value equals selling price less costs to complete and dispose) shown in Exhibit 3. If it does, the upper limit is selected.
3. Market cannot be less than the lower limit of net realizable value less a normal profit margin. If it is, the lower limit is selected.
4. Replacement cost is selected as market when it lies between the upper and lower limits.
5. After the market value is selected, compare it to cost. The lower of the two constitutes the lower-of-cost-or-market valuation.

EXHIBIT 5
DIAGRAM OF LOWER OF COST-OR- MARKET VALUE



EXAMPLE

Company ABC uses the lower of cost or market value method on an item-by-item basis. The valuation of each product follows:

Product	*Cost*	*Replacement*	*Upper Limit*	*Lower Limit*	*Answer*

		Cost			
M	$10	$14	$18	$12	$10
N	28	24	22	14	22
O	36	30	32	24	30
P	40	24	36	32	32
Q	12	10	24	14	12

With respect to Q, replacement cost is initially selected as the market value. However, since the replacement cost of $10 is below the lower limit, the lower limit of $14 is chosen as the market value. This value ($14) is then compared to cost and the lower of the two ($12) is selected as the final lower-of-cost-or-market valuation.

The write-down of inventory to market is charged to the cost of goods sold and credited to inventory. Alternatively, if it is desired to separately record the inventory holding loss, a loss account and inventory valuation account must be utilized. The loss account, known as "Loss to reduce inventory to lower of cost or market," is shown separately on the income statement, if material. An account, termed "Allowance to reduce inventory to market," is credited for the loss and is presented as a reduction to inventory (contra inventory account) on the balance sheet.

The lower-of-cost-or-market-value method is not used with LIFO because under LIFO current costs are matched against current revenue. Further, as a general rule, once a company uses LIFO for tax return preparation, it must use LIFO for book purposes (LIFO conformity rule).

Note: Inventories may be stated at market value when market value exceeds cost in exceptional cases, such as when:

- Immediate marketability exists at quoted prices and units are interchangeable (e.g., certain agricultural and mineral products, and precious metals).
- No basis exists for cost apportionment (e.g., meat packing industry), or there is some other inability to determine approximate costs.

In these cases, inventory is stated at market price less disposal costs. When inventory is valued above cost, revenue is recognized before sale. Appropriate disclosure should be made when inventory is carried above cost.

Retail Method

The *retail method* is followed by department stores and other large retail businesses that stock merchandise at retail selling price. The retail method may be used to estimate period-end inventory at cost by using a cost-to-retail (selling price) ratio. It may also be used for year-end financial statements when a physical count of inventory at retail is taken. In using the retail method, the ending inventory is determined at selling price and then converted to cost. Additionally, if a lower-of-cost-or-market valuation is needed, then net markups (markups less markup cancellations) would be added to the cost-to-retail ratio and net markdowns (markdowns less markdown cancellations) would be excluded. On the other hand, if a cost valuation is required both would be added to the cost-to-retail ratio. With the retail method, separate calculations may be made for departments within the business that experience substantially lower or higher profit margins. The retail method may be used based on FIFO, last-in, first-out (LIFO), or average cost methods.

Retail Lower-of-Average-Cost-or-Market-Value (Conventional Retail) Method

The *retail lower-of-cost-or-market-value method* is a variation of the retail method and is preferable to it because it results in a lower (conservative) inventory balance. In deriving the cost or retail ratio, markups are taken into account but not markdowns.

The following example shows the difference in calculation between the retail method and the retail lower of cost or market value method.

EXAMPLE

Retail Lower-of-Cost-or-Market-Value Method

		Cost	*Retail*
Inventory—1/1		$32,000	$ 60,000
Purchases		60,000	120,000
Purchase returns		(10,000)	(20,000)
Purchase discount		(4,000)	
Freight in		2,000	
Markups	$50,000		
Markup cancellations	(10,000)		
Net markups			40,000

Total	$80,000	$200,000	40%
Markdowns	$44,000		
Markdown cancellations	(4,000)		
Net markdowns		40,000	
Cost of goods available	$80,000	$160,000	50%
Deduct:			
Sales	$80,000		
Less:			
Sales returns	(10,000)		
Net sales		70,000	
Inventory—retail		$90,000	
Retail method:			
At cost 50% × $90,000		$45,000	
Retail lower-of-cost-or-market-method:			
At cost 40% × $90,000		$ 36,000	

Retail LIFO

In determining ending inventory, the approach of the retail method is practiced. Markups and markdowns are both considered in computing the cost-to-retail ratio. However, this ratio excludes beginning inventory. A decline in inventory during the period is subtracted from the most recently added layers in the inverse order of addition. Inventory is restated based on a retail price index.

EXAMPLE

Retail price indices follow: 2X10, 100; 2X11, 104; and 2X12, 110.

2X11	*Cost*	*Retail*	
Inventory—Jan. 1 (base inventory)	$ 80,000	$130,000	
Purchases	$240,000	$410,000	
Markups		10,000	
Markdowns		(20,000)	
Total (excluding beginning inventory)	$240,000	$400,000	60%

Total (including beginning inventory)	$320,000	$530,000		
Sales		389,600		
2X11 inventory—end at retail		$140,400		
Cost Basis				
2X11 inventory in terms of 2X10 prices				
$140,400 ÷ 1.04		$135,000		
2X10 base				
	$ 80,000	130,000	$130,000 × 1.04	$135,200
2X11 layer in 2X10 prices		$ 5,000		
2X11 layer in 2X11 prices		$ 5,200	$ 5,000 × 1.04	5,200
				$140,400
2X11 LIFO cost 60% × $5200	3,120			
2X12	$ 83,120	$140,400		
Inventory—Jan. 1	$ 83,120	$140,400		
Purchases	$260,400	$430,000		
Markups		20,000		
Markdowns		(30,000)		
Total (excluding beginning inventory)	$260,400	$420,000	62%	
Total (including beginning inventory)	$343,520	$560,400		
Sales		408,600		
2X12 inventory—end at retail		$151,800		
Cost Basis				
2X12 inventory in 2X10 prices				
$151,800 ÷ 1.10		$138,000		
2X10 base				
	$ 80,000	130,000	$130,000 × 1.10	$143,000
Excess over base year		$ 8,000		
2X11 layer in 2X12 prices 3,120		5,000	$ 5,000 × 1.10	5,500
2X12 layer in 2X10 prices		$ 3,000		
2X12 layer in 2X12 prices		3,300	$ 3,000 × 1.10	3,300
2X12 increase in 2X12 prices				
LIFO cost 62% × $3,300	2,046			
	$ 85,166	$ 151,800		$151,800

Dollar-value LIFO

Dollar-value LIFO accumulates inventoriable costs of similar (not identical) items. These items should be similar in the sense of being interchangeable, having similar uses, belonging to the same product line, or constituting the raw materials for a given product. Dollar-value LIFO determines changes in ending inventory in terms of dollars of constant purchasing power rather than units of physical inventory. This calculation uses a specific price index for each year. In order to apply dollar-value LIFO The company might calculate an index based on recent inventory purchases, use a general price level index published by the government, or use a price index prepared by an industry group.

Dollar-value LIFO extends the historical cost principle. This method groups (pools) dollars rather than units. Any decrease in inventory is subtracted from the last year.

Dollar-value LIFO has the following steps:

- Restate ending inventory in the current year into base dollars through use of a price index.
- Deduct the year-0 inventory in base dollars from the current year's inventory in base dollars.
- Multiply the incremental inventory in the current year in base dollars by the price index to derive the incremental inventory in current dollars.
- Derive the reportable inventory for the current year by adding to the year-0 inventory in base dollars the incremental inventory for the current year in current dollars.

EXAMPLE

At December 31, 2X13, Company ABC had a year-end inventory of $150,000, and the price index is 1.20. On January 1, 2X13, the base inventory was $110,000. The December 31, 2X13 inventory is calculated as follows:

12/31/2X13 inventory in base dollars ($150,000/1.2)	$125,000
1/1/2X13 beginning base inventory	110,000
2X13 increment in base dollars	$ 15,000
× Price index	× 1.2
Increment in current year dollars	$ 18,000
Inventory in base dollars	$110,000
Increment in current year dollars	18,000
Reportable inventory	$128,000

Base Stock Method

The base stock method presumes there will be a minimum base stock of inventory each year. Amounts over the base are costed under such inventory methods as FIFO, LIFO, average cost. A decrease in inventory is charged against earnings based on current cost. This method is not allowed on the tax return.

Costs Excluded from Inventory

Idle capacity costs, abnormal spoilage costs, double freight charges, and rehandling costs may require write-off immediately in the current year rather than allocation as a component of inventory valuation. Inventory cost does not include selling expenses. Selling expenses and interest incurred to finance inventory are period costs (charged directly against earnings as incurred). However, general and administrative expenses can be inventoried when they apply to manufacturing operations. It is a violation of GAAP to exclude all overhead from inventory costing. Thus, the direct costing method for inventory valuation is not accepted for financial reporting purposes.

ASC 330-10-30-7, *Inventory: Overall*, requires the immediate expensing of abnormal amounts of idle facility expense, freight, handling, and wasted material (spoilage). Further, allocation of fixed production overhead to the costs of conversion must be based on the normal capacity of the manufacturing facilities.

Standard Costing

Inventory may be valued based on standard cost as long as it is adjusted at the end of the accounting period to actual cost for financial reporting purposes. Proper disclosure is required. Insignificant variances between standard cost and actual cost are adjusted to cost of goods sold. Significant variances must be adjusted to a loss or gain account.

Relative Sales Value Method

Relative sales (or net realizable) values may be used as a basis to assign costs to inventory that is bought or produced in groups. This is because costs cannot be determined individually. The method is appropriate for allocating costs to joint products, real estate lots, and lump-sum purchases.

EXAMPLE

Joint products X and Y arise from the same manufacturing process up to the split-off point. The units produced for X and Y are 10,000 and 50,000, respectively. The selling prices per unit for X and Y are $3 and $1.20, respectively. The joint cost is $63,000. Allocated cost based on relative sales value follows:

Joint Product	*Units Produced*	*Selling Price*	*Sales Value*	*Allocated Cost*
X	10,000	$3.00	$30,000	$21,000
Y	50,000	1.20	60,000	42,000
Total				$63,000

EXAMPLE

XYZ Company bought inventory comprising four items of product for $115,000. At the time of purchase, the appraised values and relative percents were as follows:

		Percent
Product A	$ 11,000	.09
Product B	30,000	.25
Product C	50,000	.42
Product D	29,000	.24
Appraised value	$120,000	1.00

The costs of each type of product allocated based on relative appraisal value percentages were:

Product A .09 × $115,000	$ 10,350
Product B .25 × $115,000	28,750
Product C .42 × $115,000	48,300
Product D .24 × $115,000	27,600
Total cost allocation	$115,000

Stripping Costs

ASC 930-330-25, *Extractive Activities—Mining: Inventory*, states that stripping costs incurred by mining companies to find and remove overburden and waste materials are variable production costs and included in inventory.

Research and Development

According to ASC 730-10-25-2, *Research and Development: Overall*, supplies inventory used in R&D activities should be expensed unless there is an alternative future use or benefit. If the company uses its supplies or materials for R&D efforts, such inventory is charged as an R&D expense. On the other hand, if R&D activities result in salable inventory, inventory is debited and R&D expense credited. An exception is where supplies used in research and development activities are acquired as part of a business combination or an asset acquisition. In that instance, supplies are to be measured at fair value and be subject to annual impairment reviews.

Terminated Contracts

If inventory was bought for a particular customer who has since canceled the order, or the contract has been terminated for some other reason, the inventory should be written down to recognize a loss in value, if any.

Discontinued Operations

Inventories used in discontinued operations of a business must be written down to net realizable value. The write-down is included as an element of the gain or loss on disposal of the discontinued activity.

Taxes

For tax return preparation purposes, the tax law requires manufacturers to defer the following costs related to inventory: warehousing costs, accounting and data service costs, and such personnel costs as recruiting and hiring. The tax law requires large retailers and wholesalers (having gross receipts of $10 million or more) to defer the following costs related to inventory: handling and unloading charges, incidental purchasing costs, assembling and processing costs, and storage costs.

Deferred taxes arising from temporary differences result when inventory is accounted for differently on the books and the tax return.

Disclosures

The following should be footnoted with regard to inventory:

- The cost basis to determine inventory valuation.
- Inventory method used.
- Nature of any accounting changes (e.g., change in method) and their effect upon earnings.
- Inventory classification and categorization.
- Unusual losses associated with inventory, such as in applying the lower-of-cost-or-market-value rule and losses on purchase commitments.
- Excessive exposure to risk (e.g., health hazards, safety concerns, limited supply availability, labor strife).
- Significant or unusual financing arrangements relating to inventories may require note disclosure. Examples include transactions with related parties, product financing arrangements, firm purchase commitments, involuntary liquidation of LIFO inventories, and pledging of inventories as collateral.

Exhibits 6, 7, and 8 contain examples regarding disclosure of inventory methods, disclosure of trade practice in valuing inventories, and disclosure of different bases of valuation, respectively.

EXHIBIT 6

DISCLOSURE OF INVENTORY METHODS

Mumford of Wyoming

Note A: Significant Accounting Policies

Live feeder cattle and feed—last-in, first-out (LIFO) cost, which is below approximate market	$854,800
Live range cattle—lower of principally identified cost or market	$1,240,500
Live sheep and supplies—lower of first-in, first-out (FIFO) cost or market	$674,000
Dressed meat and by-products—principally at market less allowances for distribution and selling expenses	$362,630

EXHIBIT 7

DISCLOSURE OF TRADE PRACTICE IN VALUING INVENTORIES

Current assets Inventories (Note 2)	
Leaf tobacco	$ 563,424,000
Bulk whiskey	232,759,000
Other raw materials, supplies and work in process	238,906,000
Finished products	658,326,000
	$1,693,415,000

Note 2: Inventories

Inventories are priced at the lower of cost (average; first-in, first-out; and minor amounts at last-in, first-out) or market. In accordance with generally recognized trade practice, the leaf tobacco and bulk whiskey inventories are classified as current assets, although part of such inventories due to the duration of the aging process, ordinarily will not be sold within one year.

EXHIBIT 8

DISCLOSURE OF DIFFERENT BASES OF VALUATION

Newmont Gold Company

Current assets		
Noncurrent assets		$5,250,000
Note 2: Inventories		
Inventories included in current assets at December 31 were:		
Ore and in-process inventory	$11,303,000	
	$44,303,000	

Ore and in-process inventory and materials and supplies are stated at the lower of average cost or net realizable value. Gold bullion and gold precipitates are stated at market value, less a provision for estimated refining and delivery charges. Expenditures capitalized as ore and in-process inventory include labor, material and other production costs.

Noncurrent inventories are stated at the lower of average cost or net realizable value and represent ore in stockpiles anticipated to be processed in future years.

Prepaid Expenses

Prepaid expenses result from prepaying cash or incurring a liability. Prepaid expenses are presented under current assets even though they are not expected to be converted into cash, because the prepaid items would have required the use of current assets if they were not paid in advance. Prepaid expenses include insurance, rent, advertising, taxes, interest, and office supplies. However, prepayments that will not be charged to operations within one year or the normal operating cycle of the business, whichever is greater, are classified under deferred charges or other assets. Prepaid expenses expire and become expenses because of usage, events, or the passing of time. Prepaid expenses should be amortized on a ratable basis over their life.

Long-Term Investments

Long-term investments include securities of other companies (e.g., stocks, bonds, long-term notes, etc.); amounts held within special funds, such as sinking funds, and the cash surrender value of life insurance that will not be cashed in within the next year; and investments in tangible plant assets not being currently used in the operations of the entity (e.g., land held for future value appreciation).

Fair Value Option for Long-Term Notes Receivable

Under the fair value option, companies now have the option to record receivables as well as most other financial instruments in their accounts at the fair value. The FASB hoped that this option would increase the relevancy of the financial statements. If the fair value option is chosen for a given financial instrument, all unrealized holding gains and losses relating to that instrument must be recorded in net income until ownership of the instrument ceases. If a company chooses the fair value option for a financial instrument such as a long-term notes receivable, it is required to record any change in the fair value of the receivable each period as part of the entity's unrealized holding gains or losses. The latter is then reported as in the entity's net income. Each period, thereafter, the entity's notes receivable must be reevaluated for any change in fair value and that change must be recorded in net income.

Chapter 2 Review Questions

1. Estimates of price-level changes for specific inventories are required for which of the following inventory methods?

A. Retail LIFO.

B. Dollar-value LIFO.

C. Weighted-average cost.

D. Average cost retail.

2. The lower-of-cost-or-market (LCM) rule for inventories may be applied to total inventory, to groups of similar items, or to each item. Which application usually results in the lowest inventory amount?

A. All applications result in the same amount.

B. Total inventory.

C. Groups of similar items.

D. Separately to each item.

3. Jones Wholesalers stocks a changing variety of products. Which inventory costing method will be most likely to give Jones the lowest ending inventory when its product lines are subject to specific price increases?

A. Specific identification.

B. Weighted-average.

C. Dollar-value LIFO.

D. FIFO.

4. Walt Co. adopted the dollar-value LIFO inventory method as of January 1, when its inventory was valued at $500,000. Walt's entire inventory constitutes a single pool. Using a relevant price index of 1.10, Walt determined that its December 31 inventory was $577,500 at current-year cost, and $525,000 at base-year cost. What was Walt's dollar-value LIFO inventory at December 31?

A. $525,000

B. $527,500

C. $552,500

D. $577,500

Chapter 3:

Fixed Assets

Learning Objectives:

After completing this chapter, you should be able to:

- Recognize how to account for different fixed asset costs.
- Identify accounting procedures for fixed assets such as conversions, depletion and exchange/disposal of assets.
- Understand disclosure requirements for fixed assets.

Fixed Assets

GAAP for the accounting, reporting, and disclosures associated with fixed assets are included in the AICPA's Accounting Principles Board Opinion No. 6 (APB 6) dealing with depreciation; APB 12, paragraphs 4 and 5, *Disclosure of Depreciable Assets and Depreciation* (ASC 360-10-50); ARB 43, chapter 9A, *Depreciation and High Costs* (ASC 360-10-35-4).

When bought, a fixed asset is recorded at its fair value or the fair value of the consideration given, whichever is more clearly evident. The basis of accounting for a fixed asset is its cost, which includes expenditures necessary to put it into location or initially use it (e.g., delivery, installation, sales taxes, testing, breaking in, setup, assembling, trial runs, foundation). However, abnormal costs are not charged to the asset but rather expensed, such as for repairs of a fixed asset that was damaged during shipment because of mishandling.

If a fixed asset is to be disposed of, it should not be depreciated. Further, it should be recorded at the lower of its book value or net realizable value. Net realizable value equals fair value less costs to sell. Expected costs to sell beyond one year should be discounted. Idle or obsolete fixed assets should be written down and reclassified as other assets. The loss on the write-down is presented in the income statement.

Expenditures incurred that increase the capacity, life, or operating efficiency of a fixed asset are capitalized. However, insignificant expenditures are usually expensed as incurred.

Additions to an existing asset are deferred and depreciated over the shorter of the life of the addition or the life of the building. Rearrangement and reinstallation costs should be deferred if future benefit exists. Otherwise, they should be expensed. If fixed assets are obsolete, they should be written down to salvage value, recognizing a loss, and reclassified from property, plant, and equipment to other assets.

If two or more assets are purchased at a lump-sum price, cost is allocated to the assets based on their fair market values.

A liability secured by a fixed asset should not be offset.

A deposit on a fixed asset to be bought within one year is still presented as a long-term asset.

Exhibit 9 summarizes the accounting treatment for various costs incurred subsequent to the acquisition of capitalized assets.

EXHIBIT 9
ACCOUNTING TREATMENT FOR VARIOUS COSTS INCURRED
SUBSEQUENT TO THE ACQUISITION OF CAPITALIZED ASSETS

Type of Expenditure	**Normal Accounting Treatment**
Additions	Capitalize cost of addition to asset account.
Improvements and replacements	(a) **Carrying value known:** Remove cost of and accumulated depreciation on old asset, recognizing any gain or loss. Capitalize cost of improvement/replacement. (b) **Carrying value unknown:** 1. If the asset's useful life is extended, debit accumulated depreciation for cost of improvement/replacement. 2. If the quantity or quality of the asset's productivity is increased, capitalize cost of improvement/replacement to asset account.
Rearrangement and reinstallation	(a) If original installation cost is **known,** account for cost of rearrangement/ reinstallation as a replacement (carrying value known). (b) If original installation cost is **unknown** and rearrangement/reinstallation cost is **material** in amount and benefits future periods, capitalize as an asset. (c) If original installation cost is **unknown** and rearrangement/reinstallation cost **is not material or future benefit is questionable,** expense the cost when incurred.

Repairs	(a) **Ordinary:** Expense cost of repairs when incurred. (b) **Major:** As appropriate, treat as an addition, improvement, or replacement.

Self-Constructed Assets

Self-constructed assets are recorded at the *incremental or direct costs* to build (material, labor, and variable overhead) assuming idle capacity. Fixed overhead is excluded unless it increases because of the construction effort. However, self-constructed assets should not be recorded at an amount in excess of the outside cost.

EXAMPLE

Incremental costs to self-construct equipment are $80,000. The equipment could be bought from outside for $76,000. The journal entry is:

Equipment	76,000	
Loss	4,000	
Cash		80,000

EXAMPLE

Mavis Company uses its excess capacity to build its own machinery. The associated costs are direct material of $80,000, direct labor of $20,000, variable overhead of $10,000, and fixed overhead of $5,000. The cost of the self-constructed machine is $110,000. The fixed overhead is excluded because it is not affected by the construction effort.

Donation of Fixed Assets

As per ASC 958-605-15-4 and 25-2, a donated fixed asset should be recorded at its fair value by debiting fixed assets and crediting contribution revenue.

ASC 958 states that the company donating a nonmonetary asset recognizes an expense for the fair value of the donated asset. The difference between the book value and fair value of the donated asset represents a gain or loss.

EXAMPLE

Harris Company donates land costing $50,000 with a fair value of $70,000. The journal entry is:

Contribution expense	70,000	
Land		50,000
Gain on disposal of land		20,000

If a company pledges unconditionally to give an asset in the future, contribution expense and payable are accrued. This includes a conditional promise that has satisfied all conditions and, in effect, is now unconditional. However, if the pledge is conditional, an entry is not made until the asset is, in fact, transferred. If it is unclear whether the promise is conditional or unconditional, the former is presumed.

Writing up Fixed Assets

It is prohibited to write up fixed assets except for a discovery on a natural resource, in a business combination accounted for under the purchase method, or in a quasi-reorganization. If a natural resource is discovered on land, such as oil or coal, the appraised value is charged to the land account and then depleted using the units of production method.

Land and Land Improvements

The cost of land includes closing costs (e.g., attorney fees, recording fees), costs to get land in condition for intended use (e.g., grading, draining, filling), assumption of any liens or encumbrances on the property, and costs to remove an old structure to build on the property. For example, if an old building is torn down to make way for the construction of a new building, the demolition costs are charged to land.

Land held for investment, speculation, or a future plant site should be classified under investments rather than fixed assets.

Land held for resale by a real estate company is considered inventory.

Land improvements such as fences, driveways, sidewalks, and parking lots are deferred and depreciated over their useful lives.

Repairs

Ordinary repairs such as a tune-up for a delivery truck are expensed, because they only benefit less than one year.

Extraordinary repairs are deferred to the fixed asset because they benefit more than one year. An example is a new motor for a salesperson's automobile. Extraordinary repairs either increase the asset's life or make the asset more useful. Capital expenditures enhance the quality or quantity of services to be obtained from the asset.

ASC 360-10-45, *Property, Plant, and Equipment: Overall* (SOP AUG AIR-1, *Accounting for Planned Major Maintenance*), prohibits using the accrue-in-advance method to account for planned major maintenance activities in annual reports.

Environmental

As per ASC 410-30-25-16, *Asset Retirement and Environmental Obligations: Environmental Obligations*, the costs to prevent, contain, or remove environmental contamination should be expensed. **Exception:** These costs can be deferred to the fixed asset in the following cases:

- The costs increase the asset's life or capacity or improve its efficiency or safety.
- The costs are incurred to prepare the property for sale.

According to ASC 410-30-45-6, *Asset Retirement and Environmental Obligations: Environmental Obligations*, the cost to treat property bought having an asbestos problem should be deferred to the asset. Disclosure should be made of the asbestos problem and related costs to correct.

Depreciation

If a fixed asset is bought during the year, there will be fractional year depreciation requiring proration.

EXAMPLE

On April 1, 2X12, a fixed asset costing $30,000 with a salvage value of $2,000 and a life of 10 years is bought.

Depreciation for 2X12 using the sum-of-the-years'-digits method is:

$4/1/2X12\text{-}12/31/20 \times 2^{10}/_{55} \times \$\ 28{,}000 \times {}^{9}/_{12} = \$\ 3{,}818$

Depreciation for 2X13 using the sum-of-the-years'-digits method is:

1/1/2X13 - 3/31/2X13 10/55 × $28,000 × 3/12	$1,273
4/1/2X13 - 12/31/2X13 9/55 × $28,000 × 9/12	3,436
	$4,709

Depreciation expense for 2X13 under the double declining balance method is:

Year	*Computation*	*Depreciation*	*Book Value*
0			$30,000
4/1/2X12-12/31/2X12	9/12 × $30,000 × 20%	$4,500	25,500
2X13	$25,500 × 20%	5,100	20,400

It is also an acceptable GAAP to provide depreciation based on the *group and composite methods.* The group method is used for similar assets and the composite method is used for dissimilar assets, but both methods are usually accepted. One accumulated depreciation account applies for the whole group:

Depreciation rate = Depreciation/Gross cost

For the accounting period:

Depreciation expense = Depreciation rate × Gross cost

Depreciable life = Depreciable cost/Depreciation

When one asset in the group is sold, the entry is:

Cash (proceeds received)
Accumulated depreciation (balancing figure)
    Fixed asset (cost)

No gain or loss is recorded on the sale. The only occurrence in which a gain or loss would be recorded is when all of the assets are sold.

EXAMPLE

Computations under the composite depreciation method follow:

Asset	*Cost-*	*Salvage =*	*Depreciable Cost/Life =*		*Depreciation*
X	$ 50,000	$10,000	$ 40,000	10	$ 4,000
Y	80,000	4,000	76,000	5	15,200
Z	104,000	8,000	96,000	6	16,000
	$234,000	$22,000	$212,000		$35,200

Composite rate = Depreciation/Cost = $35,200/$234,000 = 15%

Composite life = Depreciable cost/Depreciation

= $212,000/$35,200 = 6 years

The entry to record depreciation is:

Depreciation expense	35,200	
Accumulated depreciation		35,200

The journal entry to sell asset X for $43,000 is:

Cash	43,000	
Accumulated depreciation	7,000	
Fixed asset		50,000

Accounting for the Impairment of Long-Lived Assets and Related Considerations

Historically, FASB Statement No. 144 (FAS-144) (ASC 360-10-05-4) was issued primarily because its predecessor statement, FASB Statement No. 121 (FAS-121), *Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of,* did not address the accounting and reporting for a segment of a business classified as a discontinued operation in APB Opinion No. 30, *Reporting the Results of Operations—Reporting the Effects of Disposal of a Segment of a Business, and Extraordinary, Unusual and Infrequently Occurring Events and Transactions* (ASC 220-20-45-10). Before FAS-144 (ASC 360-10-05-4), then, two accounting standards existed for the disposal of long-lived assets. In issuing FAS-144 (ASC 360-10-05-4), the FASB decided to unify the accounting and disclosure parameters into a single model predicated on the conceptual guidance for assets to be disposed of enumerated in FAS-121. In addition, FAS-144 (ASC 360-10-05-4) broadened the presentation of discontinued operations to include more disposal transactions and terminated the practice of recognizing future operating losses before they occur when measuring discontinued operations. By virtue of these and other changes, similar events relating to the disposal of long-lived assets are now accounted for in the same manner. Clearly, this represents an improvement in financial reporting. This chapter discusses the accounting, reporting, and disclosure requirements for impaired long-term assets to be held and used, and for long-lived assets to be disposed of as required by FAS-144 (ASC 360-10-05-4).

FAS-144 (ASC 360-10-05-4) continues FAS-121 requirements regarding recognition and measurement of impaired long-term assets. It is applicable to a company's long-term assets to be retained or to be disposed of, which include noncurrent prepaid assets, lessor long-term assets leased under operating leases, lessee capital leases, and deferred exploration costs under the successful efforts method. When a long-term asset is an element of a group of other assets and debt not covered by this Statement, the Statement is applicable to the group. In this case, the group is the accounting unit for the long-term asset. With regard to long-term assets to be kept and utilized, this *asset group* constitutes the minimum level for which identifiable cash flows are principally independent of the cash flows of other asset and liability groups. With regard to long-term assets to be disposed of, this *disposal group* refers to the net assets (assets less liabilities) to be disposed of in one transaction. An example of a liability associated with a disposed asset is a pollution-related obligation of a disposed plant.

ASC 360-10-05-4 does not relate to the following:

- Unproved natural resources accounted for under the successful efforts method.
- Financial instruments.
- A financial institution's long-lived customer connections, such as servicing assets.
- Deferred tax charges.
- Goodwill.

- Capitalized acquisition costs of policies.
- Unamortized intangible assets.

In addition, ASC 360-10-05-4 does not alter the accounting for individual assets not included in asset groups falling under this Statement, such as inventory, accounts receivable, accounts payable, and noncurrent debt.

Long-Term Assets to Be Retained and Used

ASC 360-10-05-4 provides GAAP for long-lived assets to be held and used with regard to recognizing and measuring impairment loss, recoverability tests including predicting future cash flows, asset grouping, and formulating the new cost basis. Fair value determination and reporting and disclosure requirements are also discussed.

Recognizing and measuring the impairment loss. An impairment is recognized when the book (carrying) value of a long-term asset group is greater than its fair value. The impairment loss is recorded only when the carrying value of the asset group is not recoverable. To ascertain recoverability, a threshold test, commonly referred to as the **recoverability test,** must first be failed before an impairment loss may be recognized. The recoverability test is failed (indicating a lack of recoverability) when the book value of the asset group is more than the total undiscounted (gross) cash flows expected to arise from the use and ultimate disposition of the asset group. If the recoverability test is failed, an impairment loss is recognized. The impairment loss is equal to the carrying value of the asset group less its fair value. This evaluation of carrying value should be made on the date of the recoverability test (which could be made on a date other than the end of a reporting period).

EXAMPLE

The following information is provided for an asset group:

Carrying value	$100,000,000
Fair value	80,000,000
Sum of the undiscounted cash flows	95,000,000

Because the carrying value is greater than the sum of the undiscounted cash flows, a nonrecoverability situation is evident. (The recoverability test is failed.) The impairment loss to be recognized equals $20,000,000 ($100,000,000 - $80,000,000). **Note:** The impairment loss is *not* $5,000,000 ($100,000,000 - $95,000,000) or $15,000,000 ($95,000,000-$80,000,000).

EXAMPLE

The following data is provided for another asset group:

Carrying value	$100,000,000
Fair value	106,000,000
Sum of the undiscounted cash flows	93,000,000

Because the carrying value is greater than the sum of the undiscounted cash flows, a nonrecoverability situation exists. However, an impairment loss is *not* recognized because the carrying value if the asset group is not greater than its fair value.

EXAMPLE

Carrying value	$100,000,000
Fair value	92,000,000
Sum of the undiscounted cash flows	104,000,000

Because carrying value does not exceed the sum of the undiscounted cash flows, a recoverability situation exists (the recoverability test is passed). As such, no impairment loss is recognized.

Recoverability test. A recoverability test must be made when it is deemed that the carrying value of the asset group may lack recoverability. The following may be indicative of such a situation:

- An operating or cash flow loss for the reporting period occurs, coupled with either a past history of such losses or anticipated future losses for the asset group.
- There is a material negative development in how the asset group is being utilized.
- A major impairment occurs in the physical condition of the asset group.
- A probability of more than 50% exists that the asset group will be sold or disposed of much earlier than its expected useful life.

- The market value of the asset group drastically declines.
- The total costs incurred for the asset group (e.g., actual construction costs) far exceed the expected costs.
- A major business-related government or legal development could have a significant adverse effect on the value of the asset group. An example is new government regulations restricting the business use of the long-lived assets.

In performing a recoverability test, the CPA may need to appraise the existing depreciation method and estimates for property and plant and equipment as well as the amortization periods for intangibles.

A change in useful life arising from such evaluation should be taken into account in formulating the estimates of future cash flows used to test the asset group for recoverability. **Caution:** A change in the accounting method for an asset arising from this review can occur only after this test has been applied.

Asset grouping. To determine and record an impairment loss, the asset group should be based on the minimum level that identifiable cash flows are predominantly independent of the cash flows of other assets and liabilities. In a few situations, a long-lived asset may not have identifiable cash flows predominantly independent of the cash flows of other assets and liabilities and other asset groups. An example is the central administrative office of the business entity. In such a case, the long-term asset group should encompass all of the company's assets and liabilities.

Goodwill may be considered for impairment in the asset group only if the group is or includes a reporting unit. Thus, goodwill must be tested for impairment at the reporting unit level, and only after the other assets of the reporting unit have been tested for impairment based on other authoritative pronouncements. ASC 350-20-35, *Intangibles—Goodwill and Other: Goodwill*, requires that goodwill be tested for impairment at the reporting unit level, which is one level below an operating segment. It is prohibited that goodwill be part of a lower-level asset group that incorporates only a segment of a reporting unit. However, future cash flow projections used to test the recoverability of the lower-level asset group cannot be modified for the impact of the goodwill omission from the group.

With the exception of goodwill, the carrying values of net assets in the group not falling under the dictates of ASC 360-10-05-4 must be adjusted per relevant GAAP before testing for the recoverability of the asset group.

The impairment loss for the asset group should be proportionately allocated to the specific assets of the group, based on relative carrying values. However, a particular asset in the group cannot be reduced for an amount that will bring it below its fair value, provided such value is ascertainable without unreasonable effort and cost.

EXAMPLE

Travis Manufacturing Company is testing its plant with other assets for recoverability purposes as an asset group. This group includes long-lived assets W, X, Y, Z, inventory (at lower of cost or market value), and other current assets and liabilities not falling under ASC 360. The total carrying value of the asset group of $6,000,000 is not recoverable. The fair value of the asset group is $5,200,000. The impairment loss of $800,000 ($6,000,000 - $5,200,000) is allocated to the long-term assets of the group as follows:

Asset Group (Dollars in Thousands)	*Carrying Value*	*Proportionate Allocation Percentage*	*Allocated Impairment Loss*	*Adjusted Carrying Value*
Current assets	$1,700			$1,700
Liabilities	(400)			(400)
Long-lived assets:				
Asset W	1,400	30%	$(240)	1,160
Asset X	1,500	32%	(256)	1,244
Asset Y	1,200	25%	(200)	1,000
Asset Z	600	13%	(104)	496
Total long-lived assets	4,700	100%	(800)	3,900
Total	$6,000	100%	$(800)	$5,200

EXAMPLE

In the event that the fair value of a specific long-lived asset of the asset group is ascertainable without undue effort and cost, and the fair value is more than the adjusted carrying value of that particular asset after an impairment loss is initially allocated, the excess impairment loss initially allocated to that asset would be reallocated to the other long-lived assets of the group. Assume the fair value of asset Y is $1,030,000. The excess impairment loss of $30,000 ($1,030,000-$1,000,000) initially allocated to that asset (based on the adjusted carrying value of $1,000,000) is reallocated to the other long-lived assets of the group proportionately based on the adjusted carrying amounts of those assets as follows:

Long-lived Assets (Dollars in Thousands)	*Adjusted Carrying Value*	*Reallocation Proportionate Percentage*	*Reallocation of Excess Impairment Loss*	*Adjusted Carrying Value After*

				Reallocation
Asset W	$1,160	40%	$(12)	$1,148
Asset X	1,244	43%	(13)	1,231
Asset Z	496	17%	(5)	491
Subtotal	2,900	100%	(30)	2,870
Asset Y	1,000		30	1,030
Total	$3,900		$ 0	$3,900

Formulating the new cost basis. After the impairment loss is recorded, the adjusted carrying value becomes the new cost basis of the long-term asset. A later recovery in market value of the impaired asset cannot be recorded, because the cost of the asset will be recovered through its use and cannot be written up above its new cost basis. A written-down fixed (intangible) asset should be depreciated (amortized) based on its new cost basis over the period of benefit.

Projecting future cash flows to test the recoverability of a long-lived asset. The estimation of future cash flows for testing the recoverability of the asset group represents the net cash flows directly related to, and resulting from, the utilization and ultimate disposition of the asset group. Interest expense is excluded from this calculation. In cash flow estimation, the company should take into account its reasonable assumptions and evidence about how the asset group will be used. If alternative steps to recover the carrying value of an asset group are being thought of, or there is a range of projected cash flows tied to a likely considered action, the business must take into account the probability of possible outcomes. In this regard, a probability-weighted method should be used in assessing the likelihood of potential results. This approach is explained in the following example. A range of possible projected cash flows take into account future sales price, quantity sold, volume produced, and production costs. Varying scenarios are considered. Management assessments should take into account the probabilities of the best, worst, and most likely courses of action.

EXAMPLE

At December 31, 2X13, a production plant having a carrying value of $100,000,000 is being evaluated for recoverability. The two alternative action strategies for recovering the carrying value of the plant are to sell in either three years or at the end of its remaining useful life of 12 years. Cash flows applicable to the production plant are clearly identifiable from cash flows of other assets. The following information shows the range and probability of possible estimated cash flows expected to result from the use and eventual disposition of the facility:

Course of Action: Sell in 3 Years (in Millions)				
Projected Cash Flow (Use)	*Projected Cash Flow (Disposition)*	*Estimated Cash Flow*	*Probability*	*Probability-Weighted Cash Flows*
$15	$65	$80	25%	$20
20	65	85	60%	51
25	65	90	15%	13.5
Total				$84.5

Course of Action: Sell in 12 Years (in Millions)				
Projected Cash Flow (Use)	*Projected Cash Flow (Disposition)*	*Estimated Cash Flow*	*Probability*	*Probability-Weighted Cash Flows*
$70	$2	$72	25%	$18
100	2	102	60%	61.2
120	2	122	15%	18.3
Total				$97.5

In deriving the future cash flows used to test the plant for recoverability, it is decided that there is a 70% likelihood that the plant will be sold after 3 years but a 30% probability that it will be used for its remaining estimated life of 12 years. The probability computation to derive the final estimated future cash flows considering the weighted-average probabilities of the alternative scenarios follows:

(Cash flows in Millions)			
Course of Action	*Probability-Weighted Cash Flows*	*Probability Assessment*	*Expected Cash Flows*
Sell in 3 Years	$84.5	70%	$59.2
Sell in 12 Years	97.5	30%	29.3
			88.5

The undiscounted future cash flows using probability analysis of the alternative scenarios is $88,500,000. Hence, the plant's carrying amount of $100,000,000 is not recoverable. **Note:**

The alternatives of selling or using an asset are not necessarily independent of each other. Consequently, a business might opt for the action resulting in a much higher future cash flow. If such is the case, management typically will use the probable future cash flows applicable just to that particular scenario. In the preceding example, that option would be to sell in 12 years because its probability-weighted cash flows of $97,500,000 is higher than the other option of selling in 3 years of $84,500,000.

The company must make cash flow projections to test recoverability of a long-term asset for its remaining useful life. The remaining useful life of an asset group is based on that of the *primary asset* in the group. The primary asset is defined as the major long-term depreciable tangible asset or the intangible asset being amortized that is the most important component asset in the asset group in terms of cash flow generation. (Thus, the primary asset cannot be land or an intangible asset not subject to amortization.) To determine which is the primary asset, consideration should be given to the following:

- The remaining useful life of the asset compared to other group assets.
- The replacement cost of the asset.
- The likelihood that other assets would have been bought without the primary asset.

If the primary asset does not have the longest remaining life of the group assets, future cash flow projections for the group are based on the assumed sale of the group at the end of the remaining useful life of the primary asset.

Projected cash flows applied to the recoverability test for long-term assets in use (including significantly constructed or developed assets) should be based on the current service potential of the asset on the test date. Service potential considers, in addition to remaining useful life, cash-flow-generating capacity and, if applicable, output potential. The estimates include cash flows related to future costs required to upkeep the existing service potential of the long-term asset, including any component parts. Excluded from the estimates of cash flows are future capital expenditures to increase service potential.

Future cash flow estimates for recoverability testing of long-lived assets being developed should depend on the anticipated service potential when development is significantly finished. Deferred interest costs for self-construction should be included. The capitalization period should end when the asset is substantially finished and available for use.

Determining fair value. The fair value of an asset (liability) is the purchase (settlement) price in an arm's-length transaction currently made. If an active market price does not exist, other reasonable valuation approaches may be used, such as the prices of similar assets. A present value approach is often suitable in fair value estimation. Two present value approaches are used to derive the fair value of an asset (liability). In the first method, expected present value is derived based on multiple cash flow scenarios applying to a range of potential outcomes and a risk-free interest rate. In the second

approach, one set of estimated cash flows and one interest rate based on the risk level are used in fair value determination. **Note:** The first technique is preferred when timing and amount uncertainties exist.

If individuals in the market make certain assumptions regarding fair value estimation, that should be incorporated. If not, the company should use its own assumptions.

Reporting and disclosure—impairment of long-lived assets. The impairment loss on a long-term asset held and used is a component of income from continuing operations before income taxes in the income statement. The following should be footnoted for an impairment loss:

- A description of the impaired asset along with impairment circumstances.
- The technique used to compute fair value.
- If not shown by itself in the income statement, the amount of the impairment loss and where such loss is included in the income statement.
- The business segment associated with the impaired asset.

Long-Lived Assets to Be Disposed of Other Than by Sale

A long-lived asset to be disposed of other than by sale may occur:

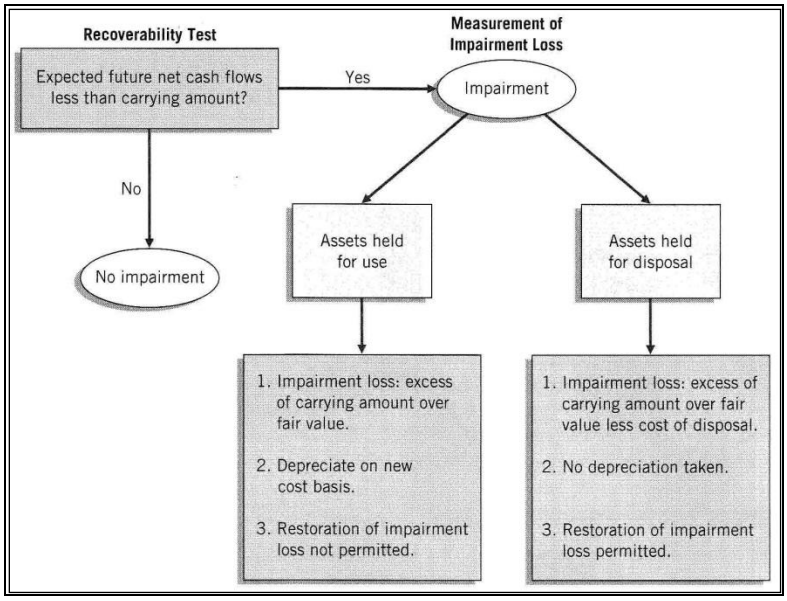
- As a result of abandonment;
- In exchange for a similar productive long-lived asset; or
- In a distribution to owners in the form of a spin-off.

Such assets should be classified as held and used until they are actually disposed of. A brief discussion of each of these scenarios follows.

An asset to be abandoned is considered disposed of when it ceases to be used. When a long-lived asset ceases to be used, the carrying value of the asset should equal its salvage value (if any). Only in unusual circumstances would the fair value of a long-lived asset to be abandoned be zero while it is being used. If a determination is made by an entity to abandon a long-lived asset before the end of its useful life, the entity must revise the asset's depreciation estimates to reflect its shortened useful life. In general, a long-lived asset that has been temporarily idled should not be accounted for as if abandoned. A disposal may also occur as a result of exchanging a long-lived asset for a similar productive long-lived asset or through a distribution to owners in a spin-off. While classified as held and used, if the asset (or group) is tested for recoverability, the estimates to be used should be based on the use of the asset for its remaining life, assuming that the disposal transaction will not occur. At time of disposal, if the carrying value of the asset (or group) exceeds its fair value, an impairment loss should be recognized in addition to any impairment losses required to be recognized while the asset is being held and used.

Exhibit 10 summarizes the key concepts in accounting for impairments.

EXHIBIT 10
GRAPHIC OF ACCOUNTING FOR IMPAIRMENTS



Capitalized Interest

In almost all cases, interest on borrowed funds is expensed. ASC 835-20-30, *Interest: Capitalization of Interest,* there is one exception in that interest on borrowings is deferred to the asset account and amortized when the following exist:

- Self-made assets for the company's own use.
- Assets for sale or lease built as discrete, individual projects. An example is real-estate development. **Note:** If land is being prepared for a specific use in the company, the cost of buying the land meets the test for capitalized interest.
- Assets bought for the entity's own use by agreements requiring a down payment or process payments.
- Assets received from a gift or grant in which donor restrictions exist.

Interest is *not* capitalized for:

- Assets in use or ready for use.
- Assets manufactured in large quantity or on a continual basis.
- Assets not in use and not being prepared for use.

Interest capitalization is based on the average accumulated expenditures for that asset. The interest rate used is generally based on the:

- Interest rate on the specific borrowing.
- Weighted-average interest rate for corporate debt.

Interest capitalization begins when the following commences:

- Interest is being incurred.
- Expenditures are being incurred.
- The asset is being made ready for use in terms of construction or when administrative and technical activities before construction are taking place. Consideration should also be given to costs related to labor problems and litigation.

The capitalization period ends when the asset is substantially finished and ready for use. When an asset has individual components, such as cooperative units, the capitalization period of interest costs related to one of the separate units ends when the particular unit is significantly complete and usable. Interest capitalization does not continue when construction ends, except for temporary and unexpected delays.

When the total asset must be completed to be useful, interest capitalization continues until the total asset is substantially complete. An example is a production facility where sequential manufacturing activities must occur.

Foreign currency losses on gains associated with debt funds denominated in a foreign currency may *not* be capitalized.

ASC 835-20-30, *Interest: Capitalization of Interest*, requires disclosure of both the interest capitalized and expensed. The following are tips in solving interest capitalization problems under ASC 835-20-30; they are fully demonstrated in a comprehensive problem following the enumeration:

- The amount of interest that is required to be capitalized under ASC 835-20-30 is the amount of interest that could have been avoided if the qualifying assets on which the interest is based had not been constructed. This amount of interest is sometimes referred to as **avoidable interest**. However, the amount of interest that is actually capitalized may never exceed the actual interest cost incurred by the entity for the period.

- To calculate the amount of interest cost that should be capitalized for a given accounting period, the average accumulated expenditures (AAE) for the period must be computed. These expenditures are weighed based on the time that they were incurred.

- In computing the amount of interest that should be capitalized, the following interest rates should be utilized in weighing the AAE:

    i. For the portion of the AAE represented by the specific borrowings incurred to acquire qualifying assets, the interest rates on those borrowings should be used to determine the amount of interest to be capitalized.

    ii. For the remaining portion of the AAE of the period (excess of AAE over the amount of specific borrowings), computation should be based on the average interest rate incurred on other borrowings of the entity that are outstanding during the period.

The average rate incurred on the other borrowings of the period are weighed based on the magnitude of the specific debt outstanding and their respective interest rates.

EXAMPLE

Assume X Company begins construction on a new building on January 1, 2X13. In addition, X obtained a $100,000 loan to finance the construction of the building on January 1, 2X13 at an annual interest rate of 10%. The company's other outstanding debt during 2X13 consists of two notes of $600,000 and $800,000 with interest rates of 11% and 14.5%, respectively. Expenditures that were made on the building project follow:

Expenditures	
January 1	$200,000
April 1	300,000
July 1	400,000
December 1	120,000

Step 1

The AAE is computed:

$ 200,000 × 12/12 (January-December)	=	$200,000
300,000 × 9/12 (April-December)	=	225,000
400,000 × 6/12 (July-December)	=	200,000

120,000 × 1/12 (December)	=	10,000
$1,020,000	AAE =	$635,000

Step 2

The average interest rate is computed based on the other outstanding debt of the entity other than specific borrowings:

$ 600,000× 11%	=	$ 66,000
800,000× 14.5%	=	116,000
$1,400,000		$182,000

Average interest rate: = $182,000/$1,400,000 = 13%

Step 3

The interest that could be avoided is computed based on the AAE:

AAE	*Interest That Should Be Capitalized (Based on AAE)*
$100,000(specific borrowing) × 10% =	$10,000
535,000($635,000 - 100,000) × 13% =	69,550
$635,000	$79,550

Step 4

Actual interest costs incurred during the year are computed:

$100,000 × 10% =	$ 10,000

600,000 × 11% =	66,000
800,000 × 14.5% =	116,000
Total	$192,000

Because the interest that could have been avoided if the building was not constructed (based on the AAE) is less than X's actual interest cost, the actual interest cost should be capitalized. Otherwise, the avoidable interest would be capitalized.

The journal entry is as follows:

Building ($200,000 + 300,000 + 400,000 + 120,000) + (79,550)	1,099,550	
Interest Expense	100,450	
Cash		1,200,000

ASC 835-20-15-5, *Interest: Capitalization of Interest*, provides that an investor's qualifying assets, for purposes of capitalizing interest, include equity funds, loans, and advances to investees accounted for by the equity method. Therefore, an investor has to capitalize interest costs on such qualifying assets if, during that period, the investee undergoes activities needed to begin its planned major operations and such activities include the use of funds to purchase qualifying assets for its operations. The investor does not capitalize any interest costs on or subsequent to the date the investor actually starts the planned major operations.

This Statement uses the term *investor* to mean both the parent and consolidated subsidiaries. Hence, all qualifying assets of a parent company and its consolidated subsidiaries are subject to the interest capitalization rule. However, there is no impact on the accounting or reporting of capitalized interest cost in an investee's separate financial statements.

Nonmonetary Transactions

Nonmonetary transactions involve the exchange of nonmonetary assets, such as inventories, plant and equipment, or property. In general, in a nonmonetary exchange, the asset received is recorded at the amount given up for it. Typically, this would include the fair value of the asset given up plus any cash paid. If cash is received, the amount of fair value given up is reduced. In addition, a gain or loss may be recognized on the transfer or disposal. It is the difference between the fair value and book value of the asset given up. Nonmonetary transactions may or may not have commercial substance. If a transaction

has commercial substance, a gain or loss on the disposal is fully recognized. However, if the transaction lacks commercial substance, then a loss is always recognized but a gain may or may not be recognized based on the circumstances. The latter situation is more complicated and is further discussed below. In general, in exchanges of nonmonetary assets, if the fair value of the asset given up is not reliably measureable, then the fair value of the asset received should be used. Also, if a transaction has commercial substance, fair value is used to measure the value of the asset acquired. ASC 845-10-50-1 requires note disclosure for a period in which an entity engages in one or more nonmonetary exchanges consisting of a description of: the nature of the transaction(s), the method to account for transferred assets, and the gain or loss on the exchanges. ASC 845-10-05-6 addresses nonmonetary transactions and covers the accounting for exchanges or distributions of fixed assets.

When Does a Transaction Have Commercial Substance?

Commercial substance occurs when future cash flows change as a result of an exchange of nonmonetary assets resulting in the modification of the economic positions of the two parties involved.

EXAMPLE

X Company exchanges machinery for Y Company's land. It is probable that the timing and dollar amount of cash flows from the land received will be materially different from the equipment's cash flows. Hence, both companies now have different economic positions indicating an exchange with commercial substance.

Even in the case of a similar exchange of assets (machine for a machine), there may arise a change in economic position. Assuming that the life of the machine received is much longer than that of the machine given up, the cash flows for the machines can be materially different. Consequently, there is commercial substance to the transaction and fair value should be used as the measurement basis for the machine received in the exchange. On the other hand, if the difference in cash flows is *not* significant, the company is still in the same economic position as before and a loss is recognized immediately. However, as noted above, a gain is recognized in only certain circumstances. Business entities must appraise the cash flow features of the assets exchanged to ascertain whether there is commercial substance to the transaction. In determining whether future cash flows change, it is required to either (1) analyze whether cash flows are affected from the exchange versus without it, or (2) determine whether the timing, amount, and risk of cash flows resulting from the asset received is different from the cash flows applicable with the asset given up. Another consideration is whether the entry-specific value of the asset received differs from that transferred, and whether the difference is significant relative to the fair values of the assets exchanged.

Commercial Substance Exists

The cost of a nonmonetary asset received in exchange for another nonmonetary asset is typically recorded at the fair value of the asset given up plus cash paid or less cash received. In addition, a gain or loss on the disposal of the asset is recognized. The fair value of the asset acquired should be used only if it is more clearly evident than the fair value of the asset given up.

EXAMPLE

XYZ Company exchanged autos plus cash for land. The autos have a fair value of $100,000. They cost $130,000 with accumulated depreciation of $50,000 so the book value is $80,000. Cash paid is $35,000. The cost of the land to XYZ equals:

Fair value of autos exchanged	$100,000
Cash paid	35,000
Cost of land	$135,000

The journal entry for the exchange transaction is:

Land	135,000	
Accumulated depreciation—autos	50,000	
Autos		130,000
Cash		35,000
Gain on disposal of autos		20,000

The gain equals the fair value of the autos less their book value as computed below:

Fair value of autos—given up		$100,000
Book value		
Cost of autos	$130,000	
Less: accumulated depreciation	50,000	80,000
Gain		$ 20,000

However, if the autos had a fair value of $78,000 rather than $100,000, there would be a loss recognized of $2,000 ($80,000 less $78,000). In either situation, the company is in a different economic position and thus the transaction has commercial substance. Hence, a gain or loss is recognized.

EXAMPLE

ABC Company exchanges its old equipment for new. The used equipment has a book value of $40,000 (cost $60,000 less accumulated depreciation of $20,000) with a fair value of $30,000. The list price of the new equipment is $80,000. The trade-in allowance is $45,000. Assuming that commercial substance exists, cash to be paid equals:

List price of new equipment	$80,000
Less: trade-in allowance	45,000
Cash to be paid	$35,000

The cost of the new equipment equals:

Fair value of old equipment—given up	$30,000
Cash due	35,000
Cost of new equipment	$65,000

The journal entry to record this exchange transaction is:

Equipment	65,000	
Accumulated depreciation	20,000	
Loss on disposal of equipment	10,000	
Equipment—old		60,000
Cash		35,000

The loss is computed as follows:

Fair value of old equipment	$30,000
Book value of old equipment	40,000
Loss	$10,000

Because assets should not be valued in excess of their cash equivalent price, the loss is recognized immediately instead of being added to the cost of the newly acquired asset.

Commercial Substance Does Not Exist

Exchanges *lacking* commercial substance may exist, as in the real estate industry. In real estate, for example, there may be a “swap” of real estate properties.

When a transaction lacks commercial substance, and a loss occurs, it is fully recognized. However, ASC-10-25-6 indicates a gain may be recognized in the following situations. First, if cash is received or paid, and the amount is significant, that is, 25% or more of the fair value of the exchange, then the entire transaction is considered to be monetized and is recorded at fair value (cash equivalent value). Thus, a gain would be fully recognized. Second, if the cash is less than 25%, then pro rater recognition of the gain (ASC 845-30-6) would be applied by the receiver of the cash (boot) only and the payer would not recognize any gain at all.

EXAMPLE

A Company and B Company both have undeveloped land for which the cash flows from the land properties to be exchanged are not materially different. Because of this, commercial substance does not exist. Both companies are in the same economic position after the swap as before. **Caution:** The asset given up may be impaired. In consequence, if the book value is more than fair value, an impairment should be recorded first provided the impairment test is satisfied.

SOLUTION

Avis Car Rental has mostly Chrysler automobiles. Avis contracts with Hertz Car Rental to exchange a group of Chrysler cars that are basically similar to Hertz's General Motors models. The Chrysler autos to be exchanged have a fair value of $320,000 and a book value of $270,000 (cost $300,000 less accumulated depreciation of $30,000). The General Motors cars have a fair value of $340,000. Avis pays $20,000 cash besides the Chrysler models exchanged. Avis has a total gain of $50,000 and pays cash of $20,000. Since $20,000/$20,000 + $320,000 is less than 25% (of the total amount paid), the gain is completely deferred. The calculations are shown below:

If the cash paid was 25% or more of the total, the entire gain would have been recognized. If, on the other hand, cash was received and it represented 25% or more of the total amount received, the entire gain would be recognized. If the cash amount received was less than 25% of the total, a pro rata amount of the gain would have been recognized.

Fair value of Chrysler autos exchanged	$320,000
Book value of Chrysler autos exchanged	270,000
Total unrecognized gain	$ 50,000

In this situation, Avis still has an auto fleet essentially of the same cash flows as the autos given up even though they are different models. Thus, the transaction does *not* have commercial substance. As indicated above, the total gain is deferred, and the basis for the GM cars is decreased. The computation of the basis of the GM automobiles follows:

Book value of Chrysler cars	$270,000
Cash paid	20,000
Basis of GM cars	290,000

An alternative calculation is:

Fair value of GM cars	$340,000
Less: unrecognized gain	50,000
Basis of GM cars	$290,000

Avis prepares the following journal entry to record this transaction:

Autos (GM)	290,000	
Accumulated depreciation	30,000	
Autos (Chrysler)		300,000
Cash		20,000

The gain that lowered the basis of the new autos will be recorded when those cars are sold to an external party. The reduced basis means higher net income because of lower depreciation expense in later years while the autos are held.

Note: If fair values for either the asset received or the asset given up are *not* reliably measureable, the book value of the asset received is recorded at the cost of the asset given up (plus cash paid). Another exception to the fair value rule is for an exchange that facilitates customer sales. An example is when a business exchanges its inventory for that of another business because its inventory has the same features as the other business (e.g., size, color), which makes the inventory items easier to sell to an outside customer. In this situation, the earnings process for the inventory is not deemed complete, and there will be *no* recognition of gain.

EXAMPLE

Because of a change in product processing, X Company trades its outdated machinery for new machinery that can be used in the new product processing. Because of the specialized nature of the machinery being exchanged, the fair values of the assets being exchanged are *not* reliably measurable. The old machinery has a book value of $19,000 (cost $32,000 less accumulated depreciation $13,000). The new machinery has a list price of $32,000. The trade-in allowance on the old machinery is $25,000. The cash to be paid equals:

List price of new machinery	$32,000
Less: trade-in allowance for used machinery	25,000
Cash to be paid	$ 7,000

The cost of the new machinery equals:

Cash to be paid	$ 7,000
Book value of old machinery—given up	19,000
Cost of new machinery	$26,000

The journal entry for the exchange follows:

Machinery—new	26,000	
Accumulated depreciation	13,000	
Machinery—old		32,000
Cash		7,000

Reminder: As was noted, if the fair values for either the asset obtained or relinquished are *not* reliably measurable, the business uses the book value of the old asset plus the cash paid as the cost basis for the new asset.

Exhibit 11 summarizes asset exchange situations and the related accounting.

EXHIBIT 11
ACCOUNTING FOR EXCHANGES

Type of Exchange	Accounting Guidance

Exchange has commercial substance.	Recognize gains and losses immediately.
Exchange lacks commercial substance—no cash received.	Defer gains; recognize losses immediately.
Exchange lacks commercial substance—cash received.	Recognize partial gain; recognize losses immediately.*

*If cash is 25% or more of the fair value of the exchange, recognize entire gain because earnings process is complete.

Accounting for Barter Transactions Involving Barter Credits

A barter transaction may relate to an exchange of goods, services or barter credits. With respect to the latter, for example, the asset inventory may be exchanged for barter credits.

ASC 845-10-05-10, *Nonmonetary Transactions: Overall*, stipulates that ASC 845-10-05-2, *Nonmonetary Transactions: Overall*, should be applied to an exchange of a nonmonetary asset for barter credits. With respect to barter credits, it is assumed that the fair value of the asset exchanged is more reliably measureable than the fair value of the barter credits received. As a result, the barter credits received should be recorded at the fair value of the asset exchanged. In ascertaining the fair value asset surrendered, it is assumed that the fair value of the asset does not exceed its book value.

In the event the book value of the asset surrendered is greater than its fair value, an impairment should be recorded before making the entry for the exchange. As an example, inventory being exchanged in a barter transaction should be reflected at the lower of cost or market value before recording the barter transaction.

At year-end, the recorded amount of barter credits should be appraised for impairment. An impairment loss is recognized when the book value of remaining barter credits is greater than its book value, or in the event it is probable that what is left of the barter credits will not be used.

Involuntary Conversion

An involuntary conversion of nonmonetary assets to monetary assets may arise because of fire, flood, theft, or condemnation. The destruction is followed by replacement of the involuntarily converted assets. An example is a building destroyed by a fire and the insurance proceeds received used to buy a similar building.

An *extraordinary gain or loss* is usually recorded for the difference between the insurance proceeds and the book value of the demolished asset. The new building is recorded at its purchase price.

Caution: A contingency arises if the old fixed asset is damaged in one year but the insurance recovery is not received until a later year. A contingent gain or loss is recognized in the period the old fixed asset was damaged. The gain or loss may be reflected for book and tax reporting in different years, resulting in a temporary difference mandating interperiod income tax allocation.

Asset Retirement Obligations

ASC 410-20-15-2, *Asset Retirement and Environmental Obligations: Asset Retirement Obligations*, requires companies to record a liability when a retirement obligation is incurred, provided fair value can be reasonably estimated even though it is years before the asset's planned retirement. The asset retirement obligation must be measured and recorded along with its associated asset retirement cost. However, the pronouncement's requirements do *not* apply to a liability arising from an asset's improper operation or functioning. An example is a machine resulting in environmental remediation. Asset retirements may be from sale, recycling, abandonment, or disposal. However, if the entity only has the intent or a plan for an asset disposal, that in and of itself does not require recognition.

ASC 410-20-15-2 applies to tangible long-term assets, including individual ones, similar asset groups, and major parts of assets. A company may be legally liable for the purchase, development, construction, or usual operation of the fixed asset.

A company must record the fair value of a liability for an asset retirement obligation as incurred. When the initial obligation arises, the company books a liability and defers the cost to the long-term asset for the same amount. After the initial recognition, the liability will change over time so the obligation must be accreted to its present value each year. The long-term asset's capitalized cost is depreciated over its useful life. When the liability is settled, the company either settles the liability for the amount recorded or will have a settlement gain or loss.

The asset retirement obligation is recorded at its fair value. In determining the fair value, the first valuation (provided it is ascertainable) is the amount by which the obligation could be settled in a current transaction in an *active market* between willing parties (not in a forced or liquidating transaction). Quoted market prices are the best basis for fair value measurement. If quoted market prices are unavailable, fair value can be estimated based on the best data available. Examples are the prices of similar liabilities and the use of present value techniques.

Fair value also can be estimated based on an alternative market value valuation, such as the discounted (present) value of projected future cash flows needed to pay the obligation. Projected cash flows are based on various assumptions, such as technology and the inflation rate. The present value technique is typically the best method to use when quoted market prices are unavailable.

The long-lived asset is charged with the asset retirement costs. Thus, the entry consists of debiting the long-term asset and crediting the asset retirement obligation. The asset is then depreciated, including the deferred (capitalized) retirement costs and interest attributable to the accretion of the asset retirement obligation arising from the passage of time.

There will be an increase in the carrying value of long-term assets because of the inclusion of asset retirement costs. Note that closure costs may be incurred during the asset's life. Further, carrying values of the assets will increase because assets bought with a related retirement obligation will be shown on a gross rather than net basis.

Any incremental liability incurred in a later year is an additional layer of the original obligation. Each layer is initially measured at fair value. For example, the contamination-related costs each year of a nuclear plant represents a separate layer for measurement and recognition.

In years after initial measurement, a business recognizes the yearly change in the asset retirement obligation owing to the passage of time, and modifications to the timing and original projection of undiscounted cash flows.

The entity may experience retirement obligations at the beginning of the asset's life or during its operating life. An example of the former is a production facility that experiences a removal obligation when it starts operations (e.g., oil production facility). An example of the latter is a mine that experiences a reclamation obligation gradually over its life as digging in the mine takes place over the years. Further, an asset retirement obligation may arise because of new governmental regulations or laws affecting the asset, such as newly enacted environmental restrictions.

The interest method of allocation is used to reflect changes in the asset retirement obligation. The interest rate is multiplied by the liability balance at the beginning of the year. The interest rate used is the one existing when the liability, or part thereof, was *initially* measured. The ensuing *accretion expense* increases the carrying value of the liability each year. Accretion expense is presented in the income statement as an operating item.

Changes in the timing or initial estimated undiscounted cash flows shall be recognized as an addition or reduction of the asset retirement obligation and the associated asset retirement cost deferred to the long-lived asset. Upward adjustments to the undiscounted estimated cash flows is discounted based on the *current* credit-adjusted risk-free rate. However, downward revisions are discounted using the rate existing when the initial liability was recognized. If asset retirement costs change because of revised estimated cash flows, we must adjust the asset retirement cost allocated to expense in the year(s) affected.

If an asset has an indeterminate service life, sufficient data to estimate a range of potential settlement dates for the obligation might not be available. In such cases, the liability is initially recognized in the year in which adequate information exists to estimate a range of potential settlement dates required to use a present value approach to estimate fair value.

Uncertainty of whether performance will be required does not defer recognizing a retirement obligation. Instead, that uncertainty is considered in the measurement of the fair value of the liability through assignment of probabilities to cash flows.

Any difference between the actual retirement costs and the asset retirement obligation is a gain or loss on retirement presented in the income statement.

ASC 410-20-25-4 through 25-6, *Asset Retirement and Environmental Obligations: Asset Retirement Obligations*, is an interpretation of ASC 410-20-25, *Asset Retirement and Environmental Obligations: Asset Retirement Obligations*. It provides that a company shall identify its asset retirement obligations. If the business has adequate data to reasonably estimate the fair value of an asset retirement obligation, it must record the liability as incurred. There exists reasonable estimation to an asset retirement obligation if (1) the fair value of the obligation is embodied in the asset's purchase price, (2) there is an active market for the obligation's transfer, or (3) adequate data is present to use an expected present value method. An expected present value method incorporates uncertainty regarding the timing and method of settlement into the fair value measurement. However, in some instances, adequate information about the timing and settlement method may not be available to reasonably approximate fair value.

A company would have sufficient information to use an expected present value method and, thus, an asset retirement obligation would be reasonably estimable when *either* of the following two conditions is present:

1. Data exists to reasonably estimate the settlement method, settlement date, and the probabilities with potential settlement methods and dates. The following may be considered in making these determinations: estimated life of asset, intent of management, prior practice, and industry policy.

2. The settlement method and date for the obligation has been stated by others, such as by contract, regulation, or law. In this case, the settlement method and date are known so the only uncertainty is whether performance will be required. Uncertainty concerning whether performance will be required does *not* defer asset retirement obligation recognition, because (a) there is a legal duty to conduct retirement activities and (b) it does not prevent reasonable estimation of fair value (this is because the only uncertainty is whether performance will be mandated).

Present Value Method

In using the present value method, the company must discount future estimated cash flows based on a credit-adjusted risk-free rate (e.g., rate on a zero-coupon U.S. Treasury Security) increased for the company's actual credit risk. After the final rate is decided on, the present value of cash flow calculation

must reflect any relevant probabilities, uncertainties, and assumptions. Multiple cash flow and probability scenarios are used based on a range of possible outcomes.

EXAMPLE

A long-lived asset's carrying cost includes a $250,000 original cost plus the capitalized retirement cost of $53,426, which equals the initial liability amount. The business entity incurs an obligation to retire the asset upon installation. The asset retirement obligation is based on the following data:

Original cost	$250,000
Credit-adjusted risk-free rate at date of installation	8%

Depreciation is based on the straight-line method for a five-year period of benefit.

The four possible alternative estimated market-based cash flows in year 5 to settle the obligation, along with their related probabilities are:

Scenario	*Projected Cash Outflow (Year 5)*	*Probability*
1	$100,000	30%
2	80,000	35%
3	70,000	15%
4	50,000	20%
Total probability		100%

The computation of the capitalized retirement cost of $53,426 follows:

Scenario	*Projected Cash Outflow (Year 5)*	*Probability*	*Weighting*
1	$100,000	30%	$30,000
2	80,000	35%	28,000
3	70,000	15%	10,500
4	50,000	20%	10,000
Expected cash outflow			$78,500
Present value for year 0 at 8%			$53,426*

[*] $78,500 × present value of $1 factor for n = 5, i = 8% $78,500 × .68058 = $53,426

The retirement entry for the long-term asset, based on the assumption that actual cash flows to settle the retirement liability are the same as those projected follows:

Accumulated depreciation	303,426	
Asset retirement liability	78,500	
Long-term asset		303,426
Cash		78,500

The annual accounting for the long-lived asset and the asset retirement obligation follows:

Computation of the Long-Term Asset and Obligation

Installment	*Asset*	*Accumulated Depreciation*	*Book Value*	*Liability*	*Net Balance Sheet*
Install	$303,426	-	$303,426	$53,426	$250,000
1	303,426	$60,685[a]	242,741	57,700[b]	185,041
2	303,426	121,370	182,056	62,316	119,740
3	303,426	182,055	121,371	67,301	54,070
4	303,426	242,740	60,686	72,685	(11,999)
5	303,426	303,426	0	78,500	(78,500)
Retirement	(303,426)	(303,426)			

[a] $303,426 divided by 5 years = $60,685

[b] $53,426 × 1.08 = $57,700

The depreciation expense and interest expense (accretion) follow:

Computation of Depreciation and Interest Expense

Year	*Depreciation*	*Interest Expense*	*Net Income Statement*
1	$60,685	$ 4,274[c]	$ 64,954

2	60,685	4,616	65,301
3	60,685	4,985	65,670
4	60,685	5,384	66,069
5	60,686	5,815	66,501
Total	$303,426	$25,074	$328,500

[c] $53,426 × 8% = $4,274

Asset Impairment. The carrying value of an asset being analyzed for impairment includes the deferred asset retirement costs. Projected future cash flows for the asset retirement obligation shall exclude the undiscounted cash flows used to test the asset for recoverability and the discounted cash flows used to derive the asset's fair value. If the fair value of the asset is based on a quoted market price and such price reflects the costs to retire the asset, the market price shall be increased by the fair value of the asset retirement obligation when measuring for impairment.

Disclosures

The following footnote disclosures are required:

- A description and valuation of legally restricted assets to settle the obligation.
- A description of both the asset retirement liability and the associated long-term asset.
- If the fair value of an asset retirement liability is not subject to reasonable estimation, that fact should be noted along with the reasons.
- Reconciliation of the asset retirement obligation balance for the year. This reconciliation shows the beginning and ending carrying values of the asset retirement obligation presenting separately the changes related to the liability incurred as well as settled in the current year, accretion expense, and adjustments made to projected cash flows.

The fair value of a conditional asset retirement obligation must be recognized before the event that either mandates or waives performance occurs. Further, a clear requirement that gives rise to an asset retirement debt coupled with a low likelihood of required performance still requires liability recognition.

Disclosure

The following should be footnoted in connection with fixed assets:

- Fixed assets by major category. Category may be in terms of nature or function.
- A description of depreciation method and estimates used.
- Fixed assets subject to pledges, liens, or other commitments.
- Fixed assets held to be disposed of and any anticipated losses. The reasons why such assets are to be disposed of should be provided. Disclosure includes expected disposal dates, carrying amounts of such assets, and business segments affected.
- Contracts to buy new fixed assets.
- Fixed assets that are fully depreciated but still in use.
- Idle fixed assets.
- Amount of capitalized interest.

Chapter 3 Review Questions

1. A machine with a 5-year estimated useful life and an estimated 10% salvage value was acquired on January 1, 2X10. On December 31, 2X13, accumulated depreciation using the sum-of-the-years' digits method is

A. (Original cost minus salvage value) multiplied by 1/15.

B. (Original cost minus salvage value) multiplied by 14/15.

C. Original cost multiplied by 14/15.

D. Original cost multiplied by 1/15.

2. A company has a long-lived asset with a carrying (book) value of $120,000, undiscounted future cash flows of $130,000, present value of expected future cash flows of $100,000, and a market value of $105,000. What amount of impairment loss should be reported?

A. $0
B. $5,000
C. $15,000
D. $20,000

3. An impairment loss on a long-lived asset (asset group) to be held and used is reported by a business enterprise in

A. Discontinued operations.

B. Extraordinary items.

C. Other comprehensive income (OCI).

D. Income from continuing operations.

4. According to ASC 835-20-30, *Interest: Capitalization of Interest*, the types of assets that qualify for interest capitalization are

A. Assets that are being used in the earning activities of the company.

B. Assets that are ready for their intended use in the activities of the company.

C. Assets that are constructed for the company's own use.

D. Inventories that are manufactured in large quantities on a continuing basis.

Chapter 4:

Natural Resources and Intangibles

Learning Objectives:

After completing this chapter, you should be able to:

- Recognize the accounting procedures for depletion of natural resources.
- Identify the procedures for amortizing intangible assets.
- Recognize the disclosure requirements for intangibles.

Natural Resources

Natural resources are wasting assets, such as petroleum, timber, and minerals. They are characterized as being subject to complete removal and being replaced only by an act of nature. Natural resources are subject to depletion. Depletion is the physical exhaustion of a natural resource from usage. It is a process of allocating the cost of the natural resource over its anticipated life and is similar to depreciation except that it relates to a natural resource instead of a fixed asset. The most common method of recording depletion for accounting purposes is the *units of production method.* An estimate is required of how much of the natural resource will be extracted in terms of tons, barrels, units, or other measure. The cost of the natural resource is divided by the total recoverable units to arrive at the depletion per unit. Depletion expense equals the units extracted for the year multiplied by the depletion per unit. A change in estimate requires the use of a new depletion rate per unit. Depletion expense is presented in the income statement; accumulated depletion reduces the cost of the natural resource in the noncurrent asset section of the balance sheet. In some cases, depletion is charged to inventory (or cost of sales). For example, if depletion on a coal mine equals $20,000, the entry would be to debit coal inventory (or cost of sales) for $20,000 and credit accumulated depletion (or land rights) for $20,000.

The basis on which depletion is computed is called the depletion base. The depletion base is generally made up of three components, consisting of the following:

1. *Acquisition cost of the depletable property* Property may be acquired in hope of finding natural resources or may already have been determined to have proved resources on it. Alternatively, the property may also be leased, with subsequent royalties being paid to the owner if resources are found on it.

2. *Exploration costs* When the rights to explore the property are secured (through acquisition or lease), exploration costs are incurred to determine the existence of natural resources. For most natural resources, the costs of exploration are expensed in the period in which they are incurred. However, for certain industries, such as oil-and gas-producing enterprises, certain specialized guidelines prevail. For example, oil and gas entities may choose between the successful efforts method or full cost method of accounting for exploration costs. In the successful efforts approach, only those exploratory costs related to successful wells are capitalized. Exploratory costs related to unsuccessful wells are expensed. In the full cost method, exploratory costs related to both successful wells and unsuccessful wells are capitalized as part of the depletion base.

3. *Development costs* These are the costs incurred in extracting the natural resource from the ground, making it ready for production or sale. Costs incurred on machinery and equipment that can be used for different wells or mines are generally not considered part of the depletable base and should be separately depreciated as they are utilized. On the other hand, intangible costs incurred on specific wells or mines which cannot be of benefit to any other should be considered part of that resource's depletion base. Such costs primarily include the costs incurred to dig, physically secure, and utilize the wells, mines, tunnels, shafts.

In summary, the components of the depletion base of a natural resource upon which depletion should be computed include (1) acquisition costs, (2) capitalized exploratory costs, and (3) development costs.

Note: After a depletable asset has been fully consumed, local, state, and federal laws may require that the company pay for any restoration costs that may be required so that the residual property that remains does not represent a detriment to the local area in which it is situated. Estimated restoration costs represent a negative salvage value that should be added to the components of the depletion base of the natural resource. The property's estimated salvage value should, of course, be subtracted from the depletion base in computing depletion expense.

EXAMPLE

In January 2X13, LevSe Company incurred costs of $3,500,000 in connection with the acquisition of a mineral mine. In addition, $200,000 of development costs were incurred in preparing the mine for production. It is estimated that 1,200,000 tons of ore will be removed from the mine over its useful life, at which point it is estimated that the company can sell the property for $250,000. After all the ore has been extracted, it is estimated that

it will cost the company $100,000 to restore it to an acceptable level as required by law. During 2X13, 30,000 tons of ore were extracted and sold. On its 2X13 income statement, what amount should LevSe report as depletion?

DEPLETION BASE	
Acquisition cost	$3,500,000
Development costs	200,000
Restoration costs—negative salvage value	100,000
Estimated salvage value	(250,000)
Depletion base	$3,550,000
2X13 production	30,000 tons
Depletion rate: $3,550,000/1,200,000 tons	$ 2.96/ton
Depletion—2X13 $2.96 × 30,000 tons	$ 88,800

The annual report of International Paper Company in Exhibit 12 shows an acceptable disclosure. It uses condensed balance sheet data supplemented with details and policies in notes to the financial statements.

EXHIBIT 12
DISCLOSURES FOR PROPERTY, PLANT, EQUIPMENT, AND NATURAL RESOURCES

International Paper Company		
Consolidated Balance Sheet		
In millions at December 31	2007	2006
Assets		
Total current assets	$ 6,735	$ 8,637
Plants, properties and equipment, net	10,141	8,993
Forestlands	770	259
Investments	1,276	641
Goodwill	3,650	2,929

Assets held for exchange (Note 5)		1,324
Deferred charges and other assets	1,587	1,251
Total assets	$24,159	$24,034

Note 1 (partial)

Plants, Properties and Equipment Plants, properties and equipment are stated at cost, less accumulated depreciation. Expenditures for betterments are capitalized, whereas normal repairs and maintenance are expensed as incurred. The units-of-production method of depreciation is used for major pulp and paper mills, and the straight-line method is used for other plants and equipment. Annual straight-line depreciation rates are, for buildings-2 1/2% to 8 1/2%, and for machinery and equipment-5% to 33%.

Forestlands At December 31, 2007, International Paper and its subsidiaries owned or managed about 300,000 acres of forestlands in the United States, approximately 250,000 acres in Brazil, and through licenses and forest management agreements, had harvesting rights on government-owned forestlands in Russia. Costs attributable to timber are charged against income as trees are cut. The rate charged is determined annually based on the relationship of incurred costs to estimated current merchantable volume.

Note 11 (partial)

Plants, properties and equipment by major classification were:

In millions at December 31	2007	2006
Pulp, paper and packaging facilities		
Mills	$18,579	$16,665
Packaging plants	5,205	5,093
Other plants, properties and equipment	1,262	1,285
Gross cost	25,046	23,043
Less: Accumulated depreciation	14,905	14,050
Plants, properties and equipment, net	$10,141	$ 8,993

Intangible Assets

Intangible assets have a life of one year or more and lack physical substance (e.g., goodwill) or reflect a right granted by the government (e.g., trademarks, copyrights) or by another company (e.g., license fee, franchise). Intangibles generally have a high degree of uncertainty concerning future benefits. Intangibles should be recorded at cost. Intangibles may be internally generated or they may be purchased. Intangibles acquired from others should be separately reported.

The cost at which intangibles are recorded depends on whether the intangible was developed internally or acquired from others. In general, expenses internally incurred to develop an identifiable intangible asset (e.g., patents, trademarks, and copyrights) should be expensed except for the direct costs of securing the intangible such as registration fees, attorney fees, design fees, etc. These are capitalized. Research and development costs, should be expensed when incurred except when arising from a business combination or asset purchase. Unidentifiable internally developed intangibles, such as goodwill, should not be recorded. Such an asset is recognized only if it is purchased from another entity.

When an intangible asset is acquired externally, it should be recorded at its cost at the date of acquisition. In an exchange transaction, cost is measured by the cash paid. Otherwise, the fair value of the more clearly evident of the consideration given or the asset acquired is the basis for measurement. The present value of payments on the liability incurred or the fair value of the stock issued may also be used to value externally acquired intangibles. When a group of assets is acquired, the identifiable intangible assets are allocated a part of the total cost based on the fair values of the individual assets in the group. The unidentifiable intangible assets, acquired as part of a group of assets, are valued at the excess of costs assigned to identifiable tangible and intangible assets, net of liabilities assumed.

EXAMPLE

Purchase price		$150,000
Fair value of assets acquired:		
Tangible assets		
Equipment	$ 20,000	
Land	80,000	
Identifiable intangible assets		
Copyrights	35,000	
Patents	40,000	
Total assets	175,000	
Less: liabilities assumed	(65,000)	110,000
Unidentifiable intangible assets		$ 40,000

In a business combination accounted for under the acquisition method ASC 805-20-30-1, the acquirer recognizes at fair value, the identifiable intangible assets acquired if they meet either the separability or contractual legal criterion. The separability criterion is met when the items are exchangeable and can be traded by the acquirer company. Examples include unpatented technology, customer lists, databases and trade secrets, including secret formulas. The contractual legal criterion relates to whether the holder obtains legal rights associated with the intangible. Examples meeting this criterion include trademarks, patents, construction permits, and licensing agreements.

As was noted, any costs to develop and maintain intangibles should generally be charged against earnings. For example, the costs incurred to develop a name (e.g., McDonald's) are expensed. Costs, such as legal costs associated with registering or successfully defending a patent, are capitalized. The costs of purchasing an externally developed patent should also be capitalized.

Patents are limited life intangibles which give the holder exclusive rights for a period of 20 years. It would, therefore, be inappropriate to amortize a patent for a period greater than 20 years. Copyrights are granted for the life of the creator plus 70 years. The useful life of copyrights is typically much shorter. Franchises and licenses are also limited life intangibles although it is possible for them to have indefinite lives. In general, limited life intangibles should be amortized over the shorter of their useful lives or legal lives. Trademarks and trade names have legal protection for a period of 10 years and may be renewed for an indefinite number of times. They are, therefore, considered to be indefinite life intangibles. Indefinite life intangibles have unlimited lives and should not be amortized. Organization costs, which include initial corporation, legal, and accounting fees that are incurred in connection with establishing an entity, are required to be expensed as incurred.

As per ASC 350-30-35-21, *Intangibles—Goodwill and Other: General Intangibles Other than Goodwill*, acquired or internally developed intangible assets having indefinite lives that have been separately recognized and are inseparable from each other owing to being operated as a single unit should be combined in one accounting unit when the impairment test is applied.

Companies must disclose information about how recognized intangible assets would aid financial statement users to determine how a company's ability to renew or extend an arrangement impacts the company's anticipated cash flows associated with the asset.

Disclosure should be made of the:

- Weighted-average period at acquisition or renewal before the next renewal or extension.
- Accounting policy for costs incurred to renew or extend an intangible asset's term.
- In the event renewal or extension costs are capitalized, the total cost incurred to renew or extend the term of a recognized intangible asset.

Goodwill

Goodwill is theoretically equal to the discounted value (present value) of future excess earnings of a company over other companies in the industry.

In purchasing a new business, a determination is needed of the estimated value of the goodwill. Two possible methods are:

- Capitalization of earnings.

- Capitalization of excess earnings.

EXAMPLE

The following data are provided for a company being considered for purchase:

Expected average annual earnings	$ 25,000
Expected fair value of net assets excluding goodwill	$180,000
Normal rate of return	10%

Goodwill is estimated as follows under the capitalization of earnings method:

Total asset value implied ($25,000/10%)	$250,000
Estimated fair value of assets	180,000
Estimated goodwill	$ 70,000

Assuming the same information, except that the capitalization of excess earnings method is used with a capitalization rate of 20%, goodwill is estimated at:

Expected average annual earnings	$25,000
Return on expected average assets ($180,000 × 10%)	18,000
Excess earnings	$ 7,000
Goodwill ($7,000/.20)	$35,000

EXAMPLE

The net worth of XYZ Company excluding goodwill is $600,000, and total profits for the last five years were $550,000. Included in the latter figure are extraordinary gains of $40,000 and nonrecurring losses of $30,000. A 15% return on net worth is considered normal for the industry. The capitalization of excess earnings is 30%. What is the estimated goodwill?

Profits for 5 years	$550,000
Less: extraordinary gains	(40,000)
Add: nonrecurring losses	30,000
Adjusted 5-year earnings	$540,000
Average earnings ($540,000/5 years)	$108,000

Normal earnings ($600,000 × .15)	90,000
Excess annual earnings	$ 18,000
Excess earnings capitalized at 30%: $18,000/.30 =	$ 60,000

Goodwill may be recorded in a business combination accounted for under the acquisition method (ASC 805-30-30). Goodwill is calculated as the excess of the fair consideration transferred (generally the purchase price) over the fair value of net assets acquired. When the fair value of net assets acquired exceeds the fair value of consideration transferred, a bargain purchase occurs. A gain on a bargain purchase is reported in the consolidated income statement.

The prior rules for business combinations (ASC 805-10-65), which are grandfathered for acquisitions closing on or before December 15, 2008, reported a bargain purchase as a proportional reduction to acquire noncurrent assets with any remainder treated as an extraordinary gain.

ASC 350, *Intangibles—Goodwill and Other*, relates to financial accounting and reporting for intangibles purchased individually or with a group of other assets but not to those bought in a business combination, because they are covered in ASC 805. These intangibles are initially measured and recorded at fair value. The optimal measure of fair value is quoted market prices in active markets. If such is not available, valuation may be based on multiples of revenue or profits or a similar performance measure, if appropriate. The pronouncement also provides GAAP to account and report goodwill and other intangibles subsequent to purchase. Goodwill and intangible assets with unlimited lives are not amortized but instead tested for impairment at least once a year. In the event there is no factor (e.g., legal, economic, regulatory, competition) that limits an intangible's useful life, such intangible is considered to have an indefinite life. Intangible assets having finite useful lives are amortized over their useful lives. However, the arbitrary limitation of 40 years no longer applies.

Goodwill for each reporting unit must be tested each year for impairment. A reporting unit is defined as an operating segment or one level below an operating segment. If certain events occur, more than one annual impairment test is required. An impairment test can be performed at any date, as long as it is consistently used each year. However, different reporting units may be tested for impairment at different dates.

There are two steps in applying the impairment test. The initial step is to determine whether there is *potential* impairment. The book value of the reporting unit (including goodwill) is compared to its fair value. No impairment exists if fair value exceeds book value. If this is the case, the second step is not undertaken. However, if the reporting unit's fair value is below its book value there is an impairment and step 2 must be followed.

EXAMPLE

Step 1

Book value	$150
Fair value	190

No impairment exists. Do *not* proceed to step 2.

EXAMPLE

Step 1

Book value	$190
Fair value	150

An impairment exists. Proceed to step 2.

In the second step, the amount of impairment, if any, is measured. A comparison is made between book value of goodwill to the *implied fair value of goodwill.* Implied fair value of goodwill may be obtained by comparing the fair value of the reporting unit to the book value of its net identifiable assets excluding goodwill. If the implied fair value of goodwill is more than book value, no impairment loss exists and no entry is made. However, if the implied fair value of goodwill is below book value of the entity's goodwill, an impairment loss must be recognized for the difference. After an impairment loss for goodwill is recorded, the downwardly adjusted book value becomes the intangible's new cost basis, which means the new accounting basis cannot be written up for a recovery in fair value.

EXAMPLE

Step 1

The fair value of the reporting entity's net assets is $6,100, and the carrying value is $6,300 (shown in the following figures). Because the fair value is below the carrying value, step 2 must be undertaken:

Current assets	$2,000
Fixed assets (net)	1,600

Goodwill	3,000
Current liabilities	100
Noncurrent liabilities	200

Net Assets = $2,000 + 1,600 + 3,000 - 100 200 = $6,300

Net identifiable assets less goodwill = $6,300 - 3,000 = $3,300

If the fair value of the reporting unit is $6,100, the implied value of goodwill is $2,800, derived as follows:

Fair value of reporting unit	$6,100
Less: net identifiable assets less goodwill	3,300
Implied value of goodwill	$2,800

EXAMPLE

Step 2

Book value of goodwill	$3,000
Implied fair value of goodwill	2,800

An impairment loss of $200 has to be recognized. The new adjusted cost basis is $2,800. If there is a recovery in fair value in a subsequent period above $2,800, it cannot be recorded.

EXAMPLE

Step 2

Book value of goodwill	$2,800
Implied fair value of goodwill	3,000

No impairment loss should be recorded.

If goodwill and another asset of a reporting unit are tested for impairment at the same time, the other asset shall be tested for impairment before goodwill.

Goodwill should be tested for impairment at least annually. For example, ASC 350-20-35-30 notes that if an event, circumstance, or occurrence results in a probability that would make it more likely than not

that a reporting unit's fair value would be below its book value, then the reporting unit should be tested for impairment between annual tests. Examples of such events follow:

- Unexpected actions by competitors.
- Serious lawsuits filed against the company or an adverse change in the business climate.
- Key senior executives quit.
- Anticipation that a reporting unit will be sold or disposed of.
- Recently issued government regulations or laws having a negative effect on the company.
- Applying the recoverability test of a major *asset group* within a reporting unit.
- Accounting for a goodwill impairment loss by a subsidiary that is part of a reporting unit. (Subsidiary goodwill is tested for impairment at the subsidiary level using the subsidiary's reporting unit.)

If only a part of goodwill is assigned to a business to be sold or disposed of, the remainder of the goodwill in the reporting unit must be tested for impairment using the adjusted carrying value.

Goodwill impairment losses are presented as a separate line item in the income statement.

In **Accounting Standards Update (ASU)** No. 2010-28 (December 2010), (ASC 350, *Intangibles-Goodwill and Other*), *When to Perform Step 2 of the Goodwill Impairment Test for Reporting Units with Zero or Negative Carrying Amounts,* goodwill of a reporting unit must be examined for impairment between annual tests if there is an occurrence or circumstance that would more likely than not reduce the fair market value of a reporting unit below its carrying value. The following are footnote disclosures for goodwill and other intangible assets:

- Amortization period and expected amortization expense for the next five years.
- Amount of any significant residual value.
- Amount of goodwill included in the gain or loss on disposal of all or a part of a reporting unit.
- Method in deriving fair value.
- The book values of intangible assets by major class for intangibles subject to amortization and separately for those not subject to amortization. An intangible asset class is a group of similar intangibles either based on their use in the company's operations or by their nature.
- Description of impaired intangible assets and the causes for such impairment.

- Information relating to the changes in the carrying values of goodwill over the year both in total and by reporting unit.
- Total amount of impairment losses and where presented in the income statement.

Internally generated costs to derive a patented product are expensed (e.g., research and development incurred in developing a new product). The patent account is charged for registration fees, legal fees in successfully defending the patent in court, and the cost of buying competing products. The patent account is amortized over its useful life not exceeding 20 years.

When an intangible asset is worthless, it should be written off as either a nonrecurring loss or extraordinary loss, depending on its nature and recurrence.

Leaseholds are rentals paid in advance and are amortized over the life of the lease.

Leasehold improvements are improvements to leased property and are amortized over the life of the property or of the lease, whichever is shorter. If a lease contains a renewal option, it is included in the life of the lease unless exercise of the option is uncertain, in which case it is ignored.

ASC 840-10-35-9, *Leases: Overall*, requires that leasehold improvements acquired in a business combination or purchase after a lease's inception are amortized over the *lesser* of the asset's useful life or the lease term that includes reasonably assured lease renewals as determined on the acquisition date of the leasehold improvement. However, leasehold improvements not considered at or near the beginning of a lease and placed in service a significant time period subsequent to the lease's inception are amortized over the *shorter* of the useful life of the asset or a term that includes required lease periods and renewals that are reasonably assured at the date the leasehold improvements are purchased.

Exhibit 13 presents acquisition costs of goodwill and other intangible assets.

EXHIBIT 13
ACQUISITION COSTS OF GOODWILL AND OTHER INTANGIBLE ASSETS

Patent	An exclusive right granted by a national government that enables an inventor to control the manufacture, sale, or use of an invention. In the United States, legal life is 20 years from patent application date.	**COST:** Purchase price, filing and registry fees, cost of subsequent litigation to protect right. Does not include internal research and development costs.
Trademark	An exclusive right granted by a national government that permits the use of distinctive symbols, labels, and designs (e.g., McDonald's Golden Arches, Nike's Swoosh® , Apple Computer's name and logo). Legal life is virtually unlimited.	**COST:** Same as patent.
Copyright	An exclusive right granted by a national government that permits an author to sell, license, or control his or her work. In the United States, copyrights expire 70 years after the death of the author.	**COST:** Same as patent.
Franchise agreement	An exclusive right or privilege received by a business or individual to perform certain functions or sell certain products or services.	**COST:** Expenditures made to purchase the franchise. Legal fees and other costs incurred in obtaining the franchise.
Acquired customer list	A list or database containing customer information such as name, address, past purchases, and so forth. Companies that originally develop such a list often sell or lease it to other companies unless prohibited by customer confidentiality agreements.	**COST:** Purchase price when acquired from another company. Costs to internally develop a customer list are expensed as incurred.
Goodwill	Miscellaneous intangible resources, factors, and conditions that allow a company to earn above normal income with its identifiable net assets. Goodwill is recorded only when a business entity is acquired by a purchase.	**COST:** Portion of purchase price that exceeds the sum of the current market value for all identifiable net assets, both tangible and intangible.

Fair Value of Financial Assets

ASC 820-10-35-15A and 35-55[A-B] states that irrespective of the valuation technique, a company must include suitable risk adjustments that market participants would use for nonperformance and liquidity risks. When markets are not active, brokers may rely on models with inputs based on information available to the broker. An income approach (e.g., present value) may be used to maximize the use of relevant observable inputs to value a financial asset that is *not* actively traded. A discount rate adjustment technique may be used to determine fair value of a financial asset at the measurement date. Risks considered in the discount rate include liquidity risk (e.g., difficulty selling an asset under present market conditions) and nonperformance risk (e.g., collateral value risk, default risk).

Fair Value Accounting

The SEC Office of the Chief Accountant and FASB staff clarified fair value accounting in a news release, which states that management may use internal assumptions, such as expected cash flows including appropriate risk premiums, to measure fair value when suitable market evidence is non-existent. In some cases, unobservable inputs (level 3) may be more appropriate then observable inputs (level 2). An example is when significant adjustments are needed to available observable inputs it may be better to use an estimate based mostly on unobservable inputs. Fair value determination often involves judgment. In some situations, multiple inputs from different sources may give the best indication of fair value. In this case, expected cash flows may be taken into account with other relevant data.

Broker quotes may be an input to measure fair value; however, they are not necessarily determinative if an active market does not exist for the security. When markets are less active, brokers may rely more on models with inputs based on information available to the broker. Less reliance should be placed on quotes not reflecting market transactions. The nature of the quote should also be considered such as if it indicates a price or binding offer.

Disorderly transactions are not determinative in measuring fair value. Fair value measurement assumes orderly transactions among market participants. Distressed or forced liquidation sales are not orderly transactions.

If prices in an inactive market are not reflective of current prices for similar assets, adjustments may be needed to determine fair value.

In determining if a market is inactive, the spread between the asking price of sellers and the bid price of buyers should be considered as well as the number of “bidding” parties. A significant increase in the spread and a small number of bidders indicate an inactive market.

In determining if another-than-temporary impairment of the financial asset exists, the following should be examined:

- Intent and ability of the holder to keep its investment in the issuer for a time period adequate to allow for a recovery in market value.
- The length of time and degree to which the market value has been less than cost.
- The issuer's financial condition and short-term prospects.
- The expected recovery period.

Leeway in Valuing Financial Assets

In determining whether a market is not active and a transaction is not distressed, the FASB has given companies greater leeway in valuing assets and reporting losses on banks' balance sheets and income statements. A bank's assets may now be valued at what they could be sold for in an “orderly” sale in an

inactive market between market participants at the measurement date as distinguished from a forced liquidation or distressed sale. The new guidelines will allow banks to avoid reporting some losses on securities. The change in how companies record impaired assets they do not currently plan to sell allows for the splitting off of credit losses from non-credit losses arising from such reasons as fluctuating interest rates. The latter will not have to be counted toward net income or loss. Banks will benefit because their asset values would be higher and so would earnings.

Assets would be valued at what banks project they might sell for in the future, instead of the current distressed environment. In effect, the mark-to-market rules are relaxed for banks' toxic assets.

To avoid a write-down as an impairment loss on an asset, management must assert it has the intent and ability to hold on to an asset until its value recovers. Under new rules, a company could avoid a write-down by stating it intends to hold the asset and it is more likely than not it will.

Once an asset is other than temporarily impaired, only losses related to the underlying creditworthiness would impact earnings and regulatory capital. Losses associated with market conditions would be disclosed and accounted for elsewhere.

More weight should be given when transactions are in a market operating in an orderly manner and less weight should be given to an inactive market.

The effective date for the pronouncement is the second quarter of 2009. Early adoption for the first quarter of 2009 is allowed.

Other Assets

The other assets section is the last classification of assets presented on the balance sheet. It is sometimes labeled *deferred charges* instead of other assets. Other assets is an all-inclusive heading representing those assets that do not fit into other asset categories. Other assets include long-term prepaid expenses (e.g., rent, insurance), deferred taxes, noncurrent receivable, and possibly restricted cash. Long-term prepaid expenses and deferred charges are amortized over the period benefited. Some deferred charges usually have no cash realizability in the event of corporate bankruptcy because they represent past expenditures of cash and cannot be sold to satisfy a bankruptcy judgment.

IFRS Connection

As in U.S. GAAP, the balance sheet and the statement of cash flows are required statements for IFRS. In addition, the content and presentation of an IFRS balance sheet and cash flow statement are similar to those used for U.S. GAAP. In general, the disclosure requirements related to the balance sheet and the statement of cash flows are much more extensive and detailed in the U.S. IAS 1, Presentation of

Financial Statements, provides the overall IFRS requirements for balance sheet information. IAS 7, Cash Flow Statements, provides the overall IFRS requirements for cash flow information. Specifically,

- IFRS requires that specific items be reported on the balance sheet. No such general standard exists in U.S. GAAP. However under U.S. GAAP, public companies must follow SEC regulations, which require specific line items. In addition, specific U.S. GAAP standards mandate certain forms of reporting balance sheet information.
- There are many similarities between U.S. and IFRS related to balance sheet presentation. For example:
    - IAS 1 specifies minimum note disclosures, similar to U.S. GAAP on accounting policies and judgments. These must include information about (1) accounting policies followed, (2) judgments that management has made in the process of applying the entity's accounting policies, and (3) the key assumptions and estimation uncertainty that could result in a material adjustment to the carrying amounts of assets and liabilities within the next financial year.
    - Comparative prior-period information must be presented and financial statements must be prepared annually.
    - Current/noncurrent classification for assets and liabilities is normally required. In general, post–balance sheet events are not considered in classifying items as current or noncurrent.
- Interestingly, IFRS statements may report property, plant, and equipment first in the balance sheet. Some companies report the subtotal "net assets," which equals total assets minus total liabilities.
- While the use of the term "reserve" is discouraged in U.S. GAAP, there is no such prohibition in IFRS.
- Under IFRSs, an entity that acquires an intangible asset may use the revaluation model for subsequent measurement only if an active market exists for the intangible asset.

Chapter 4 Review Questions

1. In January, Vorst Co. purchased a mineral mine for $2,640,000 with removable ore estimated at 1.2 million tons. After it has extracted all the ore, Vorst will be required by law to restore the land to its original condition at an estimated cost of $180,000. Vorst believes it will be able to sell the property afterwards for $300,000. During the year, Vorst incurred $360,000 of development costs preparing the mine for production and removed and sold 60,000 tons of ore. In its income statement for the year, what amount should Vorst report as depletion?

A. $135,000

B. $144,000

C. $150,000

D. $159,000

2. On June 30, Year 5, Finn, Inc. exchanged 2,000 shares of Edlow Corp. $30 par value common stock for a patent owned by Bisk Co. The Edlow stock was acquired in Year 1 at a cost of $50,000. At the exchange date, Edlow common stock had a fair value of $40 per share, and the patent had a net carrying amount of $100,000 on Bisk's books. Finn should record the patent at

A. $50,000
B. $60,000
C. $80,000
D. $100,000

3. Under IFRSs, an entity that acquires an intangible asset may use the revaluation model for subsequent measurement only if

A. The useful life of the intangible asset can be reliably determined.
B. An active market exists for the intangible asset.
C. The cost of the intangible asset can be measured reliably.
D. The intangible asset is a monetary asset.

Glossary

Allowance Method. An estimate is made of the expected uncollectible accounts from all sales made on account or from the total of outstanding receivables. This estimate is entered as an expense and an indirect reduction in accounts receivable (via an increase in the allowance account) in the period in which the sale is recorded. **This method is GAAP.**

Direct Write-Off Method. No entry is made until a specific account has definitely been established as uncollectible. Then the loss is recorded by crediting Accounts Receivable and debiting Bad Debt Expense. **This method is not GAAP.**

Dollar-value LIFO method. inventory costing method whereby increase and decrease in a pool are determined and measured in terms of total dollar-value, not the physical quantity of the goods in the inventory pool.

Cost-to-retail ratio. Total goods available for sale at cost divided by the total goods available at retail.

Dollar-value LIFO retail method. A method of estimating the cost of ending inventory by calculating the dollar increase in retail inventory layers with price indexes.

Gross profit method. A method for estimating the ending inventory by applying a gross profit rate to net sales; also called *gross margin method*.

LIFO retail method. A method of estimating the cost of ending inventory which excludes the beginning inventory in the cost-to-retail ratio.

Percentage-of-receivables (balance sheet) approach. Management established a percentage relationship between the amount of receivables and the expected losses from uncollectible accounts.

Percentage of sales (income statement) approach. Management established a percentage relationship between the amount of credit sales and expected losses from uncollectible accounts.

Revenue (expense) expenditure. An expenditure on an asset whereby (1) the useful life of the asset does not increase, (2) the quantity of units produced from the asset does not increase, and (3) the quality of the units produced is not enhanced.

Reserve Recognition Accounting. An accounting method whereby as soon as a company discovers oil or gas, it reports the value of the oil or gas on the balance sheet and on the income statement.

Limited-life intangibles. Intangible assets with a foreseeable limit on the period of time over which the intangible assets are expected to provide cash flows.

Indefinite-life intangibles. Intangible assets with no foreseeable limit on the period of time over which the intangible assets are expected to provide cash flows.

Negative goodwill (badwill). Occurs when the fair market value of the assets acquired is higher than the purchase price of the assets.

Impairment. Occurs when the carrying amount of a long-lived asset (property, plant, and equipment or intangible assets) is not recoverable.

Annual Report References

Note: Skim through this section for more annual report references

Walt Disney

2010 Annual Report

16. Fair Value Measurement

Fair value is defined as the amount that would be received for selling an asset or paid to transfer a liability in an orderly transaction between market participants and requires that assets and liabilities carried at fair value be classified and disclosed in the following three categories:

- Level 1—Quoted prices for identical instruments in active markets
- Level 2—Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs and significant value drivers are observable in active markets
- Level 3—Valuations derived from valuation techniques in which one or more significant inputs or significant value drivers are unobservable

The Company's assets and liabilities measured at fair value on a recurring basis are summarized in the following table by the type of inputs applicable to the fair value measurements.

	Fair Value Measurements at October 2, 2010			
Description	*Level 1*	*Level 2*	*Level 3*	*Total*
Assets				
Investments	$ 42	$ 42	$ 2	$ 86
Derivatives[(1)]				
Interest rate	-	231	-	231
Foreign exchange	-	404	-	404
Residual Interests	-	-	54	54

Liabilities				
Derivatives[(1)]				
Interest rate	-	(22)	-	(22)
Foreign exchange	-	(490)	-	(490)
Other derivatives	-	-	-	-
Other	-	-	(1)	(1)
Total	$ 42	$ 165	$ 55	$ 262

[(1)] The Company has a master netting arrangements by counterparty with respect to certain derivative contracts. Contracts in a liability position totaling $206 million have been netted against contracts in an asset position in the Consolidated Balance Sheet.

The fair value of Level 2 investments is primarily determined by reference to market prices based on recent trading activity and other relevant information including pricing for similar securities as determined by third-party pricing services.

The fair values of Level 2 derivatives, which consist of interest rate and foreign currency hedges, are primarily determined based on the present value of future cash flows using internal models that use observable inputs such as interest rates, yield curves and foreign currency exchange rates. Counterparty credit risk, which is mitigated by master netting agreements and collateral posting arrangements with certain counterparties, did not have a material impact on derivative fair value estimates.

Level 3 residual interests consist of our residual interests in securitized vacation ownership mortgage receivables and are valued using a discounted cash flow model that considers estimated interest rates, discount rates, prepayment, and defaults. There were no material changes in the residual interests in fiscal 2010.

The Company also has assets and liabilities that are required to be recorded at fair value on a non-recurring basis when certain circumstances occur. During fiscal 2010, the Company recorded impairment charges of $249 million on film productions which are reported in “Costs and expenses” in the Consolidated Statement of Income. The film impairment charges compared our estimated fair value using discounted cash flows, which is a level 3 input, to the unamortized cost of the films that had aggregate carrying values of $591 million prior to the impairment.

Fair Value of Financial Instruments

In addition to the financial instruments listed above, the Company's financial instruments also include cash, cash equivalents, receivables, accounts payable and borrowings.

The fair values of cash and cash equivalents, receivables, available-for-sale investments, derivative contracts and accounts payable approximated the carrying values. The estimated year end fair values of

the Company's total borrowings (current and noncurrent) subject to fair value disclosures, determined based on broker quotes or quoted market prices or interest rates for the same or similar instruments are $13.7 billion and $12.6 billion at October 2, 2010 and October 3, 2009, respectively.

Transfers of Financial Assets

Through December 4, 2008, the Company sold mortgage receivables arising from the sales of its vacation ownership units under a facility that expired on December 4, 2008 and was not renewed. The Company sold $17 million and $147 million of mortgage receivables during the years ended October 3, 2009, and September 27, 2008, respectively. These sales of mortgage receivables resulted in gains on securitized sales of vacation ownership interests totaled $4 million and $32 million for fiscal 2009 and fiscal 2008, respectively.

The Company continues to service the sold receivables and has a residual interest in those receivables. As of October 2, 2010, the outstanding principal amount for sold mortgage receivables was $309 million and the carrying value of the Company's residual interest, which is recorded in other long-term assets, was $54 million.

The Company repurchases defaulted mortgage receivables at their outstanding balance. The Company did not make material repurchases in the years ended October 2, 2010 or October 3, 2009. The Company generally has been able to sell the repurchased vacation ownership units for amounts that exceed the amounts at which they were repurchased.

The Company also provides credit support for up to 70% of the outstanding balance of the sold mortgage receivables which the mortgage receivable acquirer may draw on in the event of losses under the facility. The Company maintains a reserve for estimated credit losses related to these receivables.

Credit Concentrations

The Company continually monitors its positions with, and the credit quality of, the financial institutions that are counterparties to its financial instruments and does not anticipate nonperformance by the counterparties. In 2008, Lehman Brothers Commercial Corporation defaulted on a $91 million trade settlement.

The Company is pursuing collection of this amount, but has fully reserved the amount. The Company does not expect that it would realize a material loss, based on the fair value of its derivative financial instruments as of October 2, 2010, in the event of nonperformance by any single derivative counterparty. The Company enters into transactions only with derivative counterparties that have a credit rating of A- or better. The Company's current policy regarding agreements with derivative counterparties is generally to require collateral in the event credit ratings fall below A- or in the event

aggregate exposures exceed limits as defined by contract. In addition, the Company limits the amount of investment credit exposure with any one institution.

The Company does not have material cash and cash equivalent balances with financial institutions that have a credit rating of less than A-. As of October 2, 2010, the Company's balances that exceeded 10% of cash and cash equivalents with individual financial institutions were 30% compared to 38% as of October 3, 2009.

The Company's trade receivables and financial investments do not represent a significant concentration of credit risk at October 2, 2010 due to the wide variety of customers and markets into which the Company's products are sold, their dispersion across geographic areas, and the diversification of the Company's portfolio among issuers.

Microsoft

2009 Annual Report

Note 10. Goodwill

Changes in the carrying amount of goodwill for fiscal years 2009 and 2008 by segment were as follows:

(In millions)	*Balance as of June 30, 2007*	*Acquisitions*	*Purchase Accounting Adjustments and Other*	*Balance as of June 30, 2008*	*Acquisitions*	*Purchase Accounting Adjustments and Other*	*Balance as of June 30, 2009*
Client Server and Tools	$77	$77	$(1)	$153	$1	$(77)	$77
Online Services Business	580	90	68	738	233	67	1,038
Microsoft Business Division	552	5,775	(53)	6,274	447	(64)	6,657
Entertainment and Devices Division	3,132	1,073	(14)	4,191	-	(264)	3,927
Total	419	354	(21)	752	58	(6)	804
	$4,760	$7,369	$(21)	$12,108	$739	$(344)	$12,503

None of the amounts recorded as goodwill are expected to be deductible for tax purposes. The purchase price allocations for all of the acquisitions are preliminary for up to 12 months after the acquisition date and are subject to revision as more detailed analyses are completed and additional information about fair value of the assets and liabilities become available. Any change in the fair value of the net assets of the acquired company within this timeframe will change the amount of the purchase price allocable to goodwill. Changes in goodwill amounts resulting from foreign currency translations are included in "purchase accounting adjustments and other" in the above table.

We test goodwill for impairment annually at the reporting unit level using a fair value approach, in accordance with the provisions of SFAS No. 142, Goodwill and Other Intangible Assets. During the second quarter of fiscal year 2009, we changed the date of our annual impairment test from July 1 to May 1. The change was made to more closely align the impairment testing date with our long-range planning and forecasting process. We believe the change in our annual impairment testing date did not delay, accelerate, or avoid an impairment charge. We have determined that this change in accounting principle is preferable under the circumstances and does not result in adjustments to our financial statements when applied retrospectively. During fiscal year 2009, the annual impairment test was performed as of July 1, 2008 and was performed again as of May 1, 2009.

Marathon Oil

2008 Annual Report

17. Fair Value Measurements

As defined in SFAS No. 157, fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. SFAS No. 157 describes three approaches to measuring the fair value of assets and liabilities: the market approach, the income approach and the cost approach, each of which includes multiple valuation techniques. The market approach uses prices and other relevant information generated by market transactions involving identical or comparable assets or liabilities. The income approach uses valuation techniques to measure fair value by converting future amounts, such as cash flows or earnings, into a single present value amount using current market expectations about those future amounts. The cost approach is based on the amount that would currently be required to replace the service capacity of an asset. This is often referred to as current replacement cost. The cost approach assumes that the fair value would not exceed what it would cost a market participant to acquire or construct a substitute asse of comparable utility, adjusted for obsolescence.

SFAS No. 157 does not prescribe which valuation technique should be used when measuring fair value and does not prioritize among the techniques. SFAS No. 157 establishes a fair value hierarchy that prioritizes the inputs used in applying the various valuation techniques. Inputs broadly refer to the assumptions that market participants use to make pricing decisions, including assumptions about risk. Level 1 inputs are given the highest priority in the fair value hierarchy while Level 3 inputs are given the lowest priority. The three levels of the fair value hierarchy are as follows.

- Level 1—Observable inputs that reflect unadjusted quoted prices for identical assets or liabilities in active markets as of the reporting date. Active markets are those in which transactions for the asset or liability occur in sufficient frequency and volume to provide pricing information on an ongoing basis.

- Level 2—Observable market-based inputs or unobservable inputs that are corroborated by market data. These are inputs other than quoted prices in active markets included in Level 1, which are either directly or indirectly observable as of the reporting date.

- Level 3—Unobservable inputs that are not corroborated by market data and may be used with internally developed methodologies that result in management's best estimate of fair value.

We use a market or income approach for recurring fair value measurements and endeavor to use the best information available. Accordingly, valuation techniques that maximize the use of observable inputs are favored. Financial assets and liabilities are classified in their entirety based on the lowest priority level of input that is significant to the fair value measurement. The assessment of the significance of a particular input to the fair value measurement requires judgment and may affect the placement of assets and liabilities within the levels of the fair value hierarchy.

The following table presents net financial assets and liabilities accounted for at fair value on a recurring basis as of December 31, 2008:

(In millions)	*Level 1*	*Level 2*	*Level 3*	*Level 4*
Derivative instruments:				
Commodity	$107	$ 6	$(55)	$58
Interest rate	-	-	29	29
Foreign currency	-	(75)	-	(75)
Total derivative instruments	107	(69)	(26)	12
Other assets	2	-	-	2
Total at fair value	$109	$(69)	$(26)	$14

Deposits of $121 million in broker accounts covered by master netting agreements are included in fair values of commodity derivatives. Derivatives in Level 1 are exchange-traded contracts for crude oil, natural gas, refined products and ethanol measured at fair value with a market approach using the close-ofday settlement prices for the market. Derivatives in Level 2 are measured at fair value with a market approach using broker quotes or third-party pricing services, which have been corroborated with data from active markets. Level 3 derivatives are measured at fair value using either a market or income approach. Generally at least one input is unobservable, such as the use of an internally generated model or an external data source.

Commodity derivatives in Level 3 include a $72 million liability related to two U.K. natural gas sales contracts that are accounted for as derivative instruments and a $52 million asset for crude oil options related to sales of Canadian synthetic crude oil. The fair value of the U.K. natural gas contracts is measured with an income approach by applying the difference between the contract price and the U.K. forward natural gas strip price to the expected sales volumes for the shorter of the remaining contract term or 18 months. These contracts originated in the early 1990s and expire in September 2009. The contract prices are reset annually in October based on the previous twelve-month changes in a basket of energy and other indices. Consequently, the prices under these contracts do not track forward natural gas prices. The crude oil options, which expire December 2009, are measured at fair value using a Black-Scholes option pricing model, an income approach that utilizes prices from an active market and market volatility calculated by a third-party service.

The interest rate derivatives are measured at fair value using quotes from our counterparties which are compared to internal calculations made using rates posted by a pricing service. Because we are unable to independently verify those rates directly to the market, such inputs are considered Level 3.

The following is a reconciliation of the net beginning and ending balances recorded for derivative instruments classified as Level 3 in the fair value hierarchy.

(In millions)	*December 31, 2008*
Beginning balance	
Total realized and unrealized losses:	$(355)
Included in net income	210
Included in other comprehensive income	1
Purchases, sales, issuances and settlements, net	118
Ending balance	$ (26)

The change in unrealized losses included in net income related to instruments held at December 31, 2008, was an addition of $299 million for 2008. Amounts reported in net income are classified as sales and other operating revenues or cost of revenues for commodity derivative instruments, as net

interest and other financing income for interest rate derivative instruments and as cost of revenues for foreign currency derivatives, except those designated as hedges of future capital expenditures. Amounts related to foreign currency derivatives designated as hedges of future capital expenditures accumulate in other comprehensive income and are amortized to depletion, depreciation and amortization over the life of the capital asset.

The following table summarizes financial instruments, excluding the derivative financial instruments reported above, by individual balance sheet line item at December 31, 2008 and 2007.

	December 31,			
	2008		*2007*	
(In millions)	*Fair Value*	*Carrying Amount*	*Fair Value*	*Carrying Amount*
Financial assets				
Receivables from United States Steel, including current portion	$ 438	$ 492	$ 500	$ 507
Other noncurrent assets[(a)]	286	113	1,140	899
Total financial assets	724	605	1,640	1,406
Financial liabilities				
Long-term debt, including current portion[(b)]	5,683	6,880	7,176	6,947
Total financial liabilities	$5,683	$6,880	$7,176	$6,947

[(a)] Includes restricted cash, cost method investments and miscellaneous long-term receivables or deposits.
[(b)] Excludes capital leases.

Our current assets and liabilities accounts contain financial instruments, the most significant of which are trade accounts receivables and payables. We believe the carrying values of our current assets and liabilities approximate fair value, with the exception of the current portion of receivables from United States Steel and the current portion of our long-term debt which is reported above. Our fair value assessment incorporates a variety of considerations, including (1) the short-term duration of the instruments (e.g., less than 1 percent of our trade receivables and payables are outstanding for greater than 90 days), (2) our investment-grade credit rating, and (3) our historical incurrence of and expected future insignificance of bad debt expense, which includes an evaluation of counterparty credit risk.

The fair value of the receivables from United States Steel is measured using an income approach that discounts the future expected payments over the remaining term of the obligations. Because this asset is not publicly-traded and not easily transferable, a hypothetical market based upon United States Steel's borrowing rate curve is assumed and the majority of inputs to the calculation are Level 3. The

industrial revenue bonds are to be redeemed on or before the tenth anniversary of the USX Separation per the Financial Matters Agreement.

The majority of our restricted cash represent cash accounts that earn interest; therefore, the balance approximates fair value. Other financial assets included in our other noncurrent assets line include cost method investments and miscellaneous long-term receivables or deposits. Fair value for the cost method investments is measured using an income approach. Estimated future cash flows, obtained from our internal forecasts or forecasts from the partially owned companies, are discounted to obtain the fair value.

Over 90 percent of our long-term debt instruments are publicly-traded. A market approach, based upon quotes from major financial institutions is used to measure the fair value of such debt. Because these quotes cannot be independently verified to the market they are considered Level 3 inputs. The fair value of our debt that is not publicly-traded is measured using an income approach. The future debt service payments are discounted using the rate at which we currently expect to borrow. All inputs to this calculation are Level 3.

Long-term receivables and deposits are also measured using an income approach. The expected timing of payments are scheduled and then discounted using a rate deemed appropriate.

General Electric

2008 Annual Report

Note 17. Assets and Liabilities of Businesses Held for Sale

On January 7, 2009, we exchanged our GE Money businesses in Austria and Finland, the credit card and auto businesses in the U.K., and the credit card business in Ireland for a 100% ownership interest in Interbanca S.p.A., a leading Italian corporate bank. Assets and liabilities of $7,887 million and $636 million, respectively, were classified as held for sale at December 31, 2008; we recognized a $184 million loss, net of tax, related to the classification of the assets held for sale at the lower of carrying amount or estimated fair value less costs to sell.

On December 24, 2008, we committed to sell a portion of our Australian residential mortgage business, including certain underlying mortgage receivables, and expect to complete this sale during the first quarter of 2009. Assets of $2,669 million were classified as held for sale at December 31, 2008 (liabilities were insignificant); we recognized a $38 million loss, net of tax, related to the classifications of the assets held for sale at the lower of carrying amount or estimated fair value less costs to sell.

Summarized financial information is shown below.

December 31 (In millions)	*2008*
ASSETS	
Cash and equivalents	$ 35
Financing receivables—net	9,915
Intangible assets—net	394
Other	212
Assets of businesses held for sale	$10,556
LIABILITIES	
Liabilities of businesses held for sale	$ 636

U.S. Steel

2008 Annual Report

5. Assets Held for Sale

On September 26, 2007, U.S. Steel and Canadian National Railway Company (CN) announced that they had entered into an agreement under which CN will acquire the majority of the operating assets of Elgin, Joliet and Eastern Railway Company (EJ&E) for $300 million. Under the agreement, U.S. Steel will retain railroad assets, equipment, and employees that support Gary Works in northwest Indiana. The transaction was approved by the U.S. Surface Transportation Board on December 24, 2008 and was completed on January 31, 2009. As of December 31, 2008 and 2007, the assets of EJ&E that were to be sold, consisting primarily of property, plant and equipment, were classified as held for sale in accordance with FAS No. 144, “Accounting for Impairment or Disposal of Long-Lived Assets” (FAS 144).

Before U.S. Steel's October 31, 2007 acquisition of USSC, Cleveland Cliffs Inc. (Cliffs), now Cliffs Natural Resources Inc., and Stelco received and accepted a non-binding offer dated June 6, 2007 from Consolidated Thompson Iron Mines Limited (Consolidated) to purchase USSC's 44.6 percent interest and Cliffs' 26.8 percent interest in Wabush for a purchase price of $64.3 million plus two year warrants to purchase three million shares of Consolidated common stock. On August 30, 2007, ArcelorMittal Dofasco, Inc (Dofasco) purported to exercise a right of first refusal under the Participants Agreement dated as of January 1, 1967 governing Wabush. At December 31, 2007, USSC's investment in Wabush was classified as held for sale in accordance with FAS 144. On March 4, 2008, following several months of unsuccessful negotiations over many of the major terms of the purchase and sale, USSC and Cliffs informed Dofasco that they were withdrawing from further negotiations. At December 31, 2008, USSC's investment in Wabush was no longer classified as held for sale (see Note 27).

In December 2008, U.S. Steel decided to exit the drawn-over-mandrel (DOM) tubular products business. A pre-tax charge of $28 million was taken in the fourth quarter 2008 associated with this

action principally to write down to fair value equipment associated with the DOM business that is now classified as held for sale.

Goodyear Tire & Rubber

2008 Annual Report

Note 7. Goodwill and Other Intangible Assets

The following table presents the net carrying amount of goodwill allocated by reporting unit, and changes during 2008:

(In millions)	*Balance at December 31, 2006*	*Purchase Price Allocation*	*Divestitures*	*Translation & Other Adjustments*	*Balance at December 31, 2007*
North American Tire	$ 94	$ -	$ -	$ -	$ 94
Europe, Middle East and Africa Tire	547	28	(1)	(52)	522
Asia Pacific Tire	72	-	-	(5)	67
	$713	$28	$(1)	$(57)	$683

In March 2008, we acquired an additional 6.12% ownership interest in our tire manufacturing subsidiary in Poland by purchasing outstanding shares held by minority shareholders for $46 million. As a result of the acquisition, we recorded goodwill totaling $28 million.

The following table presents the net carrying amount of goodwill allocated by reporting unit, and changes during 2007:

(In millions)	*Balance at December 31, 2006*	*Purchase Price Allocation*	*Divestitures*	*Translation & Other Adjustments*	*Balance at December 31, 2007*
North American Tire	$ 95	$ -	$ (1)	$ -	$ 94
Europe, Middle East and Africa Tire	500	-	(2)	49	547
Asia Pacific Tire	67	-	-	5	72
	$ 662	$ -	$ (3)	$ 54	$ 713

We reduced the carrying amount of goodwill by $11 million during 2007 primarily as a result of the adoption of FIN 48 and the release of a tax valuation allowance recorded in the purchase price allocation in prior years.

The following table presents information about other intangible assets:

	2008			2007		
(In millions)	*Gross Carrying Amount*[1]	*Accumulated Amortization*[1]	*Net Carrying Amount*	*Gross Carrying Amount*[1]	*Accumulated Amortization*[1]	*Net Carrying Amount*
Intangible assets with indefinite lives	$128	$ (6)	$122	$131	$ (9)	$122
Trademarks and patents	36	(21)	15	46	(23)	23
Other intangible assets	29	(6)	23	31	(9)	22
Total Other intangible assets	$193	$ (33)	$160	$208	$(41)	$167

[1] Includes impact of foreign currency translation.

Intangible assets are primarily comprised of the right to use certain brand names and trademarks on a non-competitive basis related to our global alliance with Sumitomo Rubber Industries, Ltd.

Amortization expense for intangible assets totaled $3 million in 2008, and $4 million in both 2007 and 2006. We estimate that annual amortization expense related to intangible assets will be approximately $3 million during each of the next five years and the weighted average remaining amortization period is approximately 21 years.

At December 31, 2008, as a result of certain impairment indicators including the decrease in our market capitalization, as well as the economic outlook in the United States, we performed an interim goodwill impairment analysis for our North American Tire business unit. Our annual impairment analysis for 2008 and 2007 as well as our interim analysis for North American Tire at December 31, 2008, indicated no impairment of goodwill or other intangible assets with indefinite lives. In addition, there were no events or circumstances that indicated the impairment test should be re-performed for goodwill for segments other than North American Tire or for other intangible assets with indefinite lives for any segment at December 31, 2008.

Note 8. Other Assets

We have funded approximately 10% of the obligations under our Supplemental Pension Plan as of December 31, 2008 (approximately 33% at December 31, 2007) using a trust. The trust invests in debt and equity securities and funds current benefit payments under the Supplemental Pension Plan. No contributions were made to the trust in 2008 or 2007. The debt securities have maturities ranging from January 15, 2009 through September 1, 2036. The fair value of the trust assets was $7 million and $21 million at December 31, 2008 and 2007, respectively, and was included in Other Assets. We have classified the trust assets as available-for-sale. Accordingly, gains and losses resulting from changes in the fair value of the trust assets are deferred and reported in AOCL. At December 31, 2008, AOCL included an unrealized holding loss on the trust assets of $2 million after-tax and an unrealized holding gain of $2 million after-tax at December 31, 2007.

We owned 3,421,306 shares of Sumitomo Rubber Industries, Ltd. ("SRI") at December 31, 2008 and 2007 (the "Sumitomo Investment"). The fair value of the Sumitomo Investment was $29 million and $31 million at December 31, 2008 and 2007, respectively, and was included in Other Assets. We have classified the Sumitomo Investment as available-for-sale. At December 31, 2008, AOCL included gross unrealized holding gains on the Sumitomo Investment of $13 million ($14 million after-tax), compared to $14 million ($15 million after-tax) at December 31, 2007.

In March 2008, we acquired an additional 6.12% ownership interest in our tire manufacturing subsidiary in Poland by purchasing outstanding shares held by minority shareholders for $46 million. In October 2008, we acquired the remaining 25% ownership interest in Goodyear Dalian Tire Company Ltd., our tire manufacturing and distribution subsidiary in China. The amount of our additional investment and the impact on our results of operations and financial position were not material. We finalized purchase accounting in 2008 for both acquisitions.

In January 2006, we acquired the remaining 50% ownership interest in our South Pacific Tyres ("SPT") joint venture. In connection with the acquisition we paid approximately $40 million and repaid approximately $50 million of outstanding loans. As a result of the acquisition, we recorded goodwill of approximately $12 million and indefinite lived intangible assets of $10 million. The purchase price was allocated based on 50% of the assets acquired and liabilities assumed.

Dividends received from our consolidated subsidiaries were $209 million, $562 million and $247 million in 2008, 2007 and 2006, respectively. Dividends received from our affiliates accounted for using the equity method were $3 million, $3 million and $5 million in 2008, 2007 and 2006, respectively.

In the third quarter of 2008, we sought redemption of $360 million invested in The Reserve Primary Fund. Due to reported losses in its investment portfolio and other liquidity issues, the fund ceased honoring redemption requests. The Board of Trustees of the fund subsequently voted to liquidate the assets of the fund and approved periodic distributions of cash to its shareholders. The plan of liquidation is subject to the supervision of the SEC under an exemption order granted to the fund. In the fourth quarter of 2008, we received partial distributions of $284 million. At December 31, 2008, $71 million, net of a $5 million valuation allowance, was classified as Prepaid expenses and other current assets, which represent the remaining funds still to be redeemed by The Reserve Primary Fund.

Note 9. Property, Plant and Equipment

	2008			2007		
(In millions)	*Owned*	*Capital Leases*	*Total*	*Owned*	*Capital Leases*	*Total*
Property, plant and equipment, at cost:						
Land	$ 429	$ 4	$ 433	$ 441	$ 5	$ 446
Buildings	1,847	62	1,909	1,992	64	2,056
Machinery and equipment	10,604	93	10,697	10,564	92	10,656
Construction in progress	748	-	748	596	-	596
	13,628	159	13,787	13,593	161	13,754
Accumulated depreciation	(8,213)	(97)	(8,310)	(8,236)	(93)	(8,329)
	5,415	62	5,477	5,357	68	5,425
Spare parts	157	-	157	173	-	173
	$5,572	$ 62	$5,634	$5,530	$ 68	$5,598

The range of useful lives of property used in arriving at the annual amount of depreciation provided are as follows: buildings and improvements, 5 to 45 years; machinery and equipment, 3 to 30 years.

PPG

2007 Annual Report

5. Property

(millions)	*Useful Lives (years)*	*2007*	*2006*
Land and land improvements	5-30	$ 401	$ 366
Buildings	20-40	1,272	1,182
Machinery and equipment	5-25	5,487	5,201
Other	3-20	507	435

Construction in progress	166	207
Total[(1)]	$7,833	$7,391

[(1)] *Interest capitalized in 2007, 2006 and 2005 was $11 million, $7 million, and $5 million, respectively.*

6. Investments

(millions)	*2007*	*2006*
Investments in equity affiliates	$181	$182
Marketable equity securities		
Trading (See Note 14)	80	77
Available for sale	9	13
Other	30	71
Total	$360	$343

The Company's investments in equity affiliates are comprised principally of 50% ownership interests in a number of joint ventures that manufacture and sell coatings, glass and chemicals products, the most significant of which produce fiber glass products and are located in Asia.

In addition, we have a fifty-percent ownership interest in RS Cogen, L.L.C., which toll produces electricity and steam primarily for PPG and its joint venture partner. The joint venture was formed with a wholly-owned subsidiary of Entergy Corporation in 2000 for the construction and operation of a $300 million process steam, natural gas-fired cogeneration facility in Lake Charles, La., the majority of which was financed by a syndicate of banks. PPG's future commitment to purchase electricity and steam from the joint venture approximates $25 million per year subject to contractually defined inflation adjustments for the next fifteen years. The purchases for the years ended December 31, 2007, 2006 and 2005 were $25 million, $24 million and $25 million, respectively.

Summarized financial information of our equity affiliates on a 100 percent basis, in the aggregate, is as follows:

(millions)	*2007*	*2006*
Working capital	$ 56	$ 31
Property, net	804	715
Short-term debt	(75)	(50)
Long-term debt	(389)	(348)
Other, net	25	64

Net Assets	$421	$412

(millions)	*2007*	*2006*	*2005*
Revenues	$555	$601	$549
Net earnings	$ 60	$ 66	$ 25

PPG's share of undistributed net earnings of equity affiliates was $74 million and $63 million as of December 31, 2007 and 2006, respectively. Dividends received from equity affiliates were $20 million, $16 million and $19 million in 2007, 2006 and 2005, respectively.

As of December 31, 2007 and 2006, there were unrealized pretax gains of $4 million and $3 million, respectively, and as of December 31, 2005 there were pretax losses of $1 million recorded in "Accumulated other comprehensive loss" in the accompanying consolidated balance sheet related to marketable equity securities available for sale. During 2007, PPG sold certain of these investments resulting in recognition of pretax gains of $2 million and proceeds of $8 million. During both 2006 and 2005, PPG sold certain of these investments resulting in recognition of pretax gains of $1 million and proceeds of $3 million.

7. Goodwill and Other Identifiable Intangible Assets

The change in the carrying amount of goodwill attributable to each reportable business segment for the years ended December 31, 2007 and 2006 was as follows:

(millions)	*Performance Coatings*	*Industrial Coatings*	*Optical and Specialty Materials*	*Glass*	*Total*
Balance, Jan. 1, 2006	$ 814	$243	$ 2	$48	$1,107
Goodwill from acquisitions	84	25	48	-	157
Currency translation	45	17	5	6	73
Balance, Dec. 31, 2006	$ 943	$285	$55	$54	$1,337
Goodwill from acquisitions	55	7	(3)	-	59
Currency translation	53	18	5	4	80
Balance, Dec. 31, 2007	$1,051	$310	$57	$58	$1,476

The carrying amount of acquired trademarks with indefinite lives as of December 31, 2007 and 2006 totaled $144 million.

The Company's identifiable intangible assets with finite lives are being amortized over their estimated useful lives and are detailed below.

	Dec. 31, 2007			***Dec. 31, 2006***		
(millions)	*Gross Carrying Amount*	*Accumulated Amortization*	*Net*	*Gross Carrying Amount*	*Accumulated Amortization*	*Net*
Acquired technology	$448	$(188)	$260	$389	$(155)	$234
Other[(1)]	355	(147)	208	328	(124)	204
Balance	$803	$(355)	$468	$717	$(279)	$438

(1) *Consists primarily of customer-related intangibles*

Aggregate amortization expense was $58 million, $43 million and $32 million in 2007, 2006 and 2005, respectively. The estimated future amortization expense of identifiable intangible assets during the next five years is (in millions) $55 in 2008, $54 in 2009, $53 in 2010, $44 in 2011 and $40 in 2012. These amounts do not include amortization expense resulting from the SigmaKalon acquisition, which was completed on January 2, 2008. See Note 2, “Acquisitions” for more information.

8. Business Restructuring and Asset Impairment

During 2006, the Company finalized plans for certain actions to reduce its workforce and consolidate facilities and recorded a charge of $37 million for restructuring and other related activities, including severance costs of $35 million and loss on asset impairment of $2 million. These amounts were net of $5 million of amounts accrued in 2006 that were reversed later that year as a result of actions not being taken or being completed at a cost that was less than the estimated amount accrued. Of the $37 million restructuring charge recorded in 2006, $2 million related to the automotive glass businesses has been reclassified and is presented as discontinued operations in the accompanying consolidated statement of income. All actions related to the 2006 restructuring charge were substantially completed by the end of the second quarter of 2007.

The following table summarizes the details through December 31, 2007.

(Millions, except no. of employees)	*Severance Costs*	*Asset Impairments*	*Total Charge*	*Employees Covered*
Industrial coatings	$ 28	$ 1	$ 29	353
Performance coatings	7	1	8	193
Optical and specialty materials	1	-	1	33
Glass	4	-	4	190
Reversal	(5)	-	(5)	(112)
Total	$ 35	$ 2	$ 37	657
2006 Activity	(26)	(2)	(28)	(531)
Balance as of Dec. 31, 2006	$ 9	$ -	$ 9	126
2007 Activity	(9)	-	(9)	(126)
Balance as of Dec. 31, 2007	$ -	$ -	$ -	-

In 2002, the Company recorded a charge of $81 million for restructuring and other related activities. The workforce reductions covered by this charge have been completed; however, as of December 31, 2007, $2 million of this reserve remained to be spent. This reserve relates to a group of approximately 75 employees in Europe, whose terminations were concluded under a different social plan than was assumed when the reserve was recorded. Under the terms of this social plan, severance payments will be paid to these 75 individuals through 2008.

In the fourth quarter of 2005, the Company evaluated our fine chemicals operating segment for impairment in accordance with SFAS No. 144, “Accounting for the Impairment of Long-Lived Assets”, and determined that indicators of impairment were present for certain long-lived assets at our fine chemicals manufacturing plant in the United States. In measuring the fair value of these assets, the Company utilized an expected cash flow methodology to determine that the carrying value of these assets exceeded their fair value. We also wrote down the assets of a small fine chemical facility in France to their estimated net realizable value. The Company recorded an asset impairment charge related to these fine chemicals assets of $27 million pretax in 2005, which has been reclassified and is presented as a reduction to income from discontinued operations in the accompanying consolidated statement of income for the year ended December 31, 2005.

Solectron 2003 Annual Report

Note 2 Cash, Cash Equivalents and Short-Term Investments

Cash, cash equivalents and short-term investments (related to continuing operations and including restricted amounts) as of August 31, 2003 and 2002, consisted of the following:

	Cash and Cash Equivalents	*Short-term Marketable Securities*
Fiscal 2003	(in millions)	
Cash	$ 717.3	$ 19.9
Money market funds	543.5	-
Certificates of deposit	-	-
Market auction securities	-	21.9
U.S. government securities	-	-
Corporate obligations	210.9	5.6
Other	-	-
Total	$1,471.7	$47.4
Fiscal 2002		
Cash	$ 937.7	$ -
Money market funds	692.8	-
Certificates of deposit	24.8	11.4
Market auction securities	157.8	75.2
U.S. government securities	30.6	130.4
Corporate obligations	-	73.0
Other	41.7	42.2
Total	$1,885.4	$332.2

Solectron had $65.5 and $235.4 million of restricted cash, cash equivalents and short-term investment as of August 31, 2003 and 2002, respectively. Restricted cash, cash equivalents and short-term investments are restricted as collateral for specified obligations under certain lease agreements and certain interest payments on the 7.25% subordinated ACES debentures due November 15, 2006. Short-term investments are carried at fair market value, which approximates cost. Realized and unrealized gains and losses for the fiscal years ended August 31, 2003 and 2002 were not significant.

C. Inventories

Inventories related to continuing operations as of August 31, 2003 and 2002, consisted of:

	2003	*2002*

	(in millions)	
Raw materials	$ 957.8	$1,298.5
Work-in-process	236.1	228.2
Finished goods	221.0	295.4
Total	$1,414.9	$1,822.1

Inventoriable expenses, packages and supplies and turkey products amounting to approximately $82.6 million at October 31,1998, and $84.5 million at October 25, 1997, are stated at cost determined by the last-in, first-out method and are $27.4 million and $27.2 million lower in the respective years than such inventories determined under the first-in, first-out method.

National Semiconductor

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Note 7: Asset Retirement Obligations

We adopted SFAS No. 143, "Accounting for Asset Retirement Obligations," at the beginning of fiscal 2004. This statement requires that the fair value of a legal liability for an asset retirement obligation be recorded in the period in which it is incurred if a reasonable estimate of fair value can be made. Upon recognition of a liability, the asset retirement cost is recorded as an increase in the carrying value of the related long-lived asset and then depreciated over the life of the asset. Our asset retirement obligations arise primarily from contractual commitments to decontaminate machinery and equipment used at our manufacturing facilities at the time we dispose of or replace them. We also have leased facilities where we have asset retirement obligations from contractual commitments to remove leasehold improvements and return the property to a specified condition when the lease terminates. As a result of our evaluation of our asset retirement obligations, we recorded a $2.1 million noncurrent liability for asset retirement obligations and a $0.4 million increase in the carrying value of the related assets, net of $1.0 million of accumulated depreciation at the beginning of fiscal 2004. The cumulative effect that was recorded in the first quarter of fiscal 2004 upon the adoption of this accounting standard resulted in a charge of $1.9 million, including a tax effect of $0.2 million.

At the time we adopted SFAS No. 143, we did not recognize any asset retirement obligations associated with the closure or abandonment of the manufacturing facilities we own. Our legal asset retirement obligations for manufacturing facilities arise primarily from local laws and statutes that establish minimum standards or requirements for companies in that locale in the event it were to shut down or otherwise exit or abandon a manufacturing facility. We intend to operate our manufacturing facilities indefinitely and are therefore unable at any one time to reasonably estimate the fair value of

any legal obligations we may have because of the indeterminate closure dates. However, we announced in July 2005 that we plan to close our assembly and test facility in Singapore and consolidate its production volume into our other assembly and test facilities in Malaysia and China. The majority of the activities associated with the closure is expected to take place over the next nine to twelve months. We do not expect to incur any significant asset retirement costs in excess of amounts accrued associated with the closure of this facility.

Review Question Answers

Chapter 1 Review Questions

1. When the allowance method of recognizing uncollectible accounts is used, the entry to record the write-off of a specific account

A. **Correct.** The write-off of an uncollectible account results in a credit to accounts receivable and a debit to the allowance for uncollectible accounts. It does not affect expense or the net amount of accounts receivable.

B. Incorrect. The allowance for uncollectible accounts decreases.

C. Incorrect. The allowance for uncollectible accounts decreases, and net income is not affected.

D. Incorrect. Net income is not affected.

2. A method of estimating uncollectible accounts that emphasizes asset valuation rather than income measurement is the allowance method based on

A. **Correct.** Under the allowance method, uncollectible accounts are estimated in two ways. The method that emphasizes asset valuation is based on an aging of the receivables to determine the balance in the allowance for uncollectible accounts. Bad debt expense is the amount necessary to adjust the allowance account to this estimated balance. The method emphasizing the income statement calculates bad debt expense as a percentage of sales.

B. Incorrect. The direct write-off method is not a means of estimation.

C. Incorrect. An estimate based on gross sales focuses on the income statement.

D. Incorrect. An estimate based on credit sales minus returns and allowances focuses on the income statement.

3. When the allowance method of recognizing uncollectible accounts is used, the entries at the time of collection of a small account previously written off

A. **Correct.** When an account receivable is written off, both accounts receivable and the allowance for uncollectible accounts are decreased. When an account previously written off is collected, the account must be reinstated by increasing both accounts receivable and the allowance. The account receivable is then decreased by the amount of cash collected.
B. Incorrect. Neither write-off nor reinstatement and collection affects bad debt expense or net income.
C. Incorrect. The allowance for uncollectible accounts is increased.
D. Incorrect. The entries increase the allowance.

4. Wren Company had the following account balances at December 31: Accounts receivable = $900,000; Allowance for uncollectible accounts (before any provision for the year uncollectible accounts expense) = $16,000; Credit sales for the year = $1,750,000. Wren is considering the following methods of estimating uncollectible accounts expense for the year: Based on credit sales at 2%; based on accounts receivable at 5%. What amount should Wren charge to uncollectible accounts expense under each method?

A. Incorrect. The amount of $51,000 equals 2% of credit sales plus the balance of the allowance account, and $45,000 equals 5% of gross accounts receivable.
B. Incorrect. The amount of $51,000 equals 2% of credit sales plus the balance of the allowance account.
C. Incorrect. The amount of $45,000 equals 5% of gross accounts receivable.
D. **Correct.** Uncollectible accounts expense is estimated in two ways. One emphasizes asset valuation, the other income measurement. The first is based on an aging of the receivables to determine the balance in the allowance for uncollectible accounts. Bad debt expense is the amount necessary to adjust the allowance account to this estimated balance. The second recognizes bad debt expense as a percentage of sales. The corresponding credit is to the allowance for uncollectible accounts. Under the first method, if uncollectible accounts are estimated to be 5% of gross accounts receivable, the allowance account should have a balance of $45,000 ($900,000 x 5%), and the entry is to debit uncollectible accounts expense and credit the allowance for $29,000 ($45,000 - $16,000 existing balance). Under the second method, bad debt expense is $35,000 ($1,750,000 x 2%).

5. When the accounts receivable of a company are sold outright to a company that normally buys accounts receivable of other companies without recourse, the accounts receivable have been

A. Incorrect. A pledge is a security arrangement in which the receivables are used as security for a loan. If the loan is not paid, the secured party obtains the rights to the pledged receivables.

B. Incorrect. An assignment involves a contractual transfer of specifically named accounts receivable to a third party. The receivables are collected by the assignor, but the cash must be paid to the assignee.
C. **Correct.** One means of immediately realizing cash on accounts receivable is factoring, which is the outright sale of receivables for cash at a discount. Receivables may be sold with or without recourse. If the sale of receivables is with recourse, the buyer may obtain payment from the seller if the debtor defaults.
D. Incorrect. If accounts receivable have been collateralized, they have been used as security, not sold outright.

Chapter 2 Review Questions

1. Estimates of price-level changes for specific inventories are required for which of the following inventory methods?

A. Incorrect. In determining ending inventory, the approach of the retail method is practiced. Markups and markdowns are both considered in computing the cost-to-retail ratio. However, this ratio excludes beginning inventory. A decline in inventory during the period is subtracted from the most recently added layers in the inverse order of addition. Inventory is restated based on a retail price index.
B. **Correct.** Dollar-value LIFO accumulates inventoriable costs of similar (not identical) items. These items should be similar in the sense of being interchangeable, having similar uses, belonging to the same product line, or constituting the raw materials for a given product. Dollar-value LIFO determines changes in ending inventory in terms of dollars of constant purchasing power rather than units of physical inventory. This calculation uses a specific price index for each year.
C. Incorrect. The weighted-average method determines an average cost that is not adjusted for general price-level changes.
D. Incorrect. Average-cost retail calculate ending inventory at retail and then adjust it to cost by applying a cost-retail ratio.

2. The lower-of-cost-or-market (LCM) rule for inventories may be applied to total inventory, to groups of similar items, or to each item. Which application usually results in the lowest inventory amount?

A. Incorrect. Each application results in a different amount.
B. Incorrect. Aggregating items results in the inclusion of some items at amounts greater than LCM.

C. Incorrect. Grouping all or some items results in a higher valuation than applying the LCM rule to individual items.
D. **Correct.** Applying the LCM rule to each item of inventory produces the lowest valuation for each item and therefore the lowest and most conservative valuation for the total inventory. The reason is that aggregating items results in the inclusion of some items at amounts greater than LCM. For example, if item A (cost $2, market $1) and item B (cost $3, market $4) are aggregated for LCM purposes, the inventory valuation is $5. If the rule is applied separately to A and B, the LCM valuation is $4.

3. Jones Wholesalers stocks a changing variety of products. Which inventory costing method will be most likely to give Jones the lowest ending inventory when its product lines are subject to specific price increases?

A. Incorrect. Specific identification associates the actual units in ending inventory with their actual costs. These units are most likely to come from recent and more costly purchases.
B. Incorrect. The weighted-average method determines unit cost by dividing the total cost of goods available for sale by the units available. Hence, it includes recent costs in the calculation.
C. **Correct.** To compute the ending inventory under dollar-value LIFO, the ending inventory stated in year-end or current-year cost must be restated at base-year cost. The layers at base-year cost are computed using a LIFO flow assumption and then weighted (multiplied) by the relevant indexes to price the ending inventory. Consequently, dollar-value LIFO yields the lowest inventory valuation in a period of rising prices because it assumes the most recently acquired goods were the first to be sold.
D. Incorrect. FIFO includes the most recent costs in the calculation.

4. Walt Co. adopted the dollar-value LIFO inventory method as of January 1, when its inventory was valued at $500,000. Walt's entire inventory constitutes a single pool. Using a relevant price index of 1.10, Walt determined that its December 31 inventory was $577,500 at current-year cost, and $525,000 at base-year cost. What was Walt's dollar-value LIFO inventory at December 31?

A. Incorrect. The base-year cost is $525,000.
B. **Correct.** A price index for the current year may be calculated by dividing the ending inventory at current-year cost by the ending inventory at base-year cost. This index is then applied to the current-year inventory stated at base-year cost. Consequently, the index is 1.10 ($577,500 ÷ $525,000), and the dollar-value LIFO cost at December 31 is $527,500 ($500,000 base layer + [($525,000 - $500,000) x 1.10]).

C. Incorrect. The amount of $552,500 results from using $525,000 as the base layer. Answer
D. Incorrect. The amount of $577,500 is the year-end inventory at current cost.

Chapter 3 Review Questions

1. A machine with a 5-year estimated useful life and an estimated 10% salvage value was acquired on January 1, 2X10. On December 31, 2X13, accumulated depreciation using the sum-of-the-years' digits method is

A. Incorrect. (Original cost minus salvage value) multiplied by 1/15 is the depreciation for 2X14.
B. **Correct.** SYD depreciation is calculated on a constant depreciable base equal to the original cost minus the salvage value, multiplied by the SYD fraction. The SYD fraction's numerator is the number of years of remaining useful life of the asset. The denominator is the sum of the digits of the total years of the expected useful life. In this case, the denominator is 15 (1 + 2 + 3 + 4 + 5). Thus, the accumulated depreciation at the end of 2002 is the sum of the depreciation calculated in each of the 4 years, or 14/15 (5/15 + 4/15 + 3/15 + 2/15) times the depreciable base, which is the original cost minus the salvage value.
C. Incorrect. Original cost multiplied by 14/15 is the depreciation at December 31, 2X13 assuming no salvage value.
D. Incorrect. Original cost multiplied by 1/15 is the depreciation for 2X14 assuming no salvage value.

2. A company has a long-lived asset with a carrying (book) value of $120,000, undiscounted future cash flows of $130,000, present value of expected future cash flows of $100,000, and a market value of $105,000. What amount of impairment loss should be reported?

A. **Correct.** An impairment loss is recognized when a long-lived asset's book (carrying) amount exceeds the sum of its undiscounted future cash flows. Because the sum of the undiscounted cash flows ($130,000) exceeds the carrying amount ($120,000), the carrying amount is recoverable. Thus, no impairment is recognized.
B. Incorrect. The difference between the fair value of the asset and the present value of the expected future cash flows is $5,000.
C. Incorrect. The excess of the carrying amount over the fair value of the asset is $15,000. This unrealized holding loss is not recognized because the recoverability test has not been met.
D. Incorrect. The difference between the carrying amount and the present value of the future cash flows is $20,000.

3. An impairment loss on a long-lived asset (asset group) to be held and used is reported by a business enterprise in

A. Incorrect. A long-lived asset (asset group) to be held and used is not a discontinued operation.
B. Incorrect. An impairment loss does not meet the criteria for an extraordinary item (unusual in nature and infrequent in the environment in which the entity operates).
C. Incorrect. An impairment loss is reported in the income statement. Items reported in OCI have bypassed the income statement.
D. **Correct.** An impairment loss is included in income from continuing operations before income taxes by a business enterprise (income from continuing operations in the statement of activities by a not-for-profit organization). When a subtotal for "income from operations" is reported, the impairment loss is included.

4. According to ASC 835-20-30, *Interest: Capitalization of Interest*, the types of assets that qualify for interest capitalization are

A. Incorrect. ASC 835 explicitly prohibits capitalization of assets that are being used in the earning activities of the company.
B. Incorrect. GAAP 34 explicitly prohibits capitalization of assets that are ready for their intended use in the activities of the company.
C. **Correct.** In accordance with ASC 850, interest should be capitalized for two types of assets: those constructed or otherwise produced for an enterprise's own use, including those constructed or produced by others, and those intended for sale or lease that are constructed or produced as discrete products (e.g., ships).
D. Incorrect. ASC 835 explicitly prohibits capitalization of inventories that are manufactured in large quantities on a continuing basis.

Chapter 4 Review Questions

1. In January, Vorst Co. purchased a mineral mine for $2,640,000 with removable ore estimated at 1.2 million tons. After it has extracted all the ore, Vorst will be required by law to restore the land to its original condition at an estimated cost of $180,000. Vorst believes it will be able to sell the property afterwards for $300,000. During the year, Vorst incurred $360,000 of development costs preparing the mine for production and removed and sold 60,000 tons of ore. In its income statement for the year, what amount should Vorst report as depletion?

A. Incorrect. The amount of $135,000 does not include the $180,000 restoration costs.
B. **Correct.** Vorst's per-ton charge is calculated as follows: Purchase Price + Restoration costs – Residual value + Preparation Cost = Depletion base ($2,640,000 + 180,000 – 300,000 + 360,000 = $2,880,000). The Depletion base divided by the estimated removable tons = depletion charge per ton ($2,880,000 / 1,200,000 = $2.40). Accordingly, Vorst should report $144,000 (60,000 tons sold x $2.40 per ton) as depletion in its income statement for the year.
C. Incorrect. The amount of $150,000 does not consider the restoration costs and the residual value of the land.
D. Incorrect. The amount of $159,000 adds the $180,000 restoration cost instead of deducting the $120,000 net residual value of the land.

2. On June 30, Year 5, Finn, Inc. exchanged 2,000 shares of Edlow Corp. $30 par value common stock for a patent owned by Bisk Co. The Edlow stock was acquired in Year 1 at a cost of $50,000. At the exchange date, Edlow common stock had a fair value of $40 per share, and the patent had a net carrying amount of $100,000 on Bisk's books. Finn should record the patent at

A. Incorrect. The acquisition cost of the stock is $50,000.
B. Incorrect. The par value of the stock is $60,000.
C. **Correct.** When an intangible asset is acquired externally, it should be recorded at its cost at the date of acquisition. In an exchange transaction, cost is measured by the cash paid. Otherwise, the fair value of the more clearly evident of the consideration given or the asset acquired is the basis for measurement. The fair value of the assets given in return for the patent was $80,000 (2,000 shares of stock x $40 per share fair value). The $30 par value, the $25 per share ($50,000 ÷ 2,000 shares) acquisition cost, and the net carrying amount of the patent are not considered in determining fair value.
D. Incorrect. The net carrying amount of the patent is $100,000.

3. Under IFRSs, an entity that acquires an intangible asset may use the revaluation model for subsequent measurement only if

A. Incorrect. An intangible asset may have an indefinite life.
B. **Correct.** An intangible asset is carried at cost minus any accumulated amortization and impairment losses, or at a revalued amount. The revaluation model is similar to that for items of PPE (initial recognition of an asset at cost). However, fair value must be determined based on an active market.

C. Incorrect. Initial recognition of an intangible asset is at cost. Recognition is permitted only when it is probably that the entity will receive the expected economic benefits, and the cost is reliably measurable.
D. Incorrect. An intangible asset is nonmonetary.