Intermediate Accounting, 11th Edition
Kieso, Weygandt, and Warfield

Chapter 1: Financial Accounting and Accounting Standards

Prepared by
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Chapter 1: Financial Accounting and Accounting Standards

After studying this chapter, you should be able to:

1. Identify the major financial statements and other means of financial reporting.
2. Explain how accounting assists in the efficient use of scarce resources.
3. Identify some of the challenges facing accounting.
4. Identify the objectives of financial reporting.

Chapter 1: Financial Accounting and Accounting Standards

5. Explain the need for accounting standards.
6. Identify the major policy-setting bodies and their role in the standards-setting process.
7. Explain the meaning of generally accepted accounting principles.
8. Describe the impact of user groups on the standards-setting process.
9. Understand issues related to ethics and financial accounting.

Characteristics of Financial Accounting

- Accounting identifies, measures and communicates financial information.
- This information is about economic entities.
- Information is communicated to interested parties such as investors, creditors, unions and governmental agencies.

Accounting and the Efficient Use of Scarce Resources

Financial Reporting aids users in the allocation of scarce resources.

Objectives of Financial Reporting by Business Enterprises

The objectives are specified in *Statement of Financial Accounting Concepts No. 1.*

The objectives are as follows:

- Information provided must be useful in investment and credit decisions.
- Information must be useful in assessing cash flow prospects.
- Information must be about enterprise resources, claims to those resources and changes therein.

Generally Accepted Accounting Principles (GAAP)

- The profession has developed GAAP that present fairly, clearly and completely the financial operations of the enterprise.
- GAAP consist of authoritative pronouncements issued by certain accounting bodies.

The Standard Setting Process: Parties Involved

- Securities and Exchange Commission (SEC)
- American Institute of Certified Public Accountants (AICPA)
- Financial Accounting Standards Board (FASB)
- Governmental Accounting Standards Board (GASB)

The Financial Accounting Standards Board (FASB)

- The FASB enjoys the following advantages compared to its predecessor, the Accounting Principles Board:

  * smaller membership

  * greater autonomy

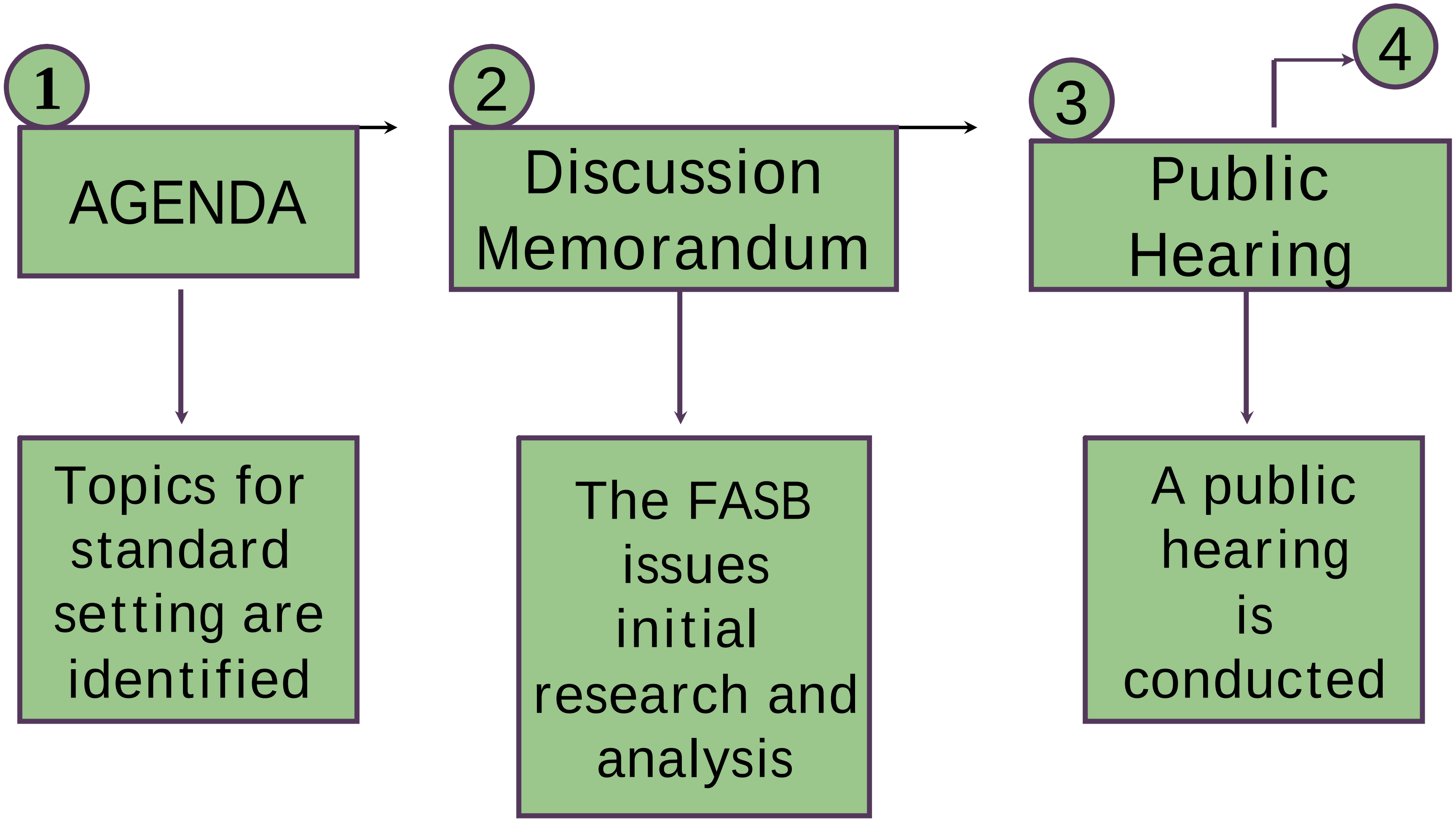
  * increased independence of members

  * broader representation on the Board

FASB
Due Process

- In establishing financial standards, the FASB follows a due process procedure.
- The due process procedure gives time to interested persons to make their views known to the Board.

FASB Due Process



FASB
Due Process

4

Exposure Draft

The FASB issues an exposure draft (tentative standard)

5

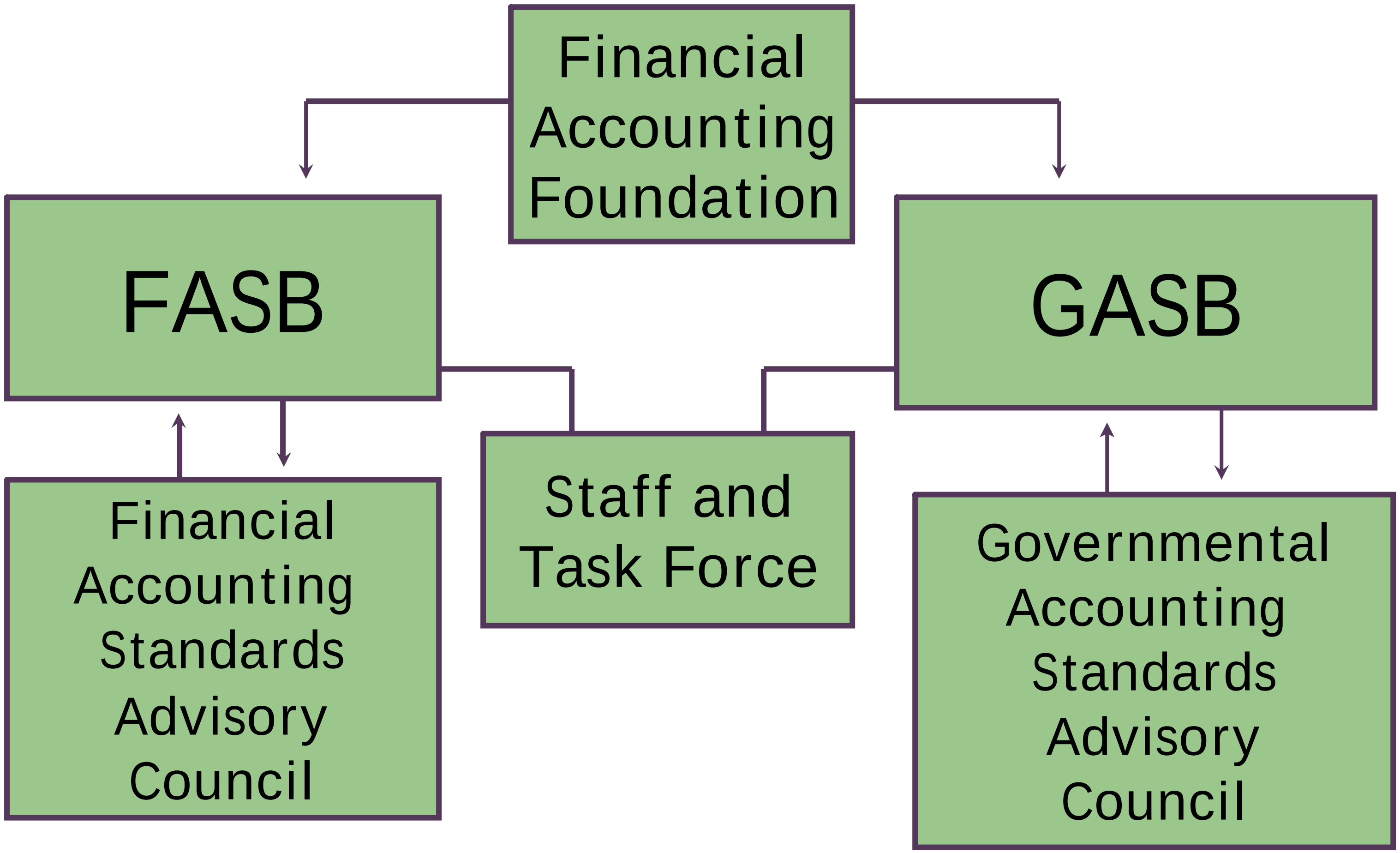
Final Standard

The FASB evaluates responses and issues the final standard

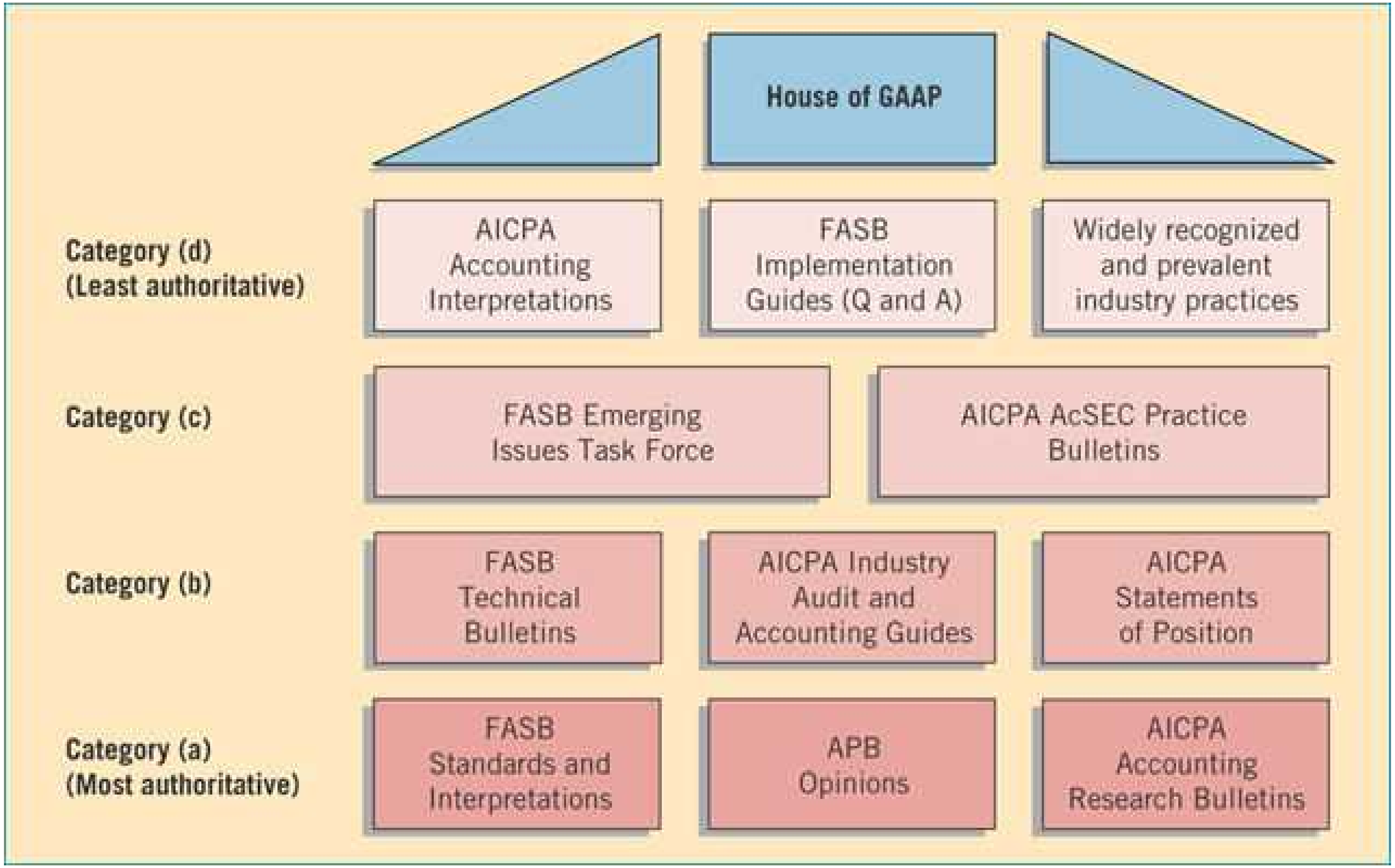
Major Types of FASB Pronouncements

- *Standards and Interpretations*
- *Financial Accounting Concepts*
- *Technical Bulletins*
- *Emerging Issues Task Force Statements*

Organizational Structure for Setting Standards



House of GAAP



Challenges Facing Financial Accounting

- Non-financial measurements need to be developed and reported.
- More information needs to be provided regarding soft assets (intangibles).
- Forward-looking information, in addition to historical information, must be provided.
- Statements may have to be prepared on a real-time basis (and not just periodically).

The Expectations Gap

An expectations gap exists between the

- public's perception of the profession's accountability and profession's perception of its accountability to the public.

Corrective steps include the setting up of the:

- SEC Practice sections and
- Public Oversight Board.

International Accounting Standards

- The International Accounting Standards Committee (IASC) was formed in 1973.
- The objective was to narrow divergence in international financial reporting.
- There are many similarities between U.S. and International accounting standards.
- The concern is that international standards may not be as rigorous as U.S. standards.

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Chapter 2: The Conceptual Framework

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Chapter 2: The Conceptual Framework

After studying this chapter, you should be able to:

1. Describe the usefulness of a conceptual framework.
2. Describe the FASB's efforts to construct a conceptual framework.
3. Understand the objectives of financial reporting.
4. Identify the qualitative characteristics of accounting information.

Chapter 2: The Conceptual Framework

5. Define the basic elements of financial statements.
6. Describe the basic assumptions of accounting.
7. Explain the application of the basic principles of accounting.
8. Describe the impact that constraints have on reporting accounting information.

Objectives of the Conceptual Framework

- The Framework was to be the foundation for building a set of coherent accounting standards and rules.
- The Framework is to be a reference of basic accounting theory for solving emerging practical problems of reporting.

Statements of Financial Accounting Concepts

- The FASB has issued seven *Statements of Financial Accounting Concepts* (SFACs) to date (Statements 1 through 7.)
- These statements set forth major recognition and reporting issues.
- Statement 4 pertains to reporting by non-business entities.
- The other six statements pertain to reporting by business enterprises.

Statements of Financial Accounting Concepts

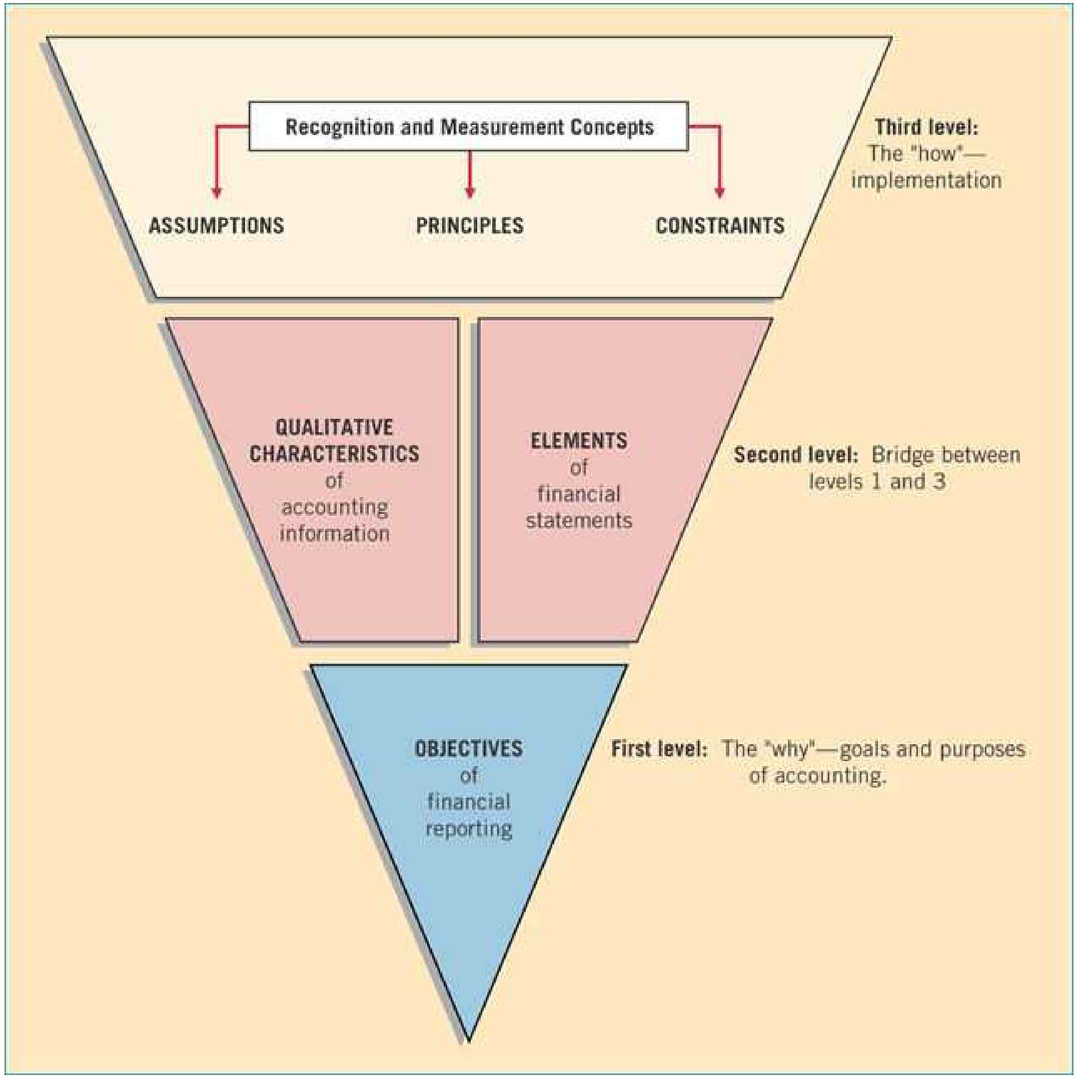
Statement	Brief Title
Statement 1	Objectives of Financial Reporting (Business)
Statement 2	Qualitative Characteristics
Statement 6	Elements of Financial Statements (replaces 3)
Statement 4	Objectives of Financial Reporting (Non-business)
Statement 5	Recognition and Measurement Criteria
Statement 7	Using Cash Flows

Overview of the Conceptual Framework

The Framework has three different levels,comprised of:

- The first level consists of objectives.
- The second level explains financial elements and characteristics of information.
- The third level incorporates recognition and measurement criteria.

Conceptual Framework for Financial Reporting

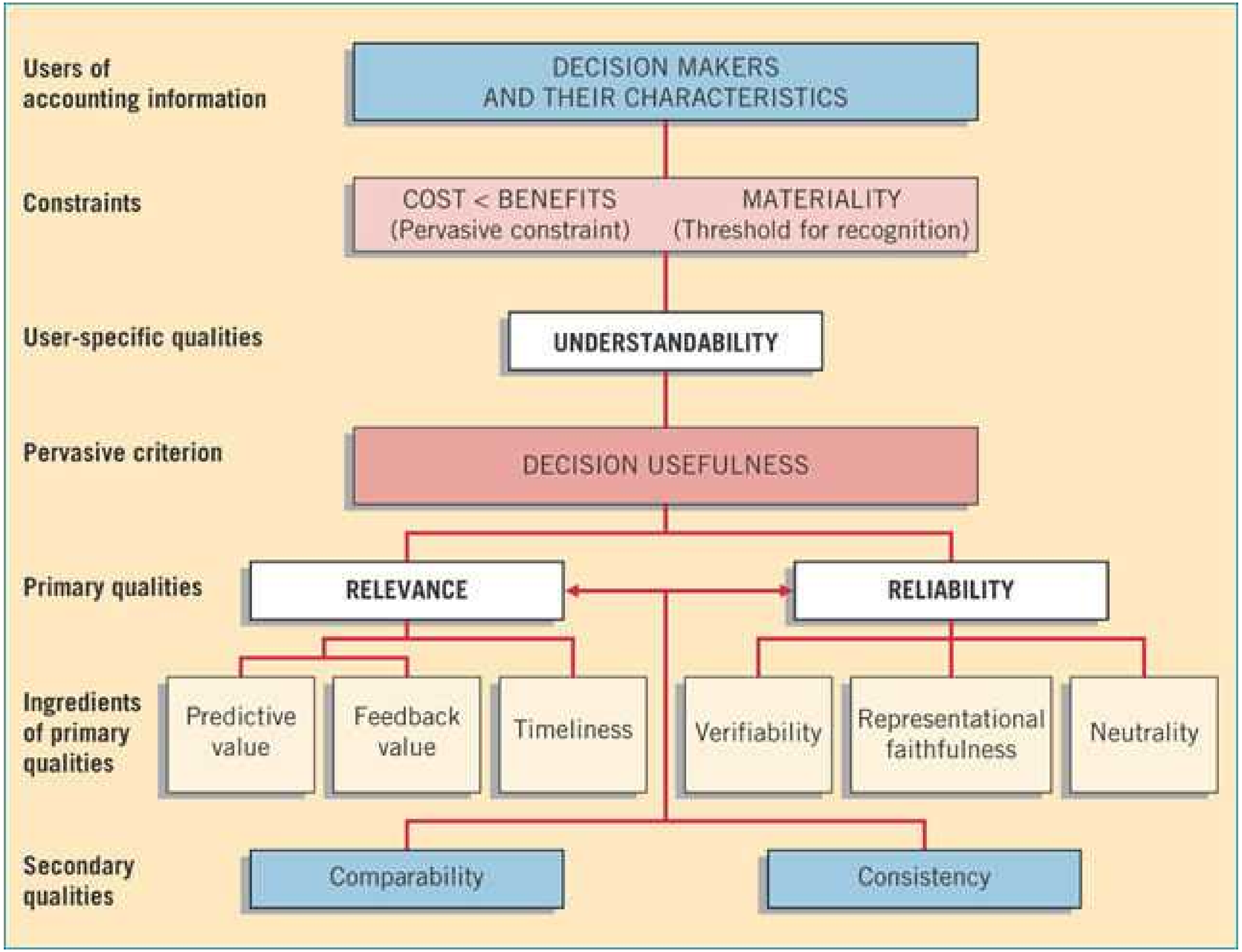


Basic Objectives of Financial Reporting

To provide information:

- about economic resources, the claims on those resources and changes in them.
- that is useful to those making investment and credit decisions.
- that is useful to present and future investors, creditors in assessing future cash flows.
- to individuals who reasonably understand business and economic activities.

Hierarchy of Accounting Qualities



Qualitative Characteristics of Accounting Information

- Primary qualities of accounting information are relevance and reliability.
- Secondary qualities are comparability and consistency of reported information.

Primary Characteristic of Accounting Information: Relevance

"Relevance of information means information capable of making a difference in a decision context."

Ingredients of relevant information are:

- Timeliness
- Predictive value
- Feedback value

Primary Characteristic of Accounting Information: Relevance

Information is reliable when it can be relied on to represent the true, underlying situation.

The ingredients of reliable information are:

- verifiability
- representational faithfulness
- neutrality (unbiased)

Secondary Characteristics of Accounting Information

Comparability: the similar measurement and reporting for different enterprises.

Consistency: application of the same accounting treatment to similar events by an enterprise period to period.

Basic Elements of Financial Statements

- Assets
- Liabilities
- Equity
- Investment by Owners
- Distributions to Owners

- Comprehensive Income
- Revenues
- Expenses
- Gains
- Losses

Recognition and Measurement Criteria

Basic Assumptions

1. Economic entity
2. Going concern
3. Monetary unit
4. Periodicity

Principles

1. Historical cost
2. Revenue recognition
3. Matching
4. Full disclosure

Constraints

1. Cost benefit
2. Materiality
3. Industry practices
4. Conservatism

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Chapter 3: The Accounting Information Systems

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Chapter 3: The Accounting Information Systems

After studying this chapter, you should be able to:

1. Understand basic accounting terminology.
2. Explain double entry rules.
3. Identify steps in the accounting cycle.
4. Record transactions in journals, post to ledger accounts, and prepare a trial balance.

Chapter 3: The Accounting Information Systems

5. Explain the reasons for preparing adjusting entries.
6. Prepare closing entries.
7. Explain how inventory accounts are adjusted at year-end.
8. Prepare a 10-column work sheet.

The Basic Accounting Equation

- Accounting data is represented by the following relationship among the assets, liabilities and owners' equity of a business:

  Assets = Liabilities + Owners' Equity

- The equation must be in balance after *every* recorded transaction in the system.

The Double Entry System

- Accounting information is based on the double entry system.
- An account is an arrangement of transactions affecting a given asset, liability or other element.
- Under this system, the two-sided effect of a transaction is recorded in the appropriate accounts.
- The recording is done by means of a “debit-credit” convention (set of rules) applying to all accounts.

The Double Entry System

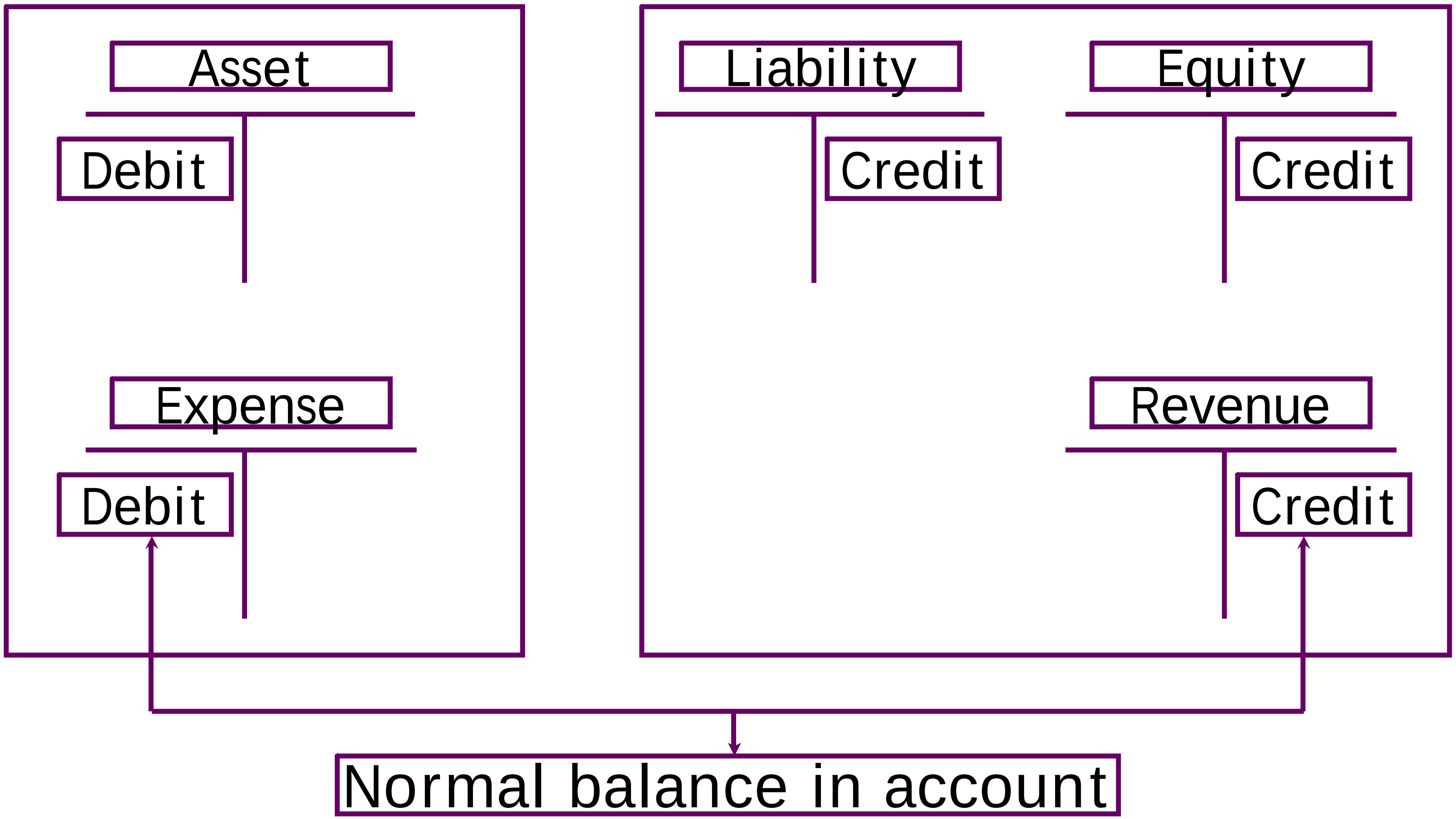
The system records the two-sided effect of transactions

Transaction	Two-sided effect
Bought furniture for cash	Decrease in *one* asset Increase in *another* asset
Took a loan in cash	Increase in an asset Increase in a liability

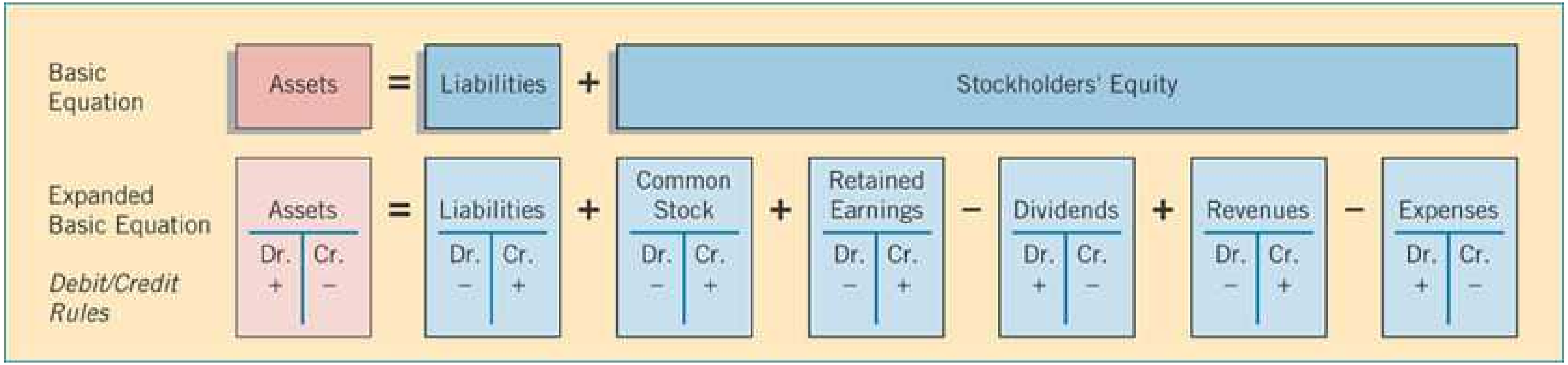
The Double Entry System

Note that the accounting equation equality is maintained after recording each transaction.

The Account and the Debit-Credit Convention



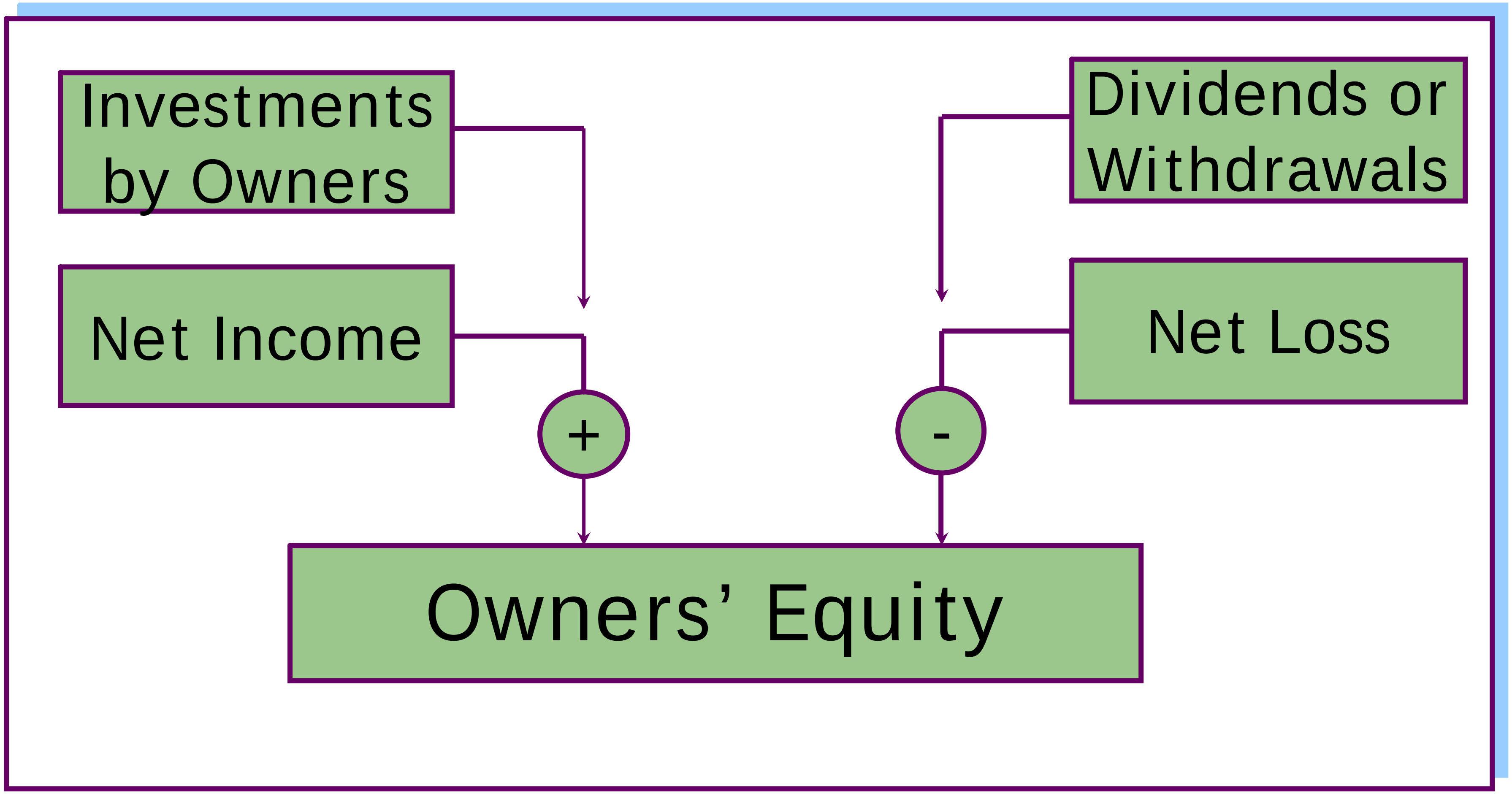
Expanded Basic Equation and Debit/Credit Rules and Effects



The Debit-Credit Convention

Balance increases	Balance decreases
• Debit entries in an asset account	• Credit entries in an asset account
• Debit entries in an expense account	• Credit entries in an expense account
• Credit entries in a liability account	• Debit entries in a liability account
• Credit entries in equity account	• Debit entries in equity account
• Credit entries in a revenue account	• Debit entries in a revenue account

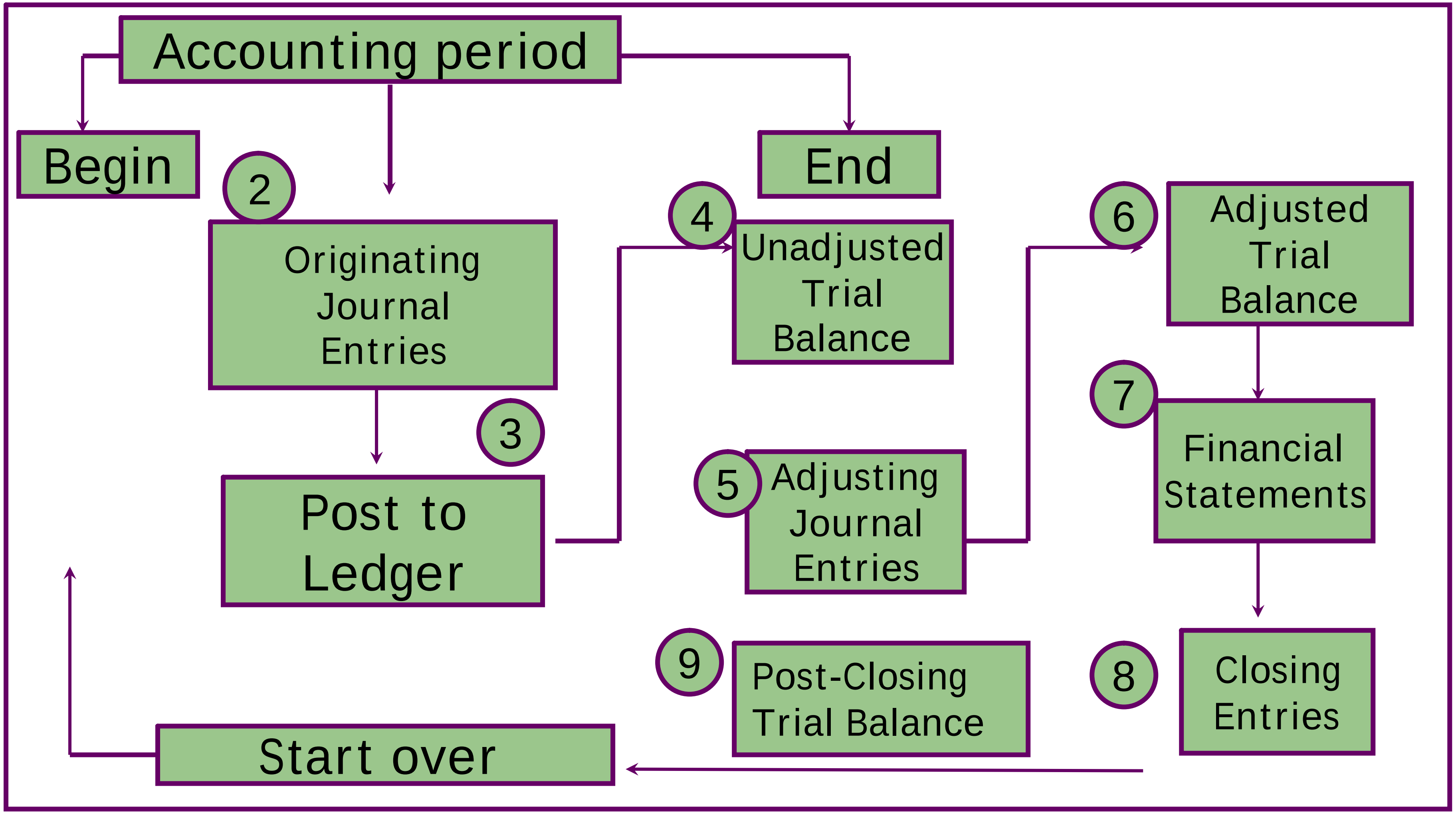
Ownership (Equity) Structure



The Accounting Cycle: Steps

1. Analyze the transaction
2. Journalize the transaction
3. Post the transaction to accounts in ledger
4. Prepare the (unadjusted) trial balance
5. Prepare necessary adjusting journal entries
6. Prepare the adjusted trial balance
7. Prepare financial statements
8. Prepare closing journal entries for the year
9. Prepare the post-closing trial balance

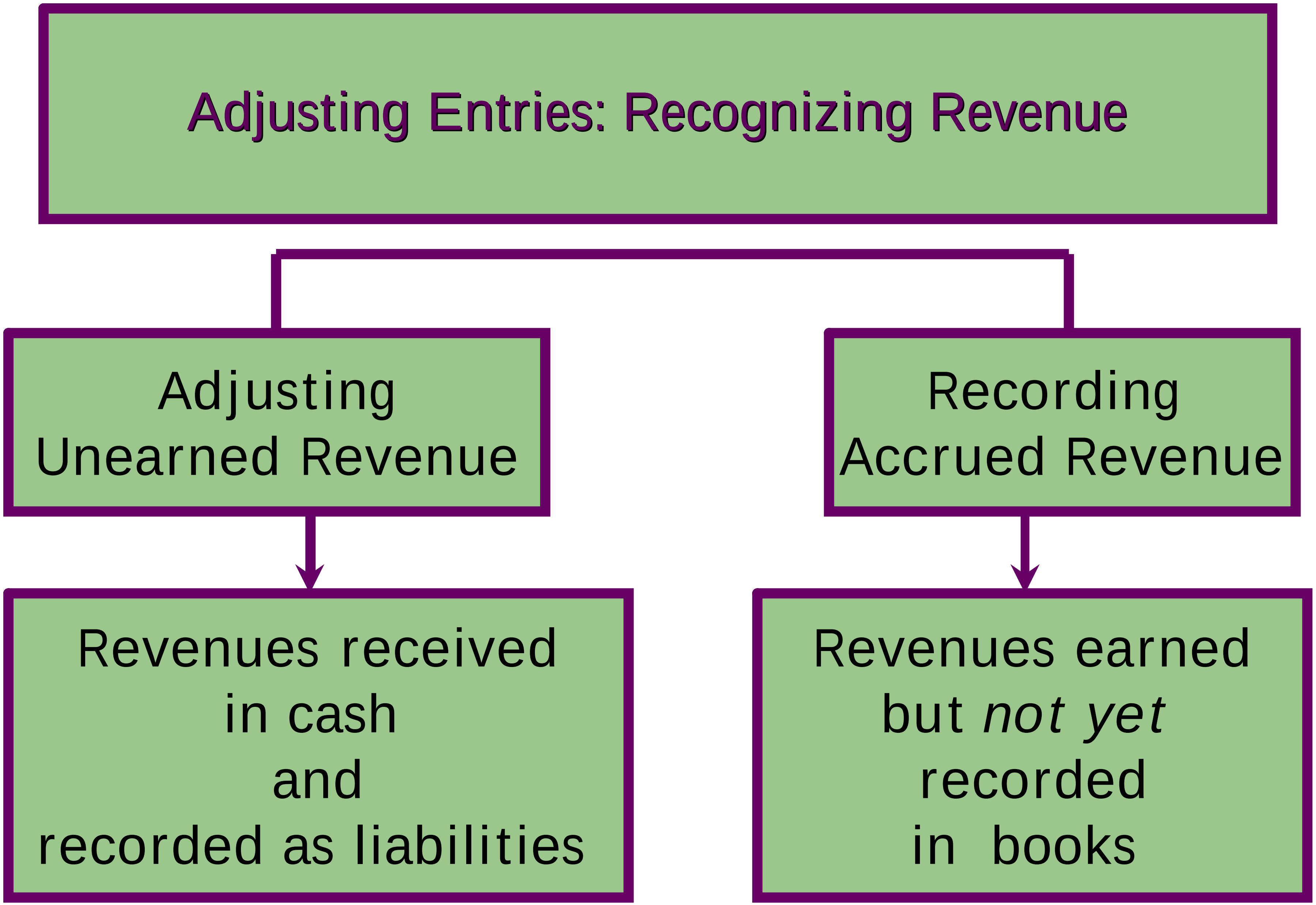
The Accounting Cycle: Steps



Adjusting Journal Entries

Adjusting entries are needed for:

- Recognizing revenue for the period.
- Matching expenses with revenues they helped generate.
- Adjusting entries are required every time financial statements are prepared.


Adjusting Entries: Recognizing Revenue
Adjusting Unearned Revenue
Recording Accrued Revenue
Revenues received in cash and recorded as liabilities
Revenues earned but *not yet* recorded in books

Adjusting Entries: Matching Expenses

Adjusting Prepayments for Expenses

Prepayments made in cash and recorded as assets

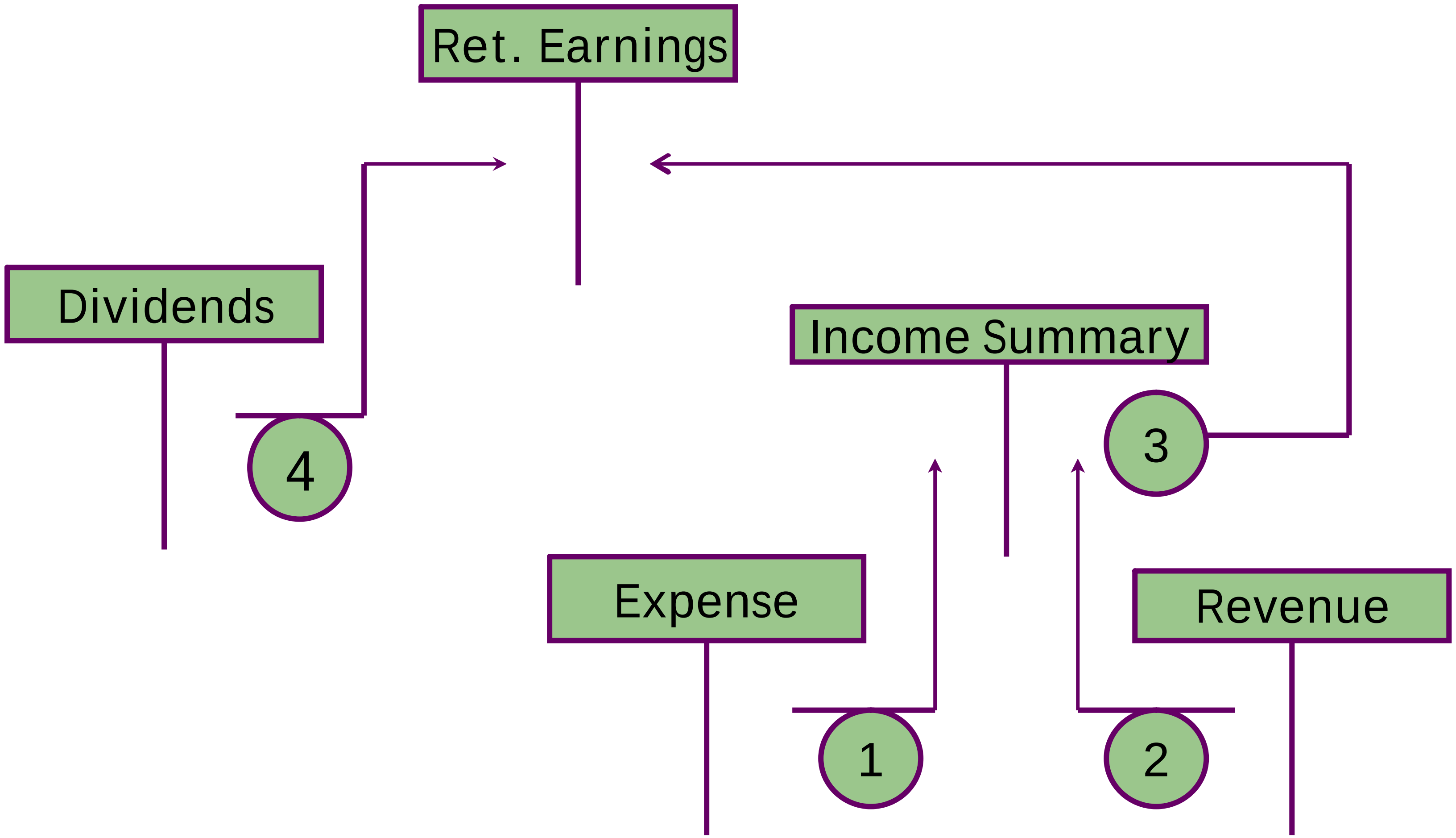
Recording Accrued Expense

Expense incurred but not yet recorded in books

Closing Journal Entries

- Closing entries are made to close all nominal accounts (revenue and expense accounts) for the year.
- Real (or Permanent) accounts (balance sheet accounts) are not closed.
- Dividend account is closed to Retained Earnings account.

Scheme of Closing Entries



Closing Entries: Periodic Inventory System

- In a periodic inventory system, closing entries are made to record cost of goods sold and ending inventory.
- In a perpetual inventory system, such entries are not required.

Using a Worksheet

- A worksheet is a multiple column form that may be used in the adjustment process and in preparing financial statements.
- The use of a worksheet is optional and not a permanent accounting record.
- The worksheet does not replace the financial statements.

Steps in Preparing a Worksheet

- Prepare a trial balance on the worksheet.
- Enter the adjustments in the adjustments column.
- Enter adjusted balances in the adjusted trial balance columns.
- Extend adjusted trial balance amounts to appropriate financial statement columns.
- Total the statement columns, compute net income (loss), and complete the worksheet.

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Chapter 4: Income Statement and Related Information

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Chapter 4: Income Statement and Related Information

After studying this chapter, you should be able to:

1. Identify the uses and limitations of an income statement.
2. Prepare a single-step income statement.
3. Prepare a multiple-step income statement.
4. Explain how irregular items are reported.
5. Explain intraperiod tax allocation.

Chapter 4: Income Statement and Related Information

6. Explain where earnings per share information is reported.
7. Prepare a retained earnings statement.
8. Explain how other comprehensive income is reported.

Usefulness of Income Statement

- Evaluate the past performance of the enterprise.
- Provide a basis for predicting future performance.
- Help assess the risk or uncertainty of achieving future cash flows.

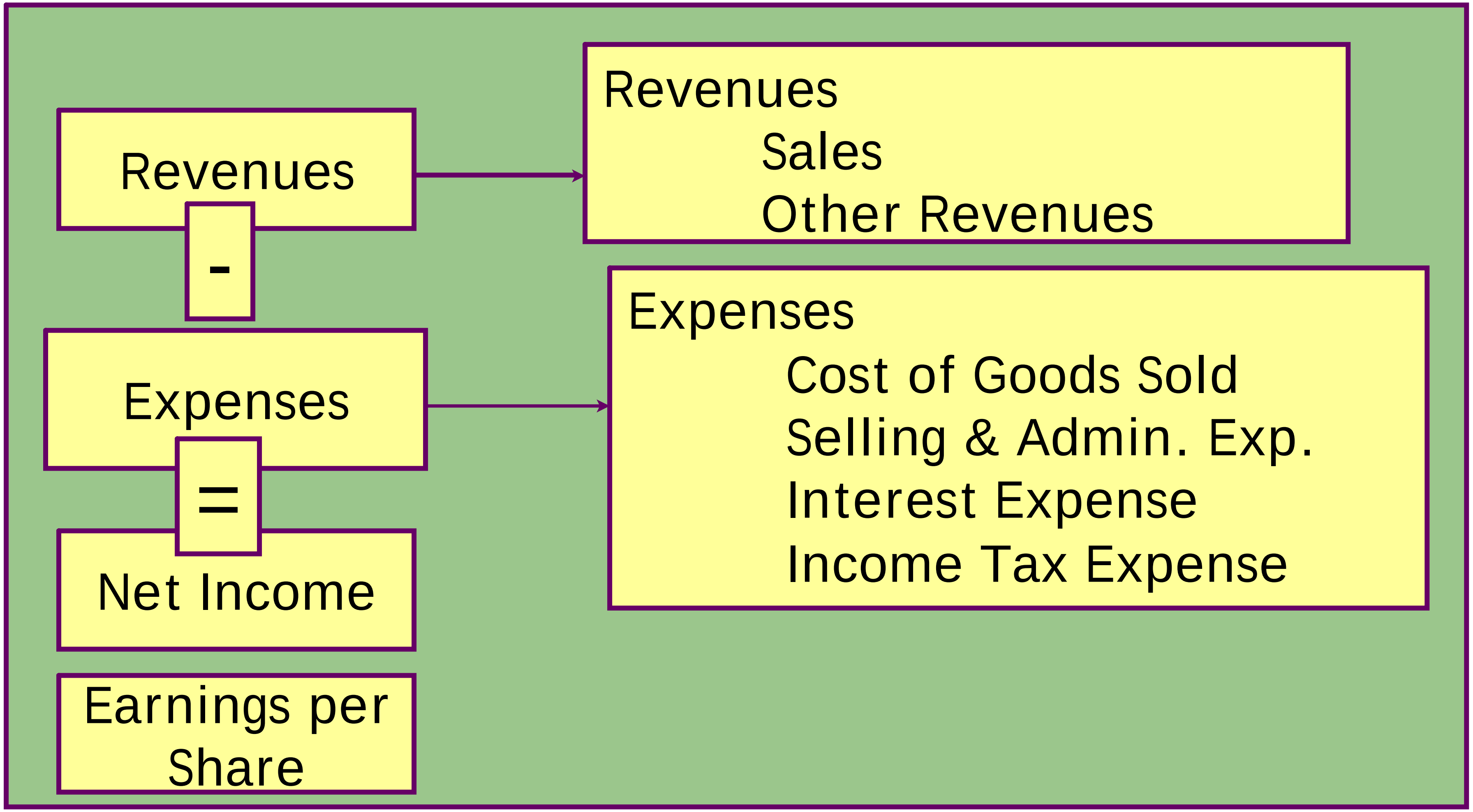
Limitations of the Income Statement

- Items that cannot be measured reliably are not reported in the income statement.
- Income numbers are affected by the accounting methods employed.
- Income measurement involves judgment.

The Single Step Income Statement

- This statement presents information in broad categories.
- Major sections are Revenues and Expenses.
- The Earnings per Share amount is shown at the bottom of the statement.
- There is no distinction between operating and non-operating activities.

The Single Step Income Statement



The Multiple Step Income Statement

- The presentation divides information into major sections on the statement.
- The statement distinguishes operating from non-operating activities.
- Continuing operations are shown separately from irregular items.
- The income tax effects are shown separately as well.

The Multiple Step Income Statement

1. Operating Section

	Sales Revenue
less:	Cost of Goods Sold
less:	Selling Expenses
less:	Administrative Expenses

2. Non-Operating Section

Add:	Other Revenues and Gains
Less:	Other Expenses and Losses

3. Income Tax
4. Irregular Items

Discontinued Operations (net of tax)
Extraordinary Items (net of tax)

5. Net Income
6. Earnings per Share

Irregular Item: Discontinued Operations

Discontinued operations refer to the disposal of a segment. To qualify:

- The segment must be a distinct line of business
- Its assets and operations must be distinguishable from other assets and operations.
- A distinction is made between:
  - the segment's results of operations and
  - the disposal of the segment's assets

Reporting Discontinued Operations

There are two important dates in reporting discontinued operations:

- the measurement date (when management commits itself to a plan of segment's disposal) and
- the disposal date (the date of sale of the segment).

Irregular Item: Extraordinary Items

- Extraordinary items are:

  nonrecurring material items that

  differ significantly from typical activities
- Extraordinary items must meet two tests:

  they must be unusual *and*

  they must be infrequent
- The environment in which the business operates is of primary importance

Extraordinary Items: what they are not

- Losses from write-down or write-off of receivables, inventories, etc.
- Gains and losses from exchange or translation of foreign currency
- Gains and losses from the abandonment of property used in business
- Effects of strike
- Adjustments or accruals on long term contracts.

Unusual Gains and Losses

- Items that are unusual *or* infrequent, but not both.
- If material, disclose separately.
- Do not disclose net of taxes.

Irregular Item: Change in Accounting Principle

An accounting change results when:

- a new generally accepted principle, different from the generally accepted one in use, is adopted.
- A change in principle is to be distinguished from a change in estimate.
- A change from FIFO to LIFO method in inventory costing is an example.

Irregular Item: Change in Accounting Principle

- The effect of the change is to be reported as a retroactive adjustment of the financial statements presented.
- Any cumulative effect of the change for prior periods not presented is recorded as an adjustment to beginning retained earnings of the earliest year presented.

Irregular Item: Changes in Accounting Estimates

- Accounting estimates will change as new events occur, more experience is acquired or additional information is obtained.
- Changes in accounting estimates are accounted for in period of change and future periods.

Intra-period Tax Allocation

- Tax expense for year related to specific items.
- Used for:
  - Income from continuing operations
  - Discontinued operations
  - Extraordinary items
  - Change in accounting principle

Earnings Per Share

Earnings per share is:

- Computed as:

$$\frac{\text{Net Income less Preferred Dividends}}{\text{Weighted Average of Common Shares Outstanding}}$$

- Disclosed on the income statement for all the major sections.
- Is subject to dilution (reduction).

Retained Earnings Statement

- Retained earnings are increased by net income and decreased by net loss and dividends for the year.
- Cumulative effects on prior years from a change in accounting principle are shown as adjustments to the beginning balance in retained earnings.
- Corrections of errors in prior period financial statements are shown as prior period adjustments to the beginning balance in retained earnings.
- Any part of retained earnings, appropriated for a specific purpose, is shown as restricted earnings.

Comprehensive Income

All changes in equity during a period, except those resulting from investments by or distributions to owners.

Other Comprehensive Income

Must be displayed as:

- A separate statement of comprehensive income OR
- Combined income statement and comprehensive income statement OR
- Part of statement of stockholders' equity

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Chapter 5: Balance Sheet and Statement of Cash Flows Systems

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Chapter 5: Balance Sheet and Statement of Cash Flows Systems

After studying this chapter, you should be able to:

1. Identify the uses and limitations of a balance sheet.
2. Identify the major classifications of the balance sheet.
3. Prepare a classified balance sheet using the report and account formats.
4. Identify balance sheet information requiring supplemental disclosure.

Chapter 5: Balance Sheet and Statement of Cash Flows Systems

5. Identify major disclosure techniques for the balance sheet.
6. Indicate the purpose of the statement of cash flows.
7. Identify the content of the statement of cash flows.
8. Prepare a statement of cash flows.
9. Understand the usefulness of the statement of cash flows.

Part 1: The Balance Sheet

Balance Sheet: Usefulness

The balance sheet provides information for evaluating:

- ✓Capital structure
- ✓Rates of return
- ✓Analyzing an enterprise's:
  - ✓Liquidity
  - ✓Solvency
  - ✓Financial flexibility

Balance Sheet: Limitations

- Most assets and liabilities are stated at historical cost.
- Judgments and estimates are used in determining many of the items.
- The balance sheet does not report items that can not be objectively determined.
- It does not report information regarding off-balance sheet financing.

Balance Sheet: Classification

Guidelines for reporting assets and liabilities separately:

- Type or expected function in the central operations
- Implications for the enterprise's financial flexibility
- Liquidity characteristics

Balance Sheet: Classification

Assets

- Current Assets
- Long-term investments
- Property, plant, and equipment
- Intangible assets
- Other assets

Liabilities and Equity

- Current liabilities
- Long-term debt
- Owners' equity
  - Capital stock
- Additional paid-in capital
- Retained earnings

Current Assets

Current assets are expected to be consumed, sold, or converted into cash:

either in one year or in the operating cycle, whichever is longer.

Current assets are presented in order of liquidity.

The following valuation principles are used:

1. Short-term investments at fair value
2. Accounts receivable at net realizable value

Long-Term Investments

Long-term investments may be:

1 Investments in securities (bonds, stock)

2 Investments in fixed assets (land not used in operations)

3 Investments set aside in special funds (e.g., sinking fund)

4 Investments in non-consolidated subsidiaries or affiliated companies

Current Liabilities

Current liabilities are liquidated:

1. Either through the use of current assets, or
2. By creation of other current liabilities

Examples of current liabilities include:

- Payables resulting from acquisitions of goods and services
- Collections received in advance of services
- Other liabilities which will be paid in the short term

Long-Term Liabilities

Long-term obligations are those not expected to be paid within the operating cycle.

Examples are:

- obligations arising from specific financing situations (issuance of bonds)
- obligations arising from ordinary business operations (pension obligations)
- obligations that are contingent (product warranties)

Balance Sheet: Additional Information Reported

Additional information may be:

1. Information not presented elsewhere, or
2. Information that qualifies items in the balance sheet

Supplemental information examples:

- Material events having an uncertain outcome
- Explanations regarding accounting policies
- Covenant restrictions

Balance Sheet: Techniques of Disclosure

- Parenthetical explanations
- Notes
- Cross references and contra items
- Supporting schedules

Part 1: The Statement of Cash Flows

The Cash Flow Statement

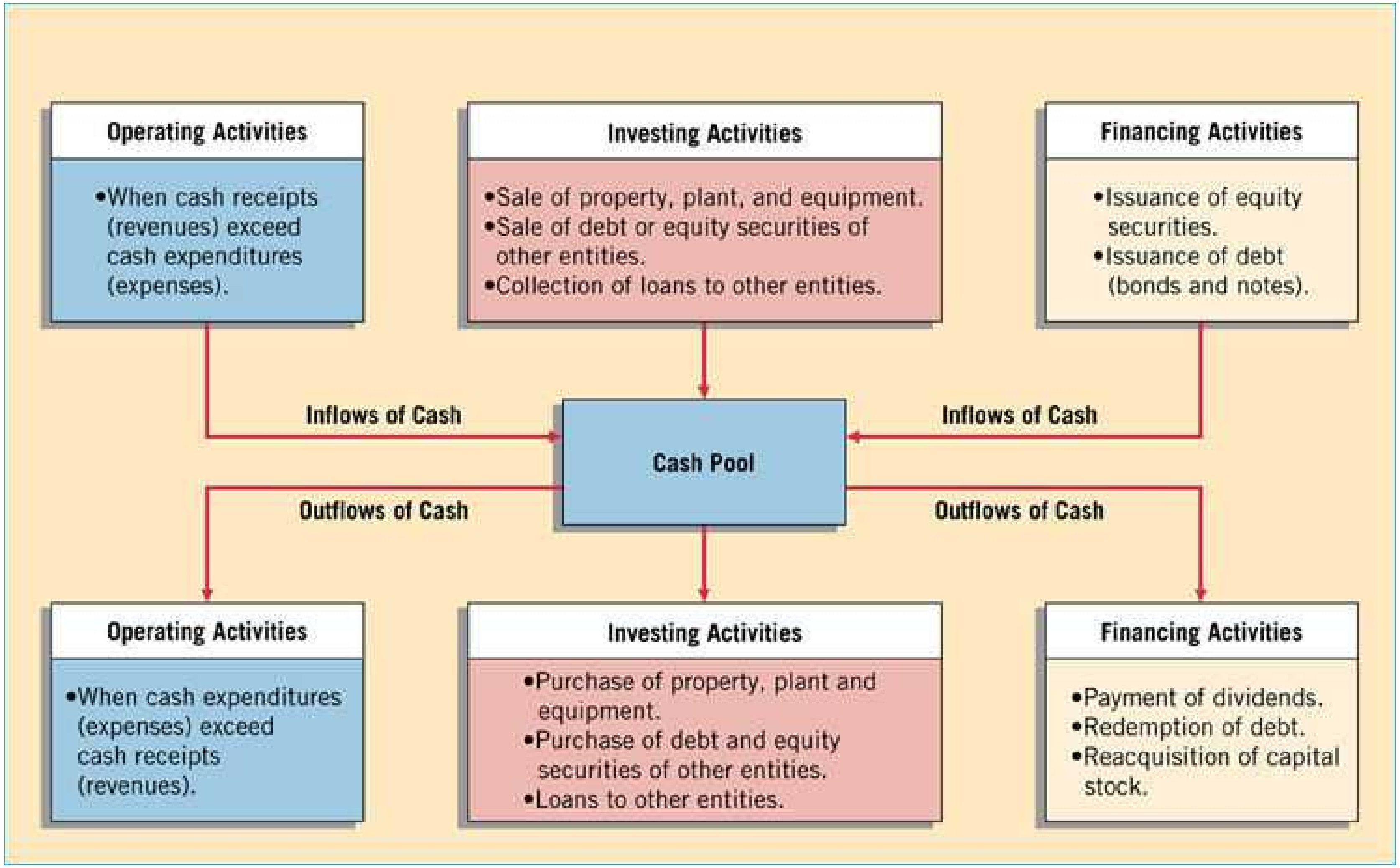
The cash flow statement provides information about:

- cash receipts (cash inflows)
- uses of cash (cash outflows)
- during a period of time

Inflows and outflows are reported for:

- operating
- investing
- financing activities

Cash Inflows and Outflows



Preparing a Statement of Cash Flows

There are two methods of preparing the statement of cash flows:

- Indirect method: derives cash flows from accrual based statements
- Direct method: derives cash flows directly for each source or use of cash

The Statement of Cash Flows: Indirect Method

Accrual Based Statements	Cash Flow Statement
Income Statement items & Changes in Current Assets and Current Liabilities	Operating activities: Adjust net income for accruals and non-cash charges to get cash flows
Balance Sheet: Changes in Non-Current Assets	Investing activities: Inflows from sale of assets and Outflows from purchases of assets
Balance Sheet: Changes in Non-Current Liabilities and Equity	Financing activities: Inflows and outflows from loan and equity transactions

Ratio Analysis

Ratio analysis expresses the relationship between selected financial data.

These relationships can be expressed as:

- percentages
- rates, or
- proportions

Types of Ratios

Type	What is measured	Examples
Liquidity ratios	Short-term ability to pay maturing obligations	Current ratio Quick assets ratio
Activity ratios	Effectiveness in using assets employed	Receivables turnover Inventory turnover
Profitability ratios	Degree of success or failure for a given period	Rate of return on assets Earnings per share
Coverage ratios	Degree of protection for long-term creditors and investors	Debt to total assets Times interest earned

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Chapter 6: Accounting and the Time Value of Money

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Chapter 6: Accounting and the Time Value of Money

After studying this chapter, you should be able to:

1. Identify accounting topics where time value of money is relevant.
2. Distinguish between simple and compound interest.
3. Learn how to use appropriate compound interest tables.
4. Identify variables fundamental to solving interest problems.

Chapter 6: Accounting and the Time Value of Money

5. Solve future and present value of 1 problems.
6. Solve future value of ordinary and annuity due problems.
7. Solve present value of ordinary and annuity due problems.
8. Solve present value problems related to deferred annuities and bonds.
9. Apply expected cash flow approach to present value measurement.

Basic Time Value Concepts

- The time value of money is the relationship between time and money.
- According to the present value of money concept, a dollar earned today is worth more than a dollar earned in the future.
- This concept is used to choose among alternative investment proposals.

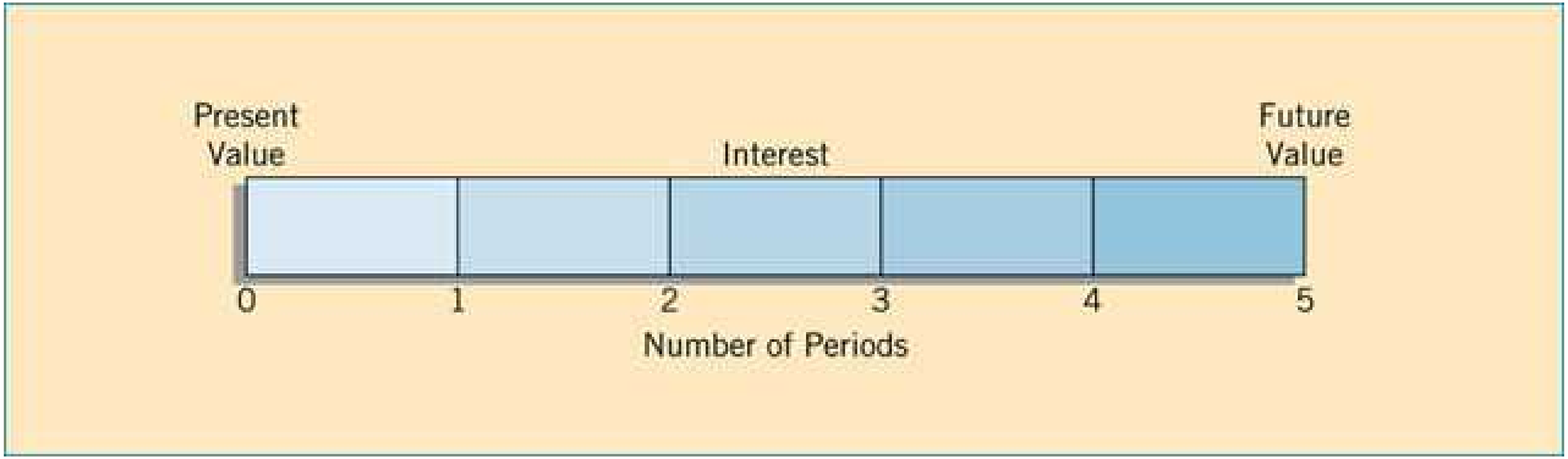
Accounting Applications

- Notes
- Leases
- Pensions
- Long-term assets
- Sinking funds
- Business combinations
- Disclosures
- Installment contracts

Variables in Interest Computations

- Principal: The amount borrowed or invested
- Interest rate: A percentage of the outstanding principle.
- Time: the number of years or fractional portion of a year that principal is outstanding.

Basic Time Diagram



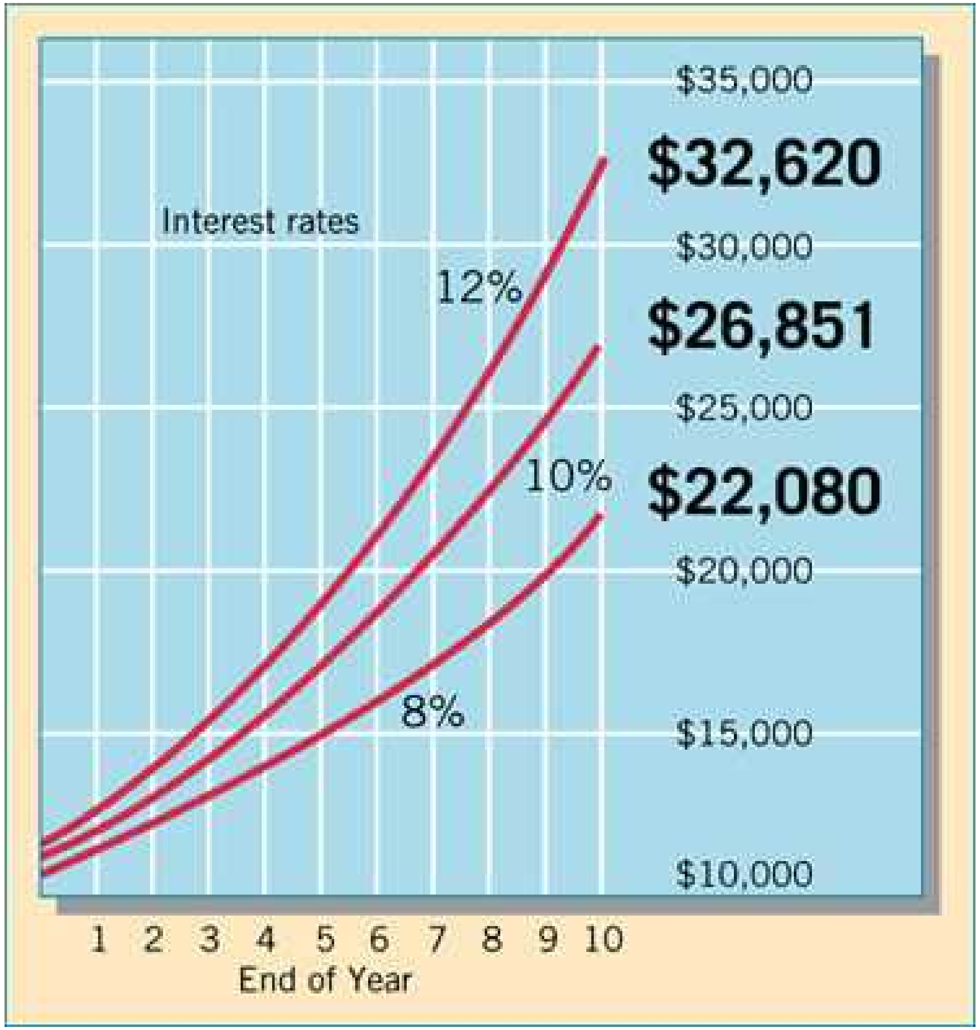
Choosing an Interest Rate in Time Value Measurements

The appropriate interest rate depends on:

- the pure rate of interest
- credit risk rate of interest
- expected inflation rate of interest

The higher the credit risk, the higher the interest rate.

Choosing an Interest Rate in Time Value Measurements



Simple and Compound Interests

- Simple interest is determined on the principal only.

  principal x interest rate (%) x time

- Compound interest is determined on:

  the principal, and any interest earned (and not withdrawn).

- Compound interest is the typical computation applied in most time value applications.

Compound Interest Tables

- *Future value of $1*
- *Present value of $1*
- *Future value of an ordinary annuity of $1*
- *Present value of an ordinary annuity of $1*
- *Present value of an annuity due of $1*

Interest Rates and Frequency Compounding

Assumed interest rate per year: 12%

Frequency of Compounding	Interest rate per compounding	Number of compounding periods
Annual	12%	One (1)
Semi-annual	6%	Two (2)
Quarterly	3%	Four (4)
Monthly	1%	Twelve (12)

Single Sum Problems

Typically one of two types:

- Computing a future value of a known single sum present value.
- Computing a present value of a known single sum future value.

Single Sum Problems: Future Value of Single Sum

Given:

- Amount of deposit today (PV): $50,000
- Interest rate 11%
- Frequency of compounding: Annual
- Number of periods (5 years): 5 periods

What is the future value of this single sum?

(use Table 6-1 to determine the factor of 1.68506)

$50,000 x (1.68506) = $84,253

Single Sum Problems: Present Value of Single Sum

Given:

- Amount of deposit end of 5 years: $84,253
- Interest rate (discount) rate: 11%
- Frequency of compounding: Annual
- Number of periods (5 years): 5 periods

What is the present value of this single sum?

(use Table 6-2 to determine the factor of .59345)

$84,253 x (0.59345) = $50,000

Annuity Computations

An annuity requires that:

- the periodic payments or receipts (rents) always be of the same amount,
- the interval between such payments or receipts be the same, and
- the interest be compounded once each interval.

Types of Annuities

Annuities may be broadly classified as:

- Ordinary annuities: where the rents occur at the end of the period.
- Annuities due: where rents occur at the beginning of the period.

Annuities: Future Value of an Ordinary Annuity

Given:

- Deposit made at the end of each period: $5,000
- Compounding: Annual
- Number of periods: Five
- Interest rate: 12%

What is future value of these deposits?

Use table 6-3 to derive the factor of 6.35285

$5,000 x (6.35285) = $ 31,764.25

Annuities: Present Value of an Ordinary Annuity

Given:

- Rental receipts at the end of each period: $6,000
- Compounding: Annual
- Number of periods (years): 5
- Interest rate: 12%

What is the present value of these receipts?

Use table 6-4 to derive the factor of 3.60478

$6,000 x (3.60478) = $ 21,628.68

Annuities: Future Value of an Annuity Due

Given:

Deposit made at the beginning of <u>each</u> period: $ 800

- Compounding: Annual
- Number of periods: Eight
- Interest rate 12%

What is the future value of these deposits?

Annuities: Future Value of an Annuity Due

First Step:

Convert future value of ordinary annuity factor to future value for an annuity due:

- Ordinary annuity factor: 8 periods, 12%: 12.29969
- Convert to annuity due factor: 12.29969 x 1.12: 13.77565

Second Step:

Multiply derived factor from first step by the amount of the rent:

- Future value of annuity due: $800 x 13.77565 = $11,020.52

Annuities: Present Value of an Annuity Due

Given:

- Payment made at the beginning of <u>each</u> period: $ 4.8
- Compounding: Annual
- Number of periods: Four
- Interest rate 11%

What is the present value of these payments?

Annuities: Future Value of an Annuity Due

First Step:

Convert future value of ordinary annuity factor to future value for an annuity due:

- Ordinary annuity factor: 4 periods, 11%: 3.10245
- Convert to annuity due factor: 3.10245 x 1.11 3.44372

Second Step:

Multiply derived factor from first step by the amount of the rent:

- Present value of annuity due: $4.8M x 3.44372: $16,529,856

Complex Situations

Deferred Annuities:

- Rents begin after a specified number of periods.

Valuation of Long-term Bonds:

- Two cash flows: principal paid at maturity and periodic interest payments

Expected Cash Flow Approach

- Introduced by *SFAC No. 7*
- Uses a range of cash flows.
- Incorporates the probabilities of those cash flows to arrive at a more relevant measurement of present value.

Intermediate Accounting, 11th ed.
Kieso, Weygandt, and Warfield

Chapter 7: Cash and Receivables

Prepared by
Jep Robertson and Renae Clark
New Mexico State University

Chapter 7: Cash and Receivables

After studying this chapter, you should be able to:

1. Identify items considered cash.
2. Indicate how cash and related items are reported.
3. Define receivables and identify the different types of receivables.
4. Explain accounting issues related to recognition of accounts receivable.

Chapter 7: Cash and Receivables

5. Explain accounting issues related to valuation of notes receivable.
6. Explain accounting issues related to recognition of notes receivable.
7. Explain accounting issues related to valuation of notes receivable.
8. Explain accounting issues related to disposition of accounts and notes receivable.
9. Explain how receivables are reported and analyzed.

Cash and Cash Equivalents: Issues

- Definition of "cash"
- Management and control of cash
- Reporting of cash in the balance sheet

Items Comprising "Cash"

- Cash must be readily available and be free of restrictions
- Cash consists of coins, currency and available funds
- Deposits (CDs) and short term paper are classified as temporary investments
- Post dated checks, travel advances and stamps on hand are not classified as cash

Management of Control and Cash

- Since cash is the most liquid asset, internal control of cash is imperative.
- Controls must prevent unauthorized use of cash.
- Management must have necessary information for proper use of cash.

Reporting of Cash

The reporting of cash depends upon whether it is:

- restricted cash
- a bank overdraft or
- a cash equivalent

Restricted Cash

Compensating balances:

- are amounts maintained by a corporation with a bank in support of existing borrowing arrangements.
- are identified as current assets separate from cash, if they relate to short-term loans.
- are identified as non-current assets separate from cash, if they relate to long-term loans.

Bank Overdrafts

- Overdrafts represent checks written in excess of cash account.
- Overdrafts may be offset against available cash in another account in the same bank.
- Otherwise, such offsetting is not allowed.

Accounts Receivable: Issues

- Types of accounts receivable
- Recognition of accounts receivable in the financial statements
- Valuation of accounts receivable
- Disposition of receivable

Accounts Receivable Recognition: Recording Cash Discounts

There are two methods: Gross and Net

1. Gross method records discounts when taken by customers.
2. Net method records discounts not taken by customers.

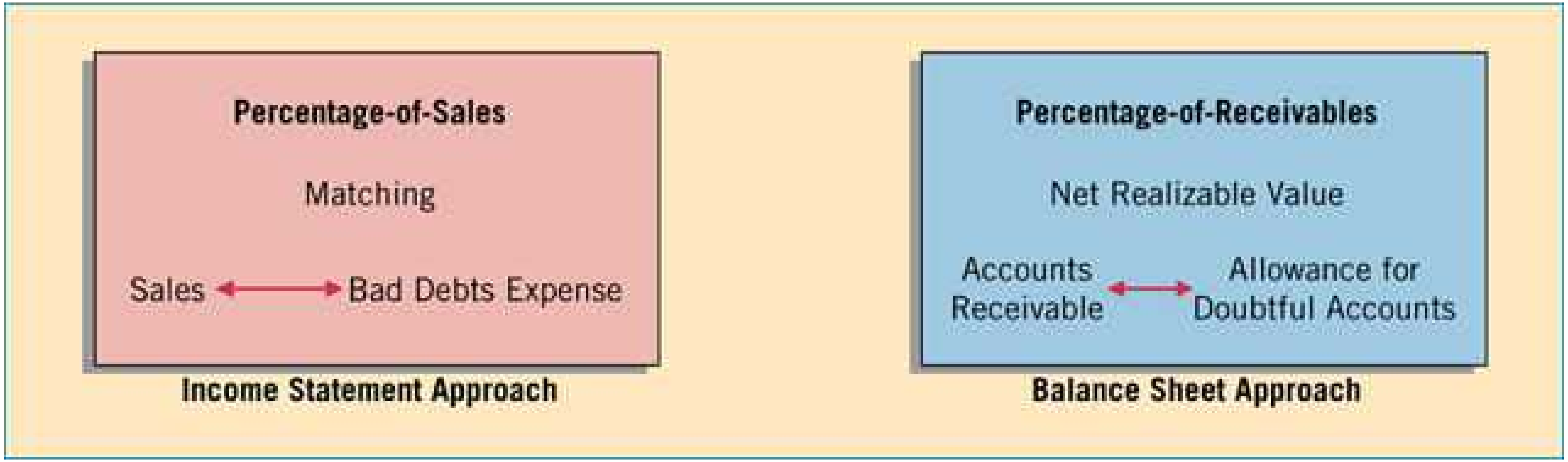
Accounts Receivable: Recording Cash Discounts

GROSS method	NET method
• Record revenue at gross amount of sales.	• Record revenue at gross amount of sales less cash discount.
• When customer takes the discount, record cash discounts.	• When customer forfeits discount, record discounts <u>not taken.</u>
• Cash discounts reduce gross sales revenue.	• Report discounts forfeited as other revenue.

Valuation of Accounts Receivable

- Short term receivables are reported at their net realizable value (NRV)
- The NRV is the net amount expected to be collected
- The NRV is gross accounts receivable less estimated non-collectible accounts.

Comparison of Methods for Estimating Uncollectibles



Estimating Non-collectable Receivables

Methods

Direct Write-Off	Allowance
Not based on the matching principle	Based on the matching principle
Accounts are written off when determined non-collectible	Estimated bad debts are matched against revenue
Appropriate only if amounts are not material	Must be followed if amounts are material

Estimating Non-collectable Accounts: The Allowance Method

The estimate of non-collectible accounts may be based on:

1. Sales (or net sales), known as the Income statement approach, or
2. Accounts receivable balance, known as the Balance sheet approach.

Balance Sheet Representation

Short-term accounts receivable are shown at their net realizable value as follows:

• Accounts Receivable (gross):	$ XXX
less: Allowance:	($ XX)
Net Realizable Value:	$ XX

Notes Receivable: Issues

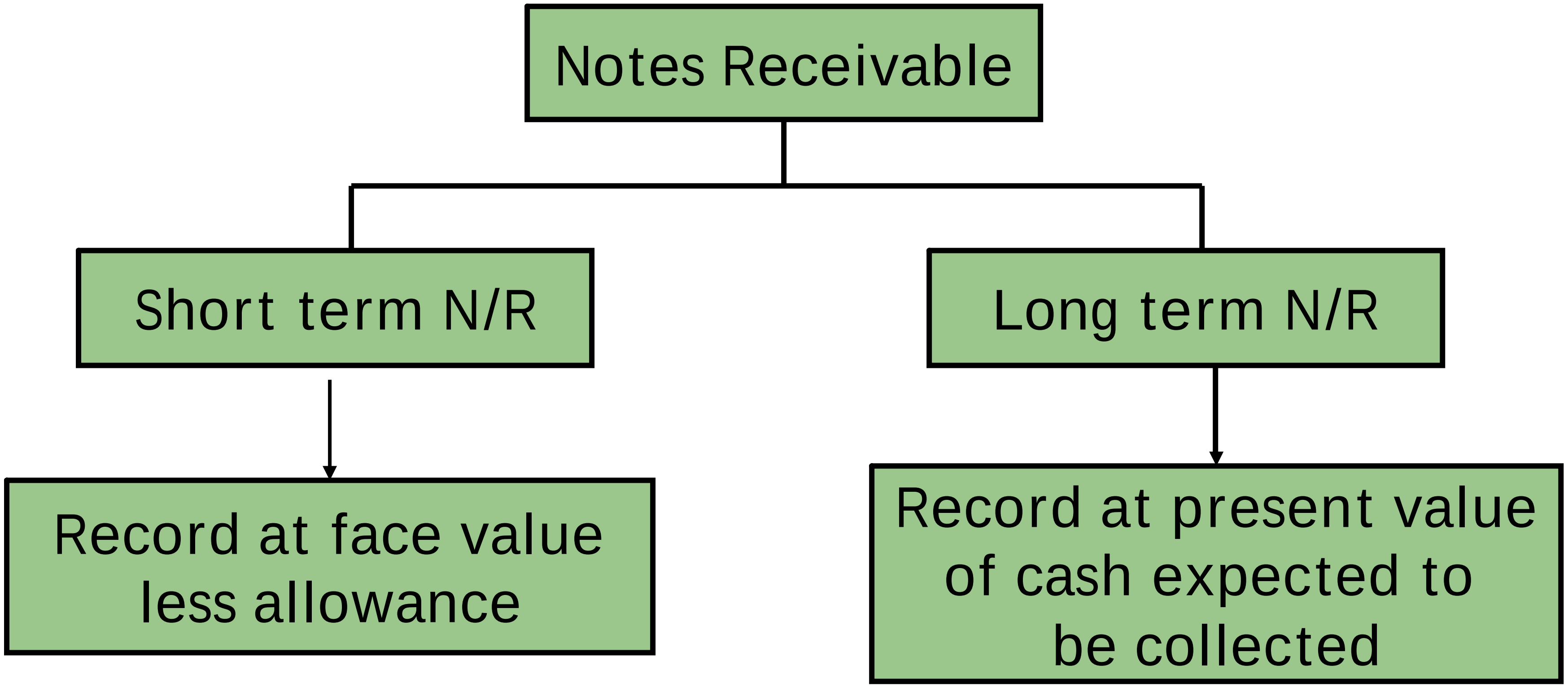
Recognition of Notes Receivable

- may be issued at face value or not at face value
- may be issued for cash/non-cash consideration

Valuation issues

Disposition of notes receivable

Recognition of Notes Receivable



Recognition of Notes Receivable

- Notes receivable are issued at face value when the stated rate of interest is the same as the effective (market) rate.
- If the stated rate is less than the effective rate then a discount results.
- If the stated rate is greater than the effective rate then a premium results.
- The discount or premium is amortized to interest revenue by the effective interest method.

Recognition of Notes Receivable

Issues NOT at face value

Non-interest bearing

1. Determine issue price on notes receivable at implicit rate of interest
2. The discount/premium is amortized to interest revenue by the effective interest method

Interest bearing

1. Determine issue price on notes receivable at the effective rate of interest.
2. The discount/premium is amortized to interest revenue by the effective interest method

Disposition of Accounts and Notes Receivable

- The holder of accounts or notes receivable may transfer them for cash.
- The transfer may be:
  1. a secured borrowing or
  2. a sale of receivables
- Holder retains ownership of receivables in a secured borrowing transaction.
- Holder transfers ownership of receivables in a sale (retaining risks of collection).

Transfer of Receivables: Borrowing vs. Sale Treatment

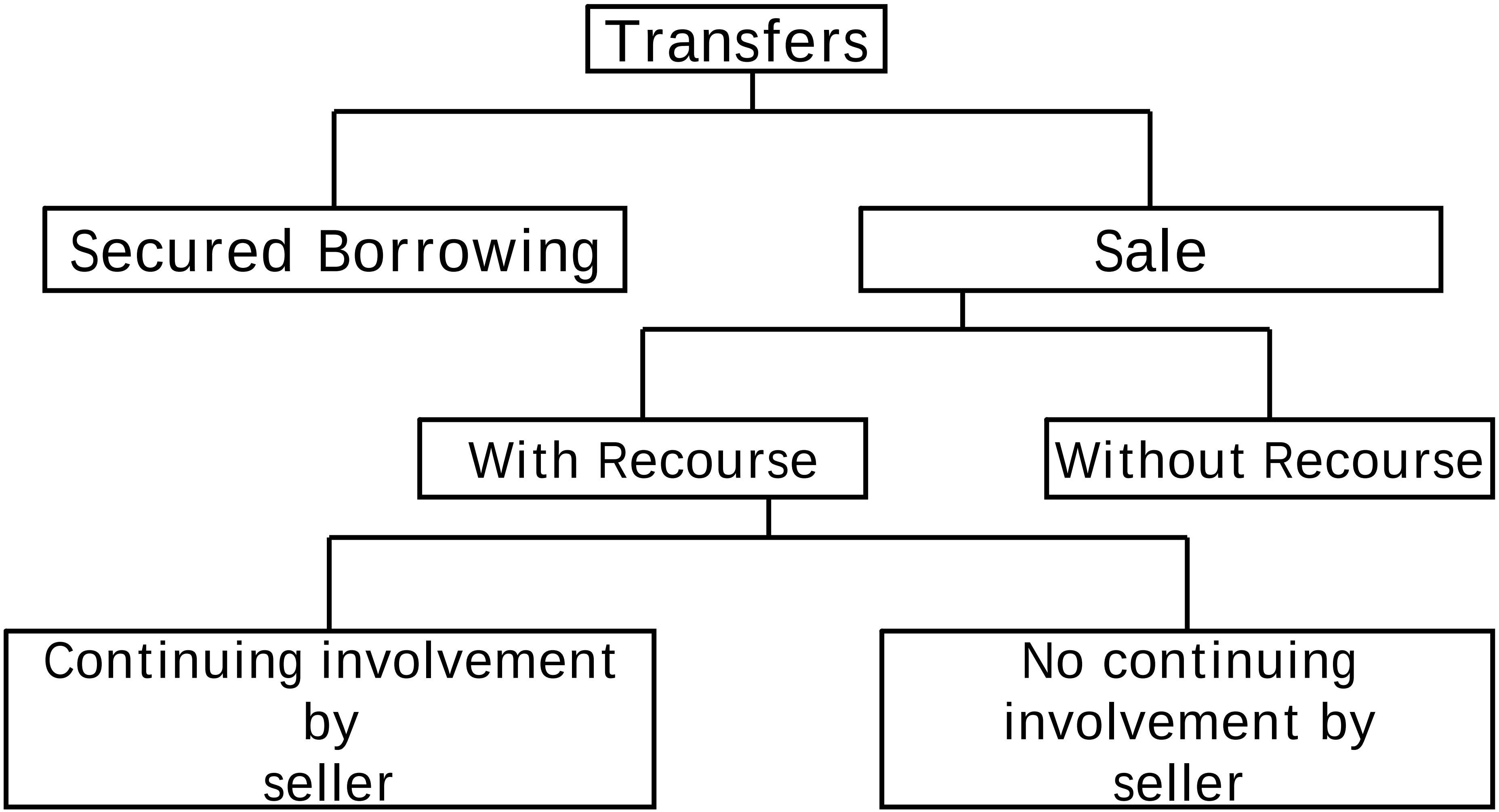
Conditions

1. Are transferred assets isolated from transferor? and
2. Does transferee have right to pledge or sell assets? and
3. Has transferor divested itself of control through repurchase agreement?

Yes → Sale

No → Borrowing

Accounting for Transfers of Receivables



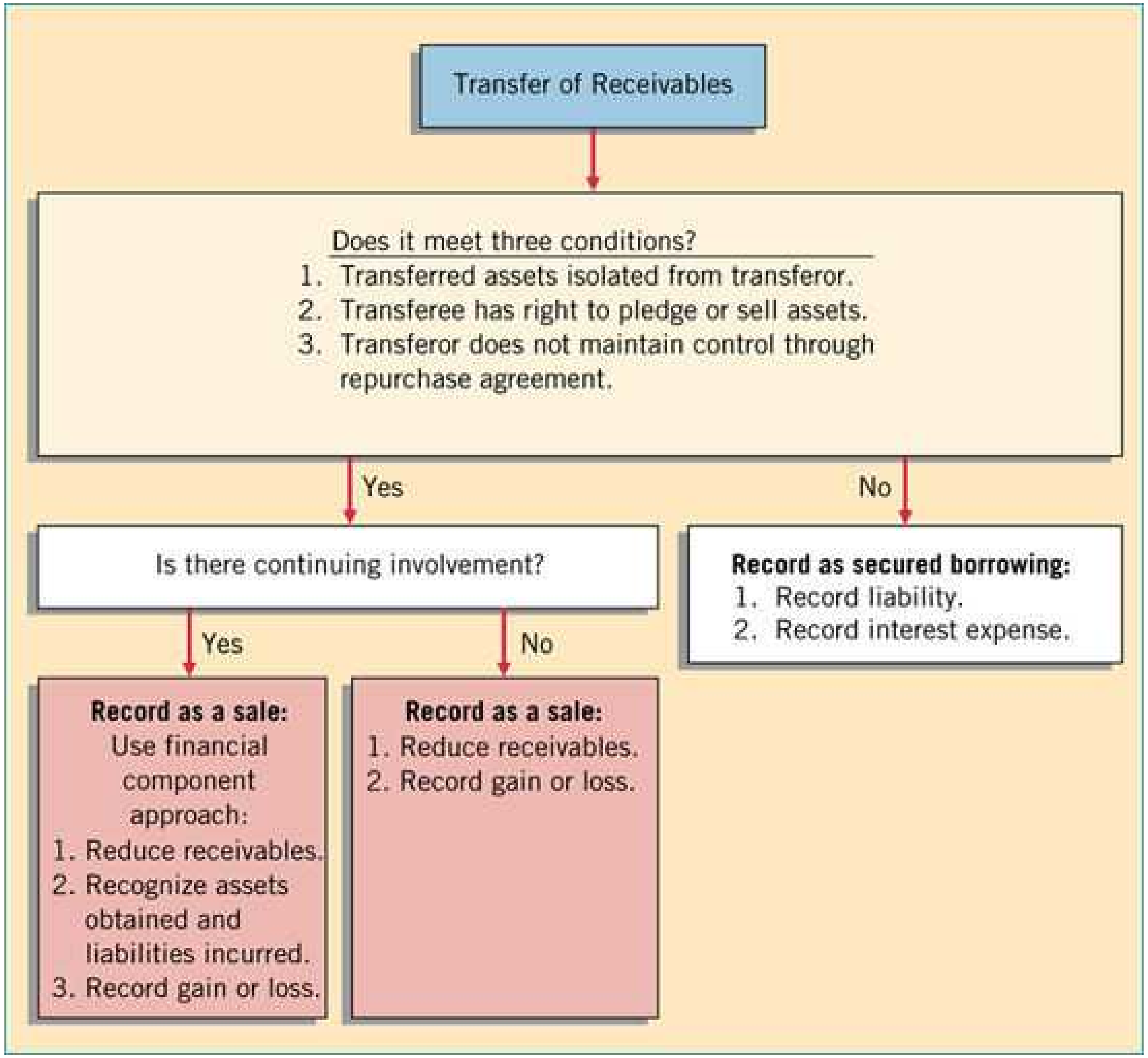
Secured Borrowing (the basics)

- Transferor records a finance charge.
- Transferor collects accounts receivable.
- Transferor records sales returns and sales discounts.
- Transferor absorbs bad debts expense.
- Transferor records interest expense on notes payable.
- Transferor pays on the note periodically from collections.

Sale of Receivables

- Transferor transfers ownership of receivables to factor.
- Factor records the (transferred) accounts as assets in its books.
- Transferor records any amount retained by transferee as "due from factor."
- Transferor records loss on sale of receivables.
- Transferor records any component liability (when appropriate).

Accounting for Transfers of Receivables



Intermediate Accounting, 11th ed.
Kieso, Weygandt, and Warfield

Chapter 8: Valuation of Inventories: A Cost Basis Approach

Prepared by
Jep Robertson and Renae Clark
New Mexico State University

Chapter 8: Valuation of Inventories: A Cost Basis Approach

After studying this chapter, you should be able to:

1. Identify major classifications of inventory.
2. Distinguish between perpetual and periodic inventory systems.
3. Identify the effects of inventory errors on the financial statements.
4. Identify the items that should be included as inventory cost.

Chapter 8: Valuation of Inventories: A Cost Basis Approach

5. Describe and compare the flow assumptions used in accounting for inventories.
6. Explain the significance and use of a LIFO reserve.
7. Explain the effect of LIFO liquidations.
8. Explain the dollar-value LIFO method.
9. Identify the major advantages and disadvantages of LIFO.
10. Identify the reasons why a given inventory method is selected.

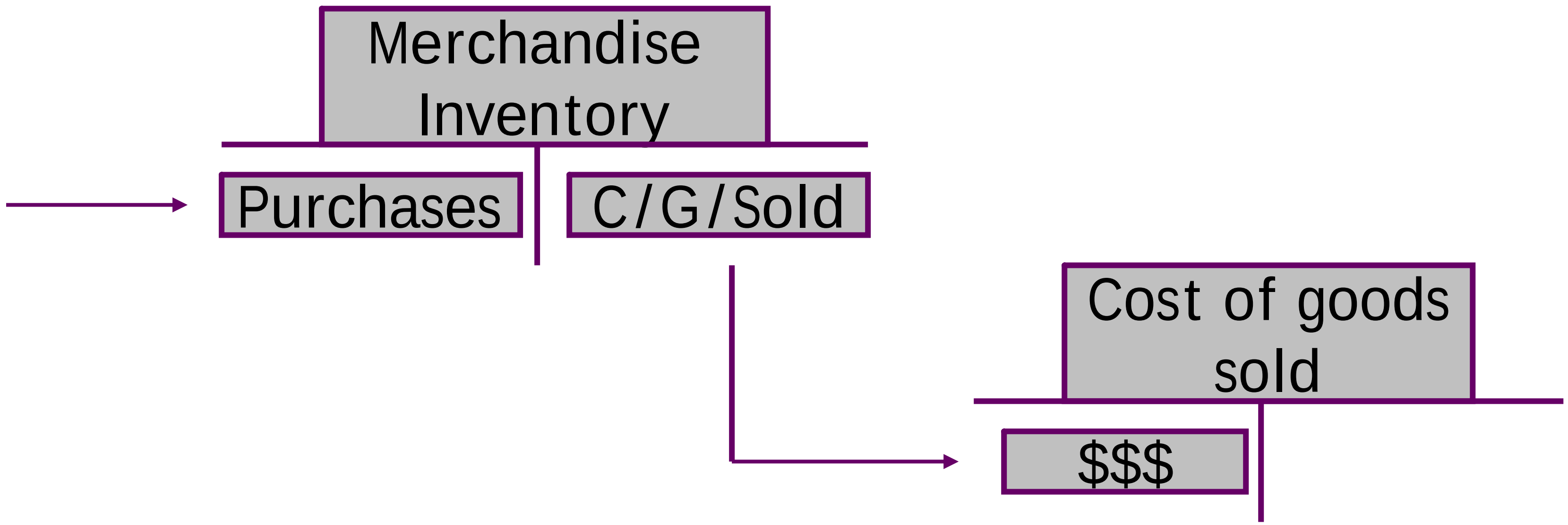
Inventory Classification

Inventory consists of:

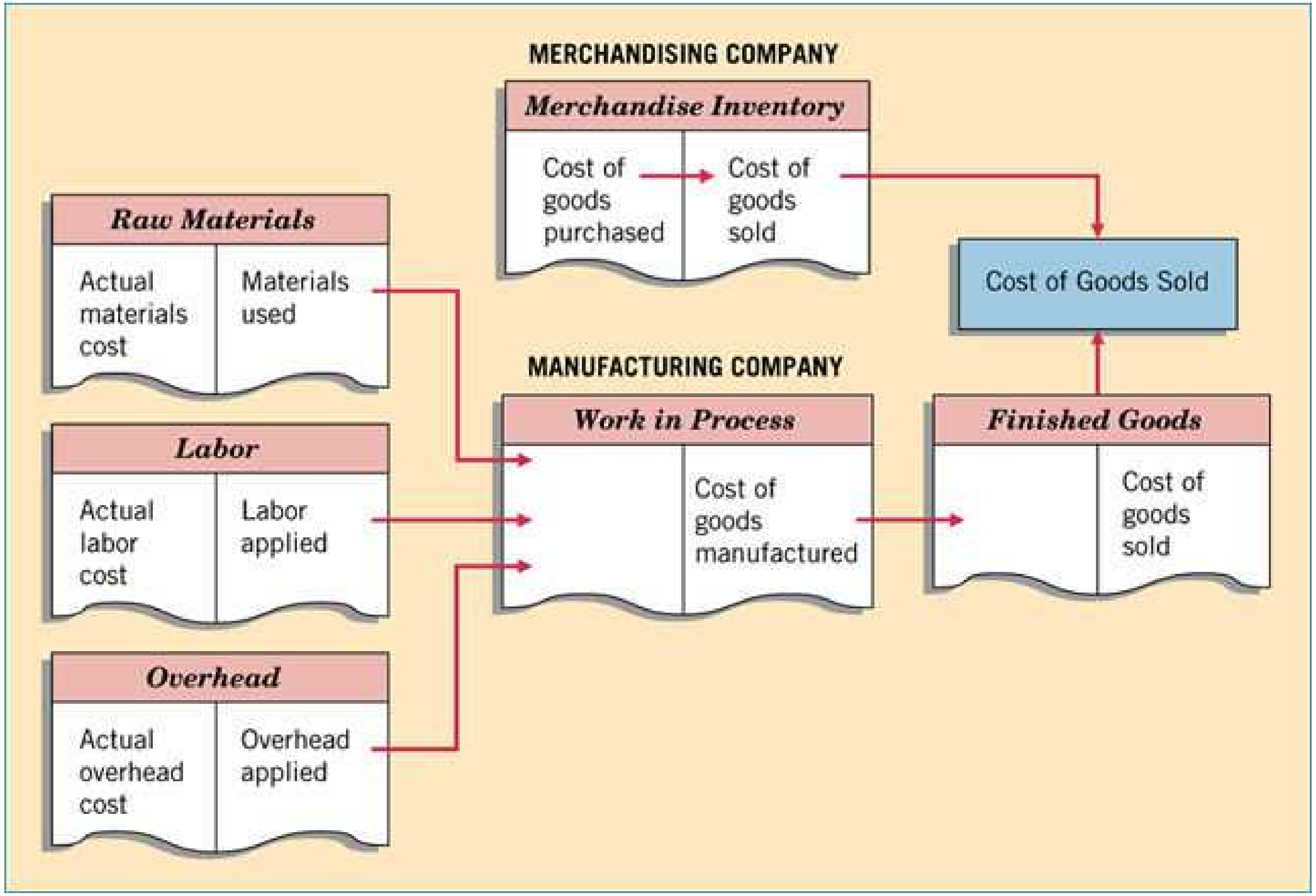
1. Finished goods held for sale in the ordinary course of business.
2. Goods held or consumed in the production of finished goods.

Inventory Cost Flows

Merchandising Operations



Flow of Costs through Manufacturing and Merchandising Companies



Inventory Control

Inventory control is important for:

1. Ensuring availability of inventory items
2. Preventing excessive accumulation of inventory items

The perpetual system maintains a continuous record of inventory changes

The periodic system updates inventory records only periodically

Inventory Systems

Perpetual Method	Periodic Method
• Purchases are debited to Inventory account • Freight-in, Purch. R & A and Purch. Disc. are recorded in Inventory account. • Debit COGS and credit Inventory account for each sale.	• Purchases are debited to Purchases account. • Freight-in, Purch. R & A and Purch. Disc. are recorded in their respective accounts. • COGS is computed only periodically: COGAS - Ending Inventory COGS

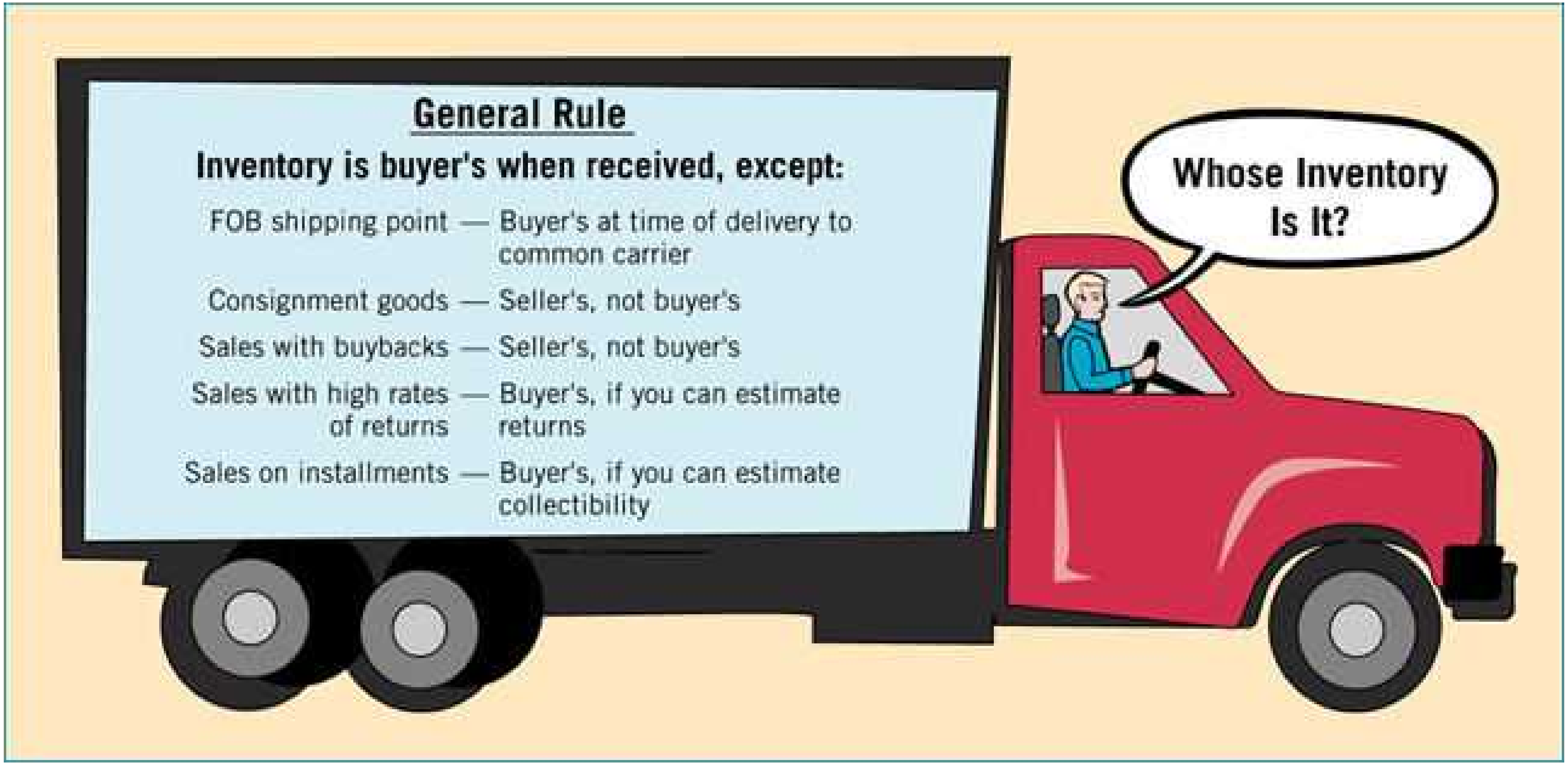
Items to be Included in Inventory

Legal title to goods typically determines inclusion.

The following goods are included in "seller's" inventory:

1. Goods in transit (FOB Destination)
2. Goods on consignment with consignee
3. Goods, sold under buy back agreements
4. Goods, sold with high rates of return
5. Installment sales (if bad debts can *not* be estimated)

Guidelines for Determining Ownership



Effect of Inventory Errors

Error in Ending Inventory	Effect on Income Items	Effect on Balance sheet Items
Under-stated	COGS (over) Net income (under)	Inventory (under) Retained Earn (under)
Over-stated	C/G/sold (under) Net income (over)	Inventory (over) Retained Earn (over)

Costs Included in Inventory

Generally accounted for on a cost basis.

- Product costs are "inventoriable" costs, whereas
- Period costs are not inventoriable costs
  - Abnormal inventory costs are accounted for as period costs

Cost Flow Assumptions

The objective is to most clearly reflect periodic income.

Cost flow assumptions need not be consistent with physical flow of goods.

The cost flow assumptions are:

1. Specific identification
2. Average cost
3. First-in, first-out (FIFO) and
4. Last-in, first-out (LIFO)

Cost Flow Assumptions: Example

Susieworld reports the following transactions for 2004:

Date	Purchases	Purchase Cost
May 12	100 units	$1,000
Aug 14	200 units	2,200
Sep 18	120 units	1,800
	420 units	$5,000

On December 31, the company had 20 units on hand and uses the periodic inventory system.

What are the cost of goods sold and the cost of ending inventory?

Average (Weighted) Method

Given Data:

Date	Purchases	Cost
May 12	100 units	$1,000
Aug 14	200 units	$2,200
Sep 18	120 units	$1,800
	420 units	$5,000

Steps:

1. Calculate per unit average cost: $5,000/420 = $11.905
2. Apply this per unit average cost to units sold to get COGS: 400 x $11.905 = $4,762
3. Apply the per unit average cost to units remaining in inventory to determine Ending inventory: 20 x $11.91 = $238

First-In, First-Out (FIFO) Method

Given data:

Date	Purchases	Cost
May 12	100 units @ $10	$1,000
Aug 14	200 units @ $11	$2,200
Sep 18	120 units @ $15	$1,800
	420	$5,000

Cost of goods sold (FIFO)

$1,000 (100 sold)
$2,200 (200 sold)
$1,500 (100 sold; 20 end inv)
$4,700

Cost of goods available		
$5,000	Cost of goods sold	$4,700
	Ending inventory	20 * $15 = $300

Last-In, First-Out (LIFO) Method

Given data:

Date	Purchases	Cost
May 12	100 units @ $10	$1,000
Aug 14	200 units @ $11	$2,200
Sep 18	120 units @ $15	$1,800
	420	$5,000

Cost of goods sold (LIFO)

$ 800 (80 sold; 20, end inv)
$2,200 (200 sold)
$1,800 (120 sold)
$4,800

Cost of goods available		
$5,000	Cost of goods sold	$4,800
	Ending inventory	20 * $10 = $200

Cost Flow Assumptions: Notes

- The ending inventory in units is the same in all three methods: the cost is different.
- The cost of goods sold and the cost of ending inventory are different, but
- The cost of goods available is the same in all three methods.
- LIFO would result in the smallest reported net income (with rising prices).

LIFO Reserve

LIFO Reserve (Allowance) account is used, when:

LIFO is used for external reporting and a non-LIFO basis is used for internal reporting.

An Allowance to Reduce Inventory to LIFO is used to reduce the cost to a LIFO basis.

LIFO Reserve: Example

Jeppo Inc reports the following balances:

Inventory (FIFO basis) on Dec 31, 2004:	$50,000
Inventory (LIFO basis) on Dec 31, 2004:	$20,000

Adjust the cost of ending inventory to the LIFO basis

Cost of goods sold	Dr. $30,000	
Allowance to Reduce Inventory to LIFO		Cr. $30,000

Balance Sheet (Assets):

Inventory (FIFO)	$50,000
less: Allowance to Reduce Inventory	($30,000)
Inventory (LIFO) basis	$20,000

LIFO Layers

Under the LIFO approach, a business may build up layers of inventory from prior periods.

A layer liquidation occurs, when:

- Earlier costs are matched against current sales.
- Such matching results in distorted income.

Methods to Alleviate Layer Liquidation Problems

Use the specific goods pooled LIFO approach: a pool is a combination of similar items.

- reductions in one item, compensated by increases in other items.

Use dollar-value LIFO where:

- changes in pools are determined in terms of dollars, not quantities.

Dollar Value LIFO: Example

Given:

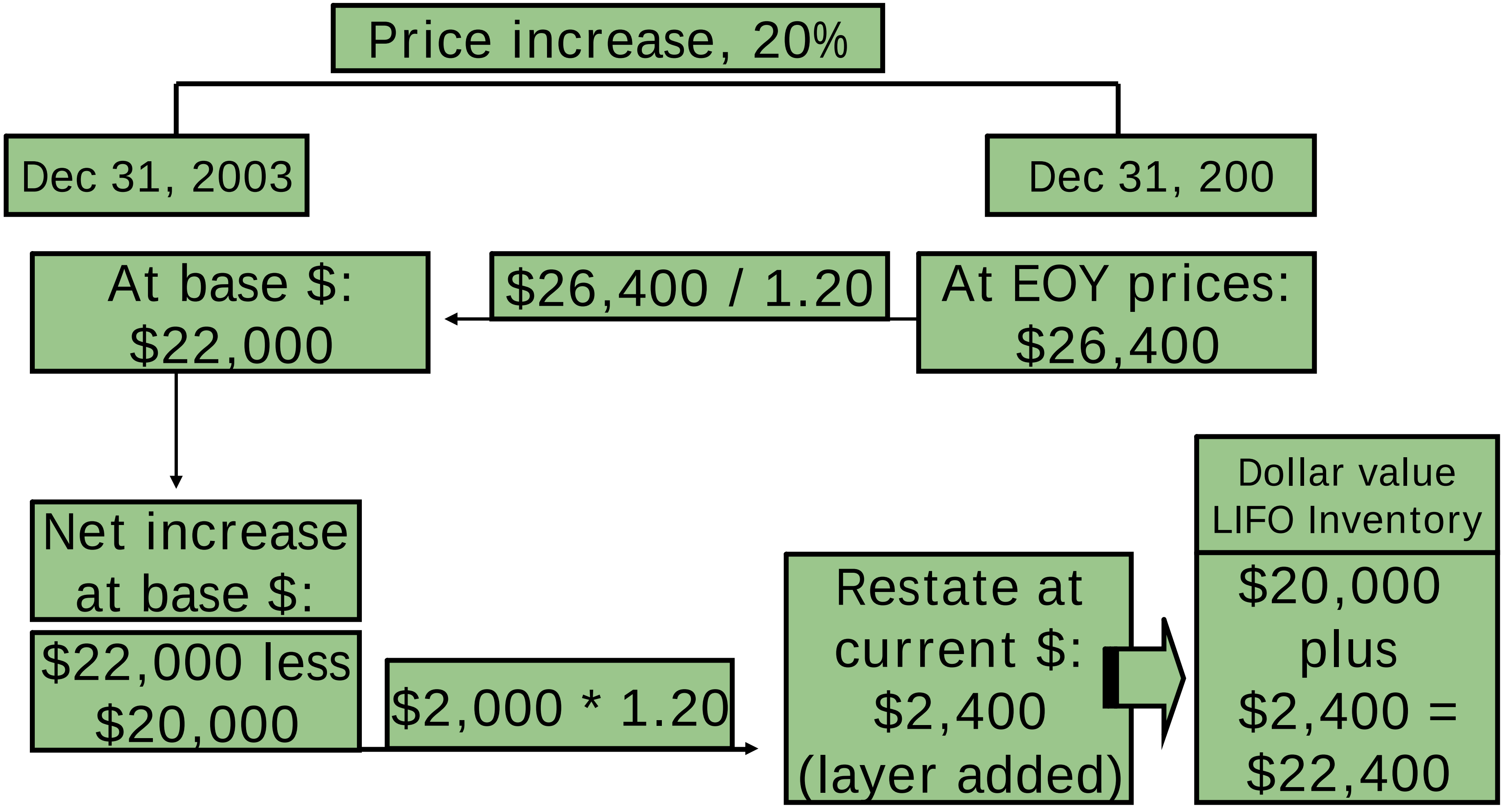
Base layer (Dec 31, 2003): $20,000

Inventory (current prices)
on Dec 31, 2004:
$26,400

Prices increased 20% during 2004.

Determine dollar value LIFO at Dec 31, 2004

Dollar Value LIFO: Example



Dollar Value LIFO: Notes

When the ending inventory (at base year prices) is less than the beginning inventory (at base year prices):

- the decrease must be subtracted from the most recently added layer.
- Once a layer is eliminated (peeled off), it cannot be rebuilt.

Advantages of LIFO Method

- LIFO matches more recent costs with current revenues.
- With increasing prices, LIFO yields the lowest taxable income (assuming inventory does not decrease).
- With reduced taxes, cash flow is improved.
- Under LIFO, the need to write down inventory to market is lower.

Disadvantages of LIFO Method

- LIFO does not approximate the physical flow of goods except in special situations.
- LIFO yields the lowest net income and therefore reduced earnings (when prices rise).
- Under LIFO, the ending inventory is understated relative to current costs.
- LIFO involuntary liquidation may result in income that is detrimental from a tax view.
- LIFO may cause poor buying habits (because of the layer liquidation problem).

Intermediate Accounting, 11th ed.
Kieso, Weygandt, and Warfield

Chapter 9: Inventories: Additional Valuation Issues

Prepared by
Jep Robertson and Renae Clark
New Mexico State University

Chapter 9: Inventories: Additional Valuation Issues

After studying this chapter, you should be able to:

1. Explain and apply the lower of cost or market rule.
2. Identify when inventories are valued at net realizable value.
3. Explain when the relative sales value method is used to value inventories.
4. Explain accounting issues related to purchase commitments.

Chapter 9: Inventories: Additional Valuation Issues

5. Determine ending inventory by applying the gross profit method.
6. Determine ending inventory by applying the retail inventory method.
7. Explain how inventory is reported and analyzed.

Lower of Cost or Market

The lower of cost or market is an exception to the historical cost principle.

When the future potential of the asset is less than its original cost:

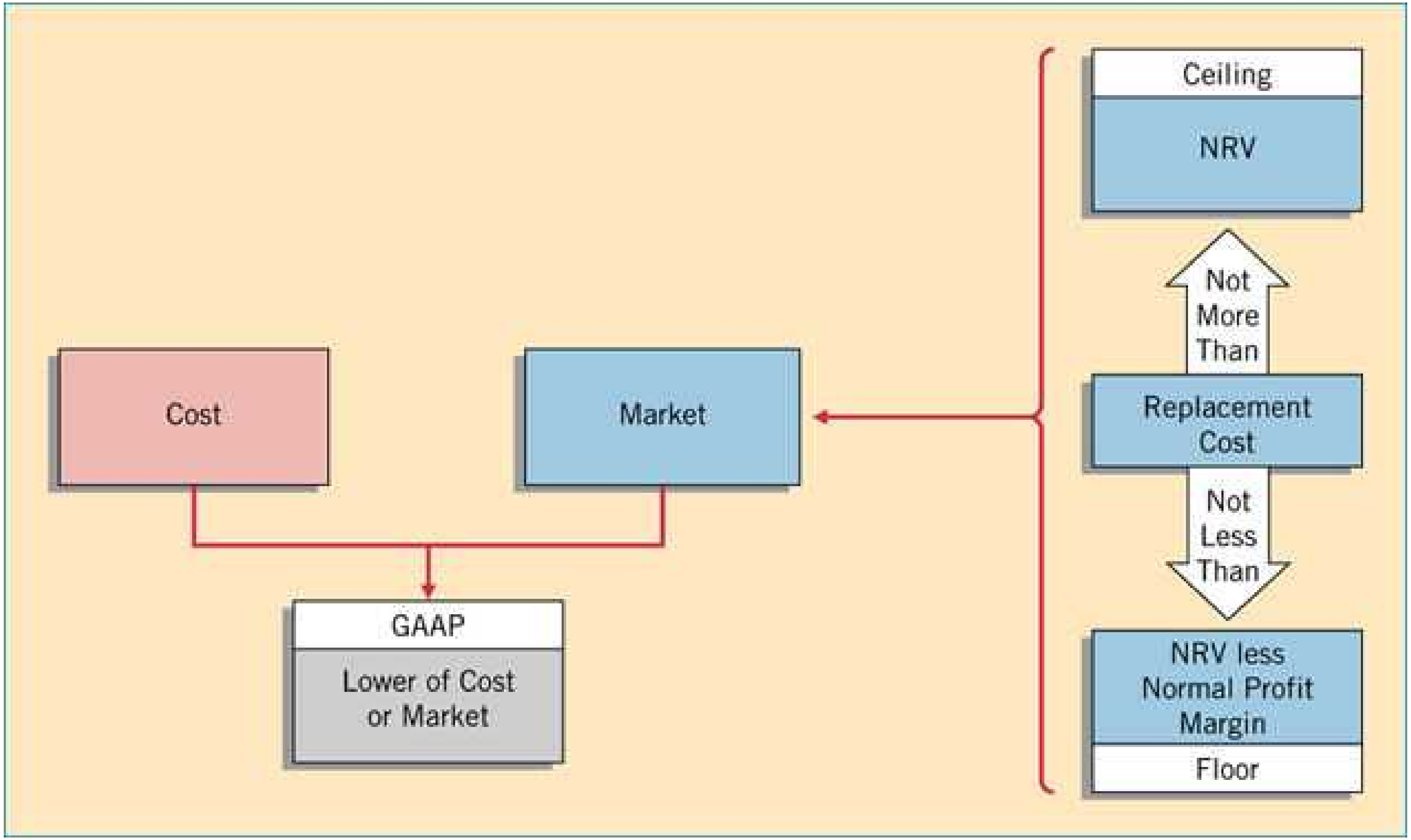
- Restate asset at market to replace cost.
- The loss must be charged against revenues of the period.

Lower of Cost or Market: Ceiling and Floor

The lower of cost or market rule:

1. Market value is the replacement cost.
2. The replacement cost must lie between a ceiling amount and a floor amount.
3. The ceiling is the net realizable value (selling price less disposal cost).
4. The floor is net realizable value less a normal profit margin.

Inventory Valuation—Lower of Cost or Market



Lower of Cost or Market: Ceiling and Floor: Example

Item	Replacement Cost	Historical Cost	Ceiling	Floor	Final Inv $
A	$88,000	$80,000	$120,000	$104,000	$80,000
B	$88,000	$90,000	$100,000	$70,000	$88,000
C	$88,000	$90,000	$100,000	$90,000	$90,000
D	$88,000	$90,000	$87,000	$70,000	$87,000

Lower of Cost or Market

The lower of cost or market may be applied:

1. Either directly to each item,
2. To each category, or
3. To the total of the inventory

Whichever method is selected, it should be consistently applied!

Recording the Decline in Market Value

Under the direct method:

COGS

Inventory

Under the indirect (allowance) method:

Loss

Allowance (contra-inventory acct.)

Valuation Basis: Relative Sales Values

- Relative sales values are an appropriate basis, when basket purchases are made.
- Basket purchases involve a group of varying units.
- The purchase price is paid as a lump sum amount.
- The lump sum price is allocated to units on the basis of their relative sales values.

Relative Sales Values: Example

Kirby Company buys three different lots (A, B and C) in a basket purchase, paying $300,000 for all three.

The lots were sold as follows:

A ($75,000); B ($150,000) and C ($200,000) for a total of $425,000.

What is the cost of A, B and C and the gross profit for each lot?

Relative Sales Values: Example

Lot	Sales Value	Allocated Cost	Gross Profit
A	$75,000	($75,000/$425,000) * $ 300,000 = $ 52,941	$ 22,059
B	$150,000	$105,882	$ 44,118
C	$200,000	$ 141,176	$ 58,824
Totals	$425,000	$300,000 (rd.)	$125,000 (rd.)

Purchase Commitments

- Formal, non-cancelable purchase contracts are not recognized in the accounts but should be disclosed.
- If it is expected that execution of the contract will result in a loss, then recognition of the loss is appropriate.

Gross Profit Method

- The gross profit method is used to estimate cost of ending inventory.
- This method is used also when an estimate is needed due to a casualty loss.
- Assumptions:
  1. Beginning inventory + Purchases = Goods to be accounted for.
  2. Goods not sold are on hand
  3. Cost of goods available – Sales (at cost) = Cost of ending inventory.

Gross Profit Method: Example

Given:

- Beginning inventory : $ 50,000
- Net Purchases : $ 125,000
- Sales (net) : $ 112,000
- Gross Profit percentage on sales 40% (historically derived)

Estimate the ending inventory!

Gross Profit Method: Example

• Sales	$112,000	(given)	1st
• - COGS	$ 67,200	(plug)	3rd
• Gross Profit	$ 44,800	(given $112,000 x 40%)	2nd
• COGAS	$175,000	(given)	4th
• - COGS	$67,200	(computed above)	5th
• Ending Inv.	$107,800	(result)	6th

Notes on Gross Profit Method

Gross profit rates may be stated either as:

1. Percent-of-Sales, or
2. Percent-of-Cost

Gross profit rates are typically based on historical data.

The gross profit method is not normally acceptable for financial reporting.

Retail Inventory Method

Is appropriate for retail concerns

1. with high volume sales and
2. different types of merchandise.

The method assumes an observable pattern between cost and prices.

The steps are:

1. determine ending inventory at retail price
2. convert this amount to a cost basis using a cost-to-retail ratio

Retail Inventory Method: Example

Given for the year 2002:

	at cost	at retail
Beginning inventory	$2,000	$3,000
Purchases (Net)	$10,000	$15,000
Sales (Net)		$12,000

What is ending inventory, at retail and at cost?

Retail Inventory Method: Example

	at cost	at retail
Beginning inventory	$2,000	$3,000
Purchases (Net)	$10,000	$15,000
Goods available for sale	$12,000	$18,000
less: Sales (Net)		($12,000)
Ending inventory (at retail)		$6,000
Times: cost to retail ratio		x 2/3
Ending inventory at cost		$4,000

Markups, Markdowns and Cancellations: Example

Given:

	at cost	at retail
• Goods available	$20,500	$36,000
• Markups		$ 3,000
• Markup cancellations		$ 1,000
• Markdowns		$ 2,500
• Markdown cancellations		$ 2,000

What is the cost-to-retail ratio using the conventional method?

Markups, Markdowns and Cancellations: Example

	at cost	at retail
• Goods available	$20,500	$36,000
• Markups		$ 3,000
• Markup cancellations		($ 1,000)
• Goods available (adj.)	$20,500	$ 38,000

- Cost-to-retail ratio ($20,500/ $38,000) = 53.9%
- Ignore markdowns and markdown cancellations

Intermediate Accounting, 11th ed.
Kieso, Weygandt, and Warfield

Chapter 10: Acquisition and Disposition of Property, Plant, and Equipment

Prepared by
Jep Robertson and Renae Clark
New Mexico State University

Chapter 10: Acquisition and Disposition of Property, Plant, and Equipment

After studying this chapter, you should be able to:

1. Describe the major characteristics of property, plant, and equipment.
2. Identify the costs included in the initial valuation of land, buildings, and equipment.
3. Describe the accounting problems associated with self-constructed assets.
4. Describe the accounting problems associated with interest capitalization.

Chapter 10: Acquisition and Disposition of Property, Plant, and Equipment

5. Understand accounting issues related to acquiring and valuing plant assets.
6. Describe the accounting treatment for costs subsequent to acquisition.
7. Describe the accounting treatment for disposal of property, plant, and equipment.

Property, Plant, and Equipment (PP&E)

PP&E include:

land, building, structures and equipment

machinery, furniture and tools

They are used in operations and not held for resale

They are long term and are subject to depreciation (except land)

They are tangible

Acquisition Cost

PPE is initially valued at historical cost.

Historical cost includes:

- the asset’s cash or cash equivalent price, and
- the cost of readying the asset for use

Cost of Land

Land costs include:

- purchase price
- closing costs, attorney fees, and recording fees
- costs of getting land ready for use (clearing, etc.)
- special assessments for local improvements
- assumption of liens or encumbrances, and
- additional improvements with an indefinite life

Sale of salvaged materials reduces cost

Land Improvements, Building and Equipment

Improvements with limited lives are recorded as Land Improvements (and not as Land)

Building cost includes:

- costs of materials and labor, and overhead
- professional fees and building permits

Cost of equipment includes:

- purchase price
- freight and handling charges
- costs of special foundation, installation, and initial testing.

Self-Constructed Assets

These are assets constructed by the business for use in operations.

The cost of self-constructed assets includes:

- cost of direct materials,
- cost of direct labor,
- variable manufacturing overhead,
- a pro rata portion of the fixed overhead, and
- interest costs incurred during construction (with modification).

Interest Capitalization: Factors

Three questions must be answered:

1. Which assets are qualifying assets?
2. What is the capitalization period?
3. What is the amount of interest to be capitalized?

Interest Capitalization: Qualifying Assets

- They must require a period of time to make them ready for use.
- There are two types of qualifying assets:

1. Assets under construction for use in operations, and
2. Discrete assets intended for sale or lease.

Interest Capitalization: Capitalization Period

Capitalization period begins when:

1. expenditures for the asset have been made, and
2. activities for readying the asset are in progress, and
3. interest costs are being incurred

Capitalization period ends when:

1. The asset is substantially complete and ready for its intended use.

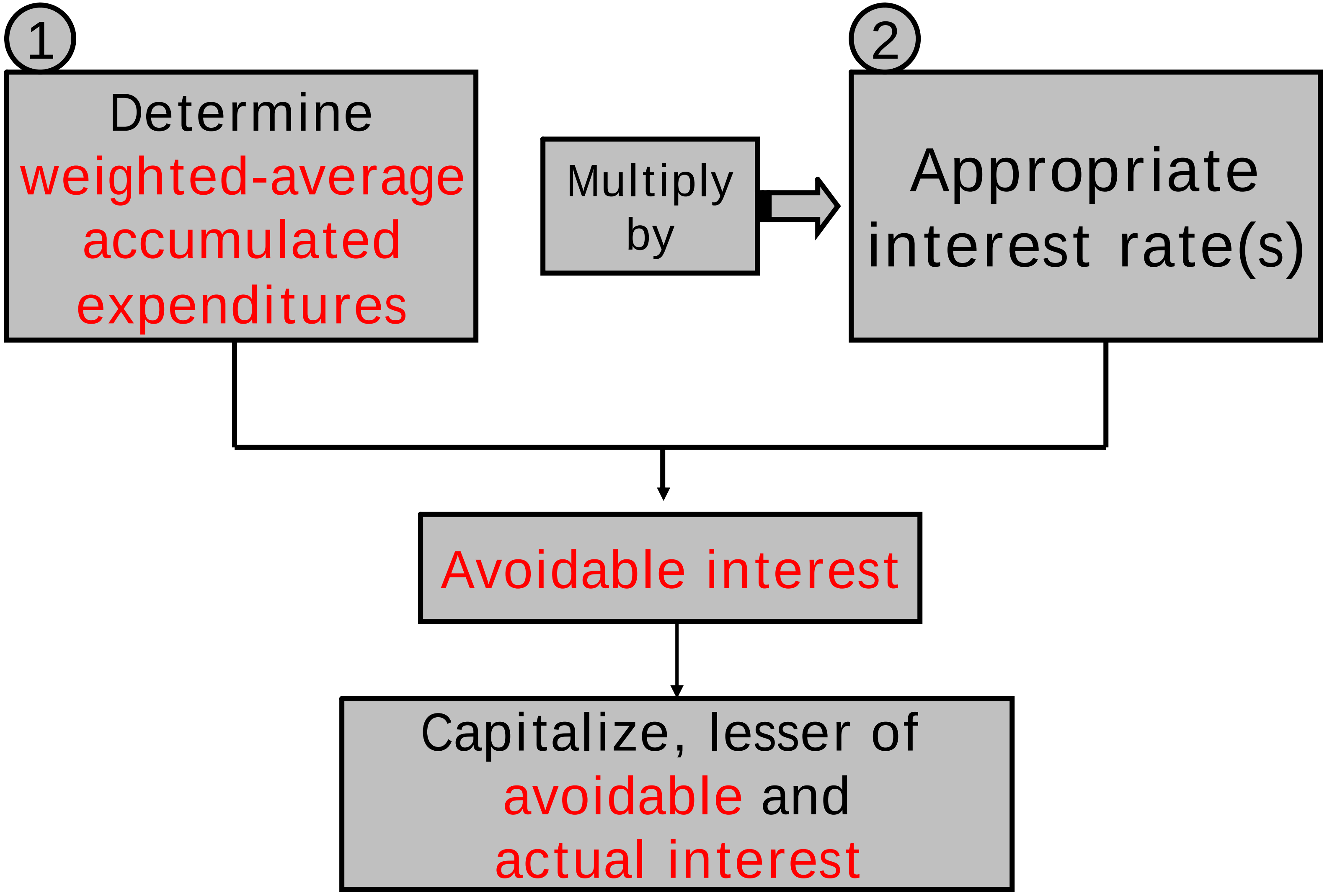
Interest Capitalization: Amount to be Capitalized

Capitalize the lesser of:

1. actual interest costs
2. avoidable interest

   Avoidable interest is the amount that could have been avoided if expenditures for the asset had not been made

Computing Avoidable Interest: Steps



Determining Weighted-Average Accumulated Expenditures (WAAE): Example

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Jan 31: $24,000 July 31: $18,000

Capitalization period ran from Jan 31 – Dec 31.

What is the WAAE?

Jan 31:	$24,000 * (11/12)	$22,000
July 31:	$18,000 * (5/12)	$ 7,500
	WAAE	$29,500

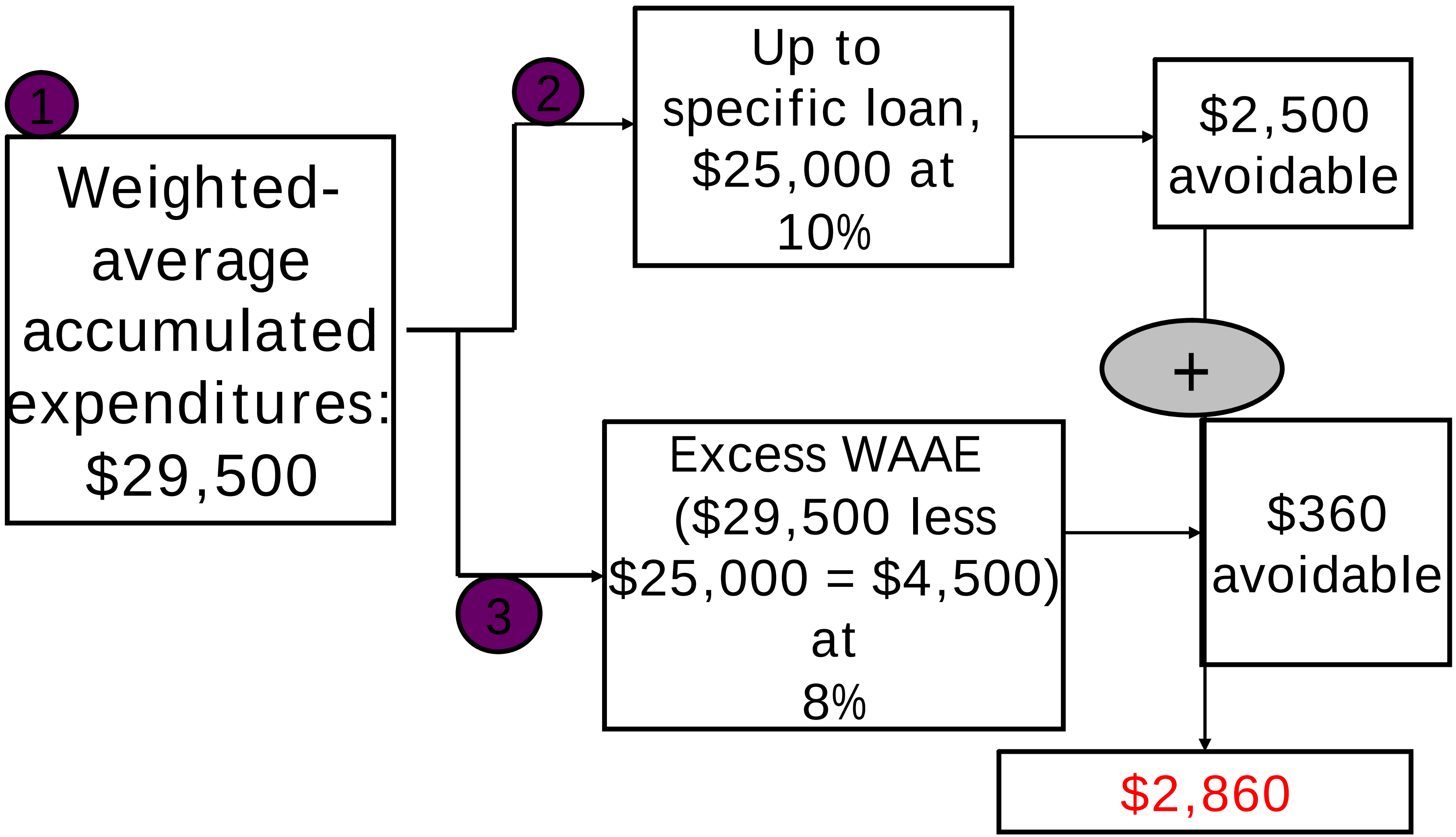
Determining the Appropriate Interest Rate: Example

Amber (in the previous example) had the following debt outstanding throughout 2004:

1. 10%, 2-year note specifically for the project: $25,000
2. 8%, 5-year note (other debt): $20,000

What is the appropriate interest rate(s) and the avoidable interest?

The Appropriate Interest Rate and Avoidable Interest: Example



Comparing Actual and Avoidable Interest: Example

Avoidable interest: $2,860

Actual interest:

- $25,000 @ 10% = $2,500
- $20,000 @ 8% = $1,600

$4,100

- Capitalize avoidable interest of $2,860 (the lesser of avoidable and actual interest).
- Expense $1,240 ($4,100 less $2,860).

Valuation Issues

- A cash discount, whether taken or not, reduces purchase price of asset.
- Assets, purchased through long term credit, are recorded at the present value of the consideration exchanged.
- Cost of assets, acquired in a basket purchase, is allocated to assets on the basis of their relative fair market values.
- If assets are acquired in exchange for stock then the market valuation of the stock is the basis for valuation.

Exchange of Non-Monetary Assets

The basic rule is that the exchange must be based on:

1. the fair value of the asset given up, or
2. the fair value of the asset received

whichever is clearly more evident.

The rules for gain/loss recognition depend upon whether the non-monetary exchange has commercial substance.

Exchange of Non-Monetary Assets

- If the future cash flows change as a result of the non-monetary exchange, then the transaction has commercial substance.
  - Determine whether the risk, timing, and amount of cash flows arising for the asset received is different from the cash flows associated with the outbound asset, or
  - Evaluate whether cash flows are affected with the exchange versus without the exchange

Accounting for Exchanges

Types of Exchange	Accounting for Asset Received	Accounting for gain/loss
Has commercial substance	Recognize at fair value	Recognize gain or loss
Lacks commercial substance	Book value of asset(s) given up	No gain or loss recognized

Dispositions of PP&E

Plant assets may be:

- retired voluntarily, or
- disposed of by sale, exchange, involuntary conversion

Depreciation is recorded up to the date of disposal before determining gain or loss.

Gains or losses from involuntary conversion are often reported as extraordinary items.

Costs Subsequent to Acquisition

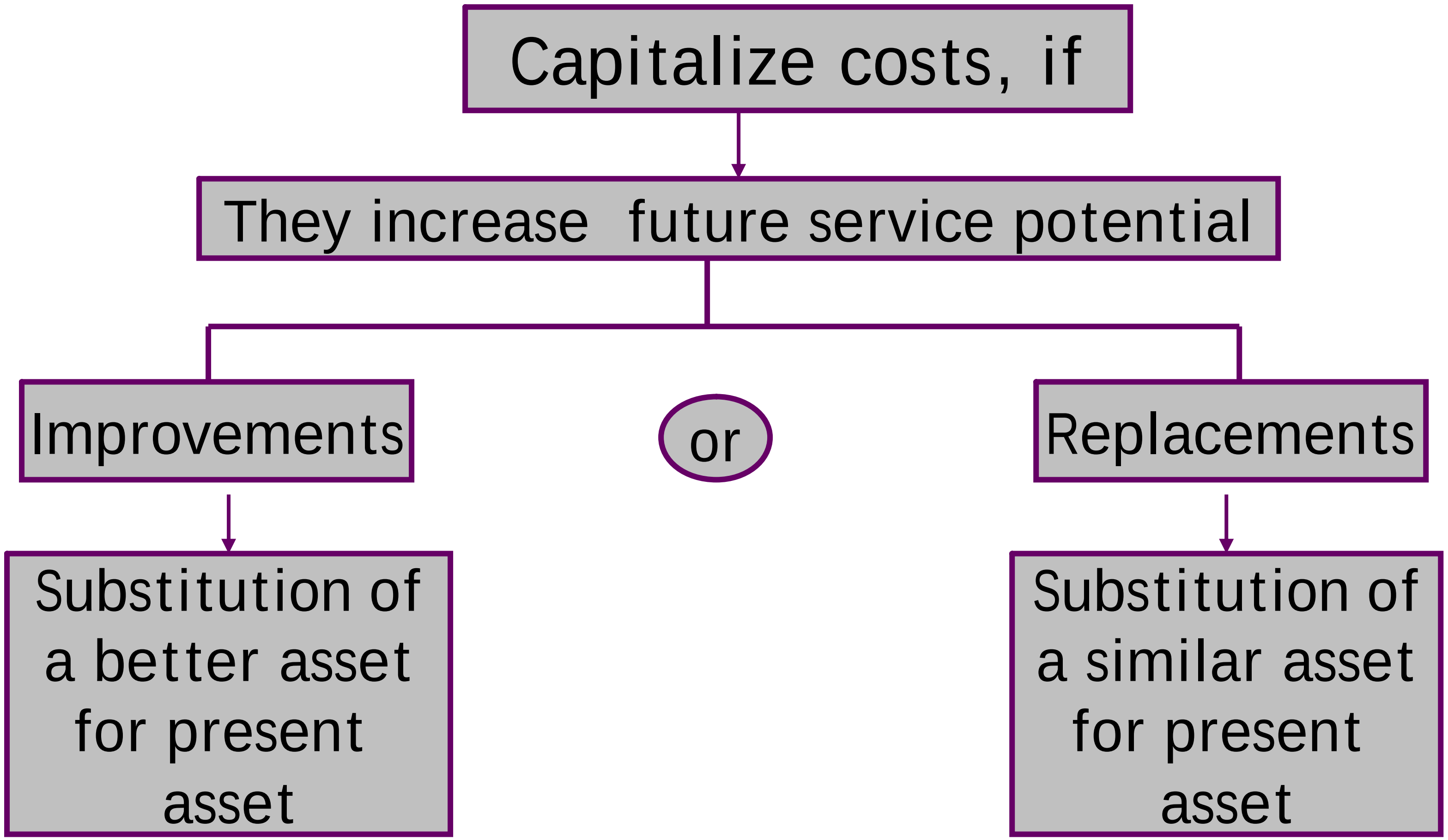
If cost incurred increase future benefits, capitalize costs.

If costs maintain a given level of services, expense costs.

Costs incurred after acquisition can be classified as:

- additions
- improvements and replacements
- rearrangements and reinstallation
- repairs

Improvements and Replacements



Capitalization Approaches

- Carrying value of asset is known
- Carrying value of the asset is unknown

- Substitution approach
- Capitalize the new asset (without removing the old asset from the pool), or
- Debit accumulated depreciation (when expenditures extend useful life of asset)

Intermediate Accounting, 11th ed.
Kieso, Weygandt, and Warfield

Chapter 10: Acquisition and Disposition of Property, Plant, and Equipment

Prepared by
Jep Robertson and Renae Clark
New Mexico State University

Chapter 10: Acquisition and Disposition of Property, Plant, and Equipment

After studying this chapter, you should be able to:

1. Describe the major characteristics of property, plant, and equipment.
2. Identify the costs included in the initial valuation of land, buildings, and equipment.
3. Describe the accounting problems associated with self-constructed assets.
4. Describe the accounting problems associated with interest capitalization.

Chapter 10: Acquisition and Disposition of Property, Plant, and Equipment

5. Understand accounting issues related to acquiring and valuing plant assets.
6. Describe the accounting treatment for costs subsequent to acquisition.
7. Describe the accounting treatment for disposal of property, plant, and equipment.

Property, Plant, and Equipment (PP&E)

PP&E include:

land, building, structures and equipment

machinery, furniture and tools

They are used in operations and not held for resale

They are long term and are subject to depreciation (except land)

They are tangible

Acquisition Cost

PPE is initially valued at historical cost.

Historical cost includes:

- the asset's cash or cash equivalent price, and
- the cost of readying the asset for use

Cost of Land

Land costs include:

- purchase price
- closing costs, attorney fees, and recording fees
- costs of getting land ready for use (clearing, etc.)
- special assessments for local improvements
- assumption of liens or encumbrances, and
- additional improvements with an indefinite life

Sale of salvaged materials reduces cost

Land Improvements, Building and Equipment

Improvements with limited lives are recorded as Land Improvements (and not as Land)

Building cost includes:

- costs of materials and labor, and overhead
- professional fees and building permits

Cost of equipment includes:

- purchase price
- freight and handling charges
- costs of special foundation, installation, and initial testing.

Self-Constructed Assets

These are assets constructed by the business for use in operations.

The cost of self-constructed assets includes:

- cost of direct materials,
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- variable manufacturing overhead,
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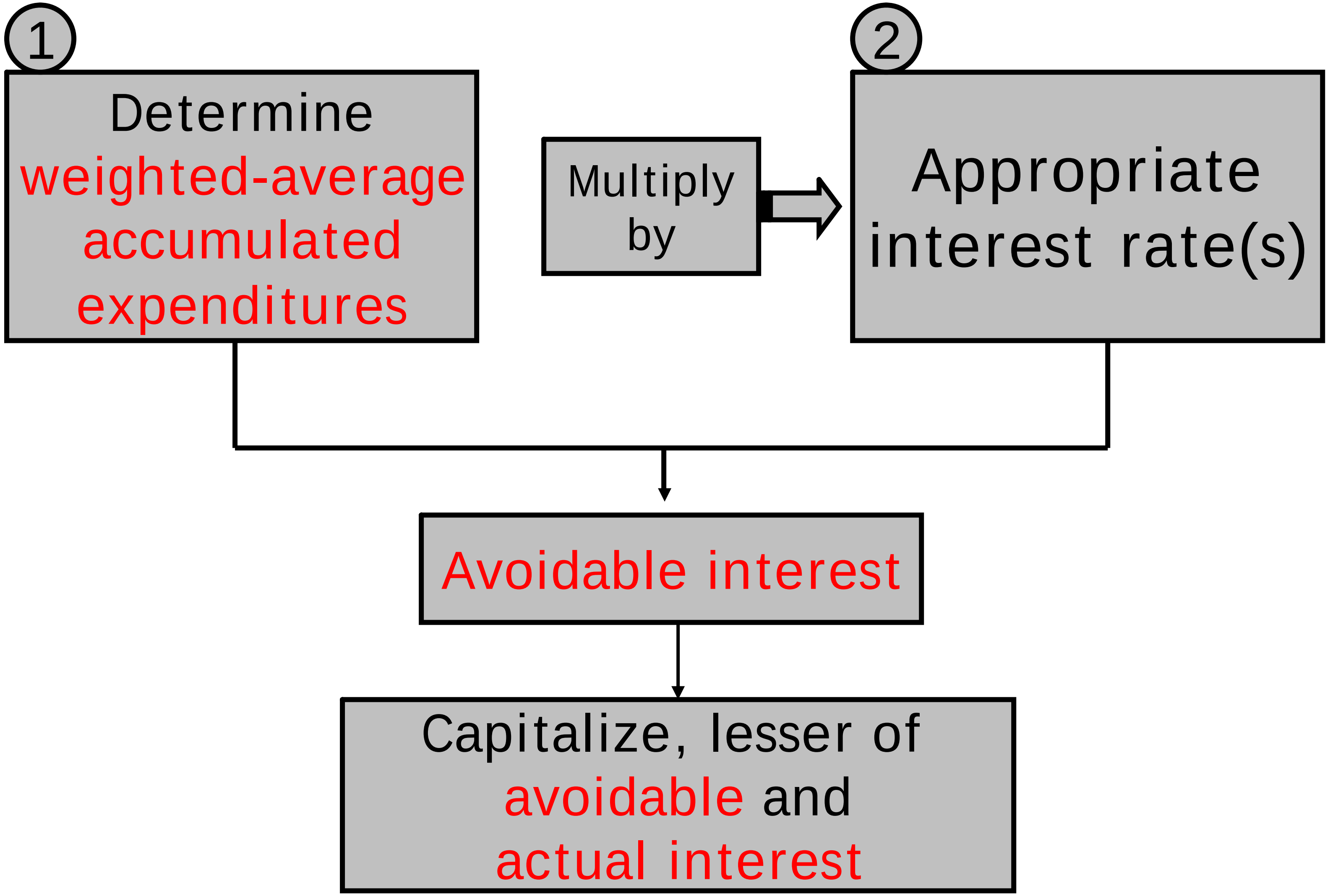

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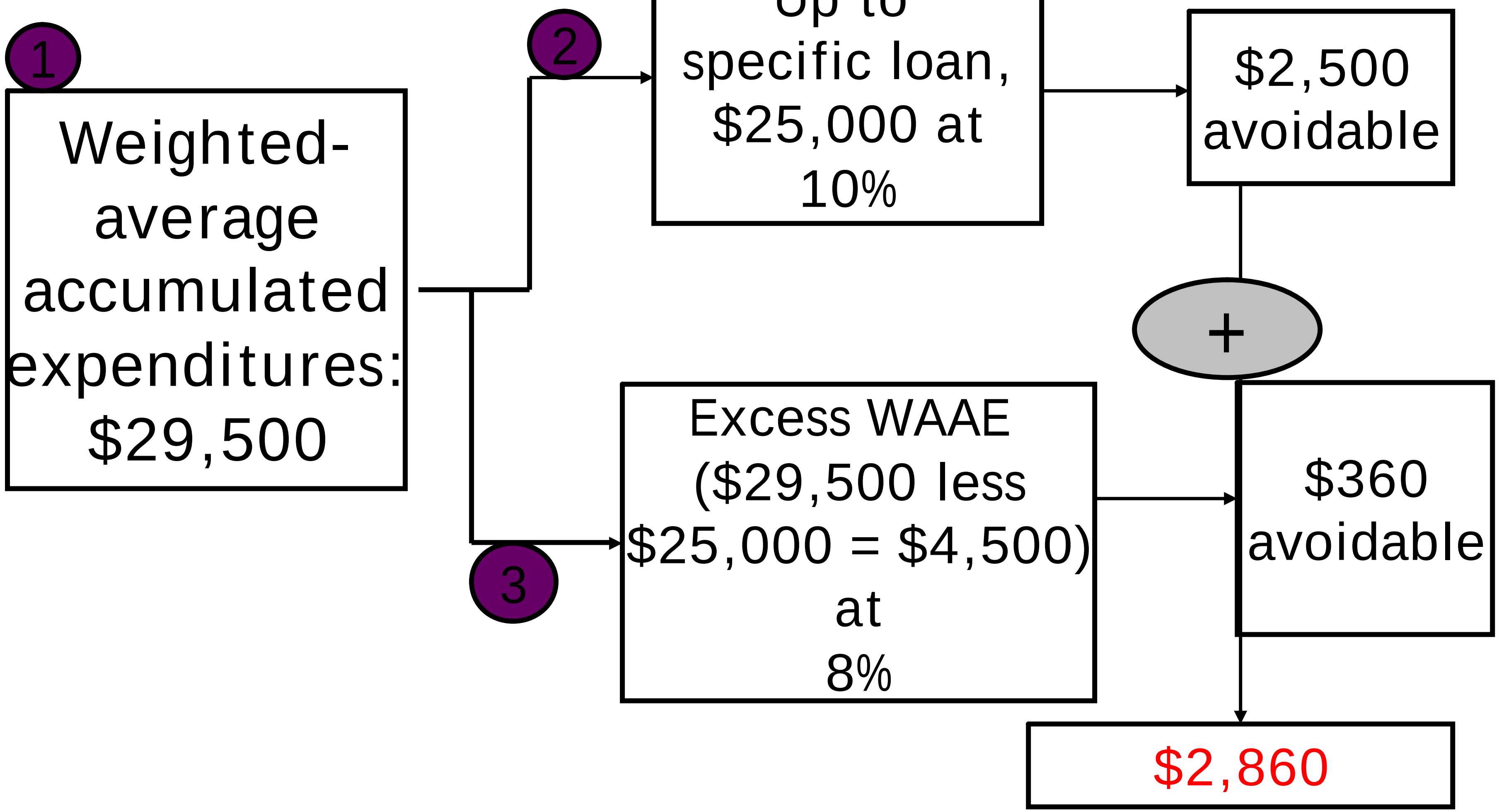

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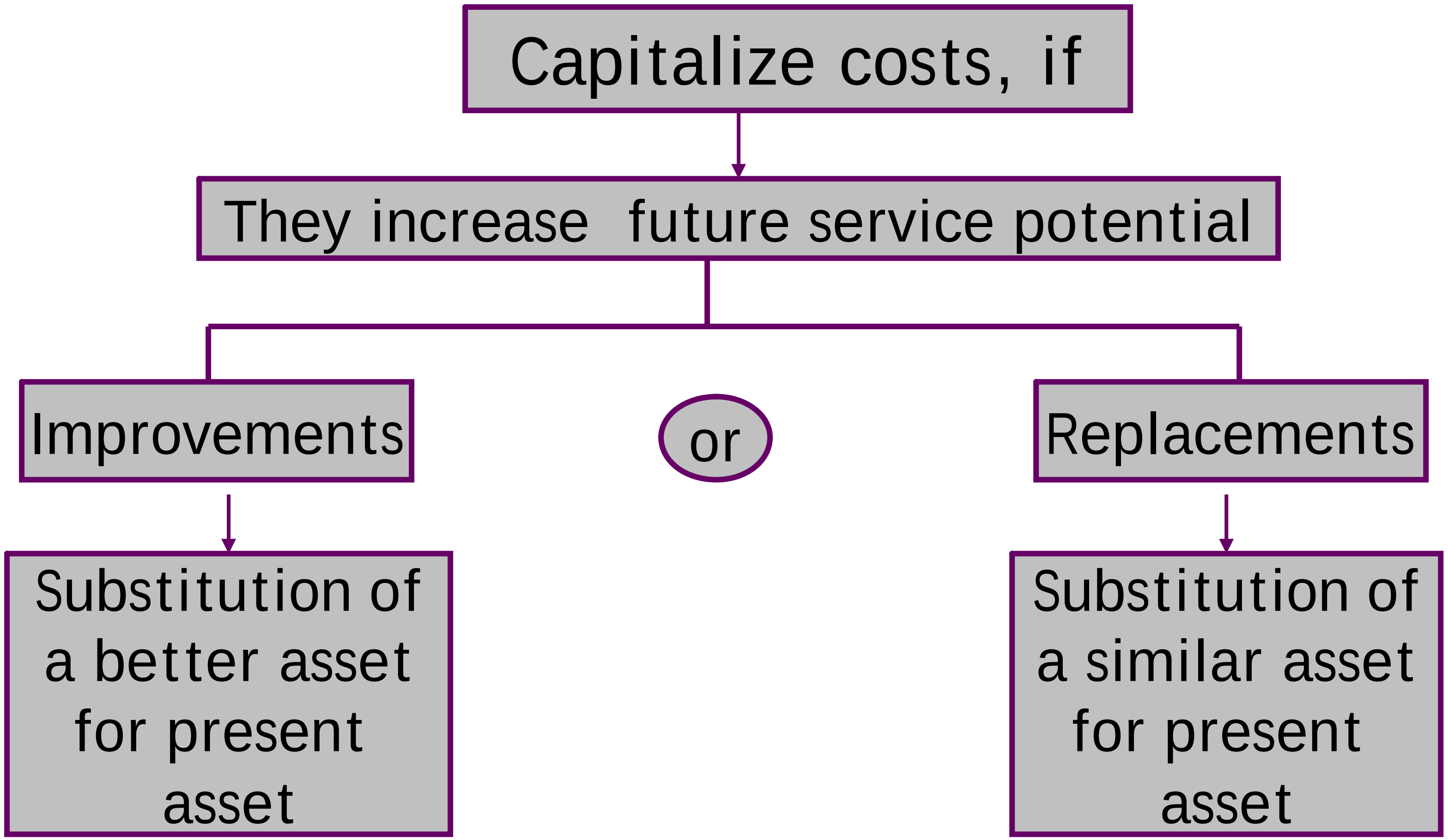

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Intermediate Accounting, 11th ed.
Kieso, Weygandt, and Warfield

Chapter 12: Intangible Assets

Prepared by
Jep Robertson and Renae Clark
New Mexico State University

Chapter 12: Intangible Assets

After studying this chapter, you should be able to:

- Describe the characteristics of intangible assets.
- Identify the costs included in the initial valuation of intangible assets.
- Explain the procedure for amortizing intangible assets.
- Identify the types of intangible assets.
- Explain the conceptual issues related to goodwill.

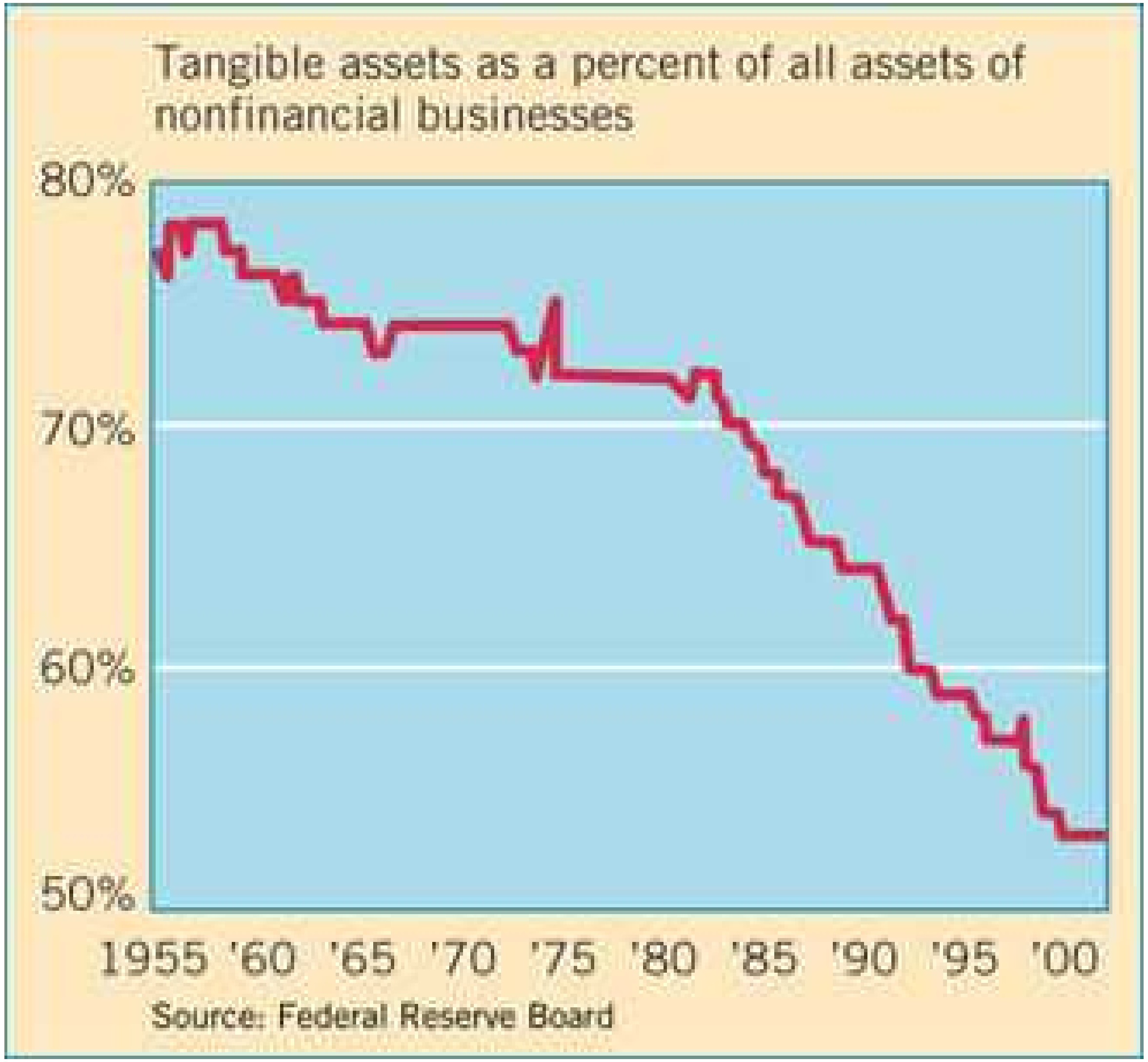
Chapter 12: Intangible Assets

- Describe the accounting procedures for recording goodwill.
- Explain the accounting issues related to intangible asset impairments.
- Identify the conceptual issues related to research and development costs.
- Describe the accounting procedures for research and development costs and for other similar costs.
- Indicate the presentation of intangible assets and related items.

Intangibles: Characteristics

- They lack physical existence
- They represent entity’s rights and privileges
- They are not financial instruments
- They are long term in nature

Tangible Assets As a Percent of All Assets

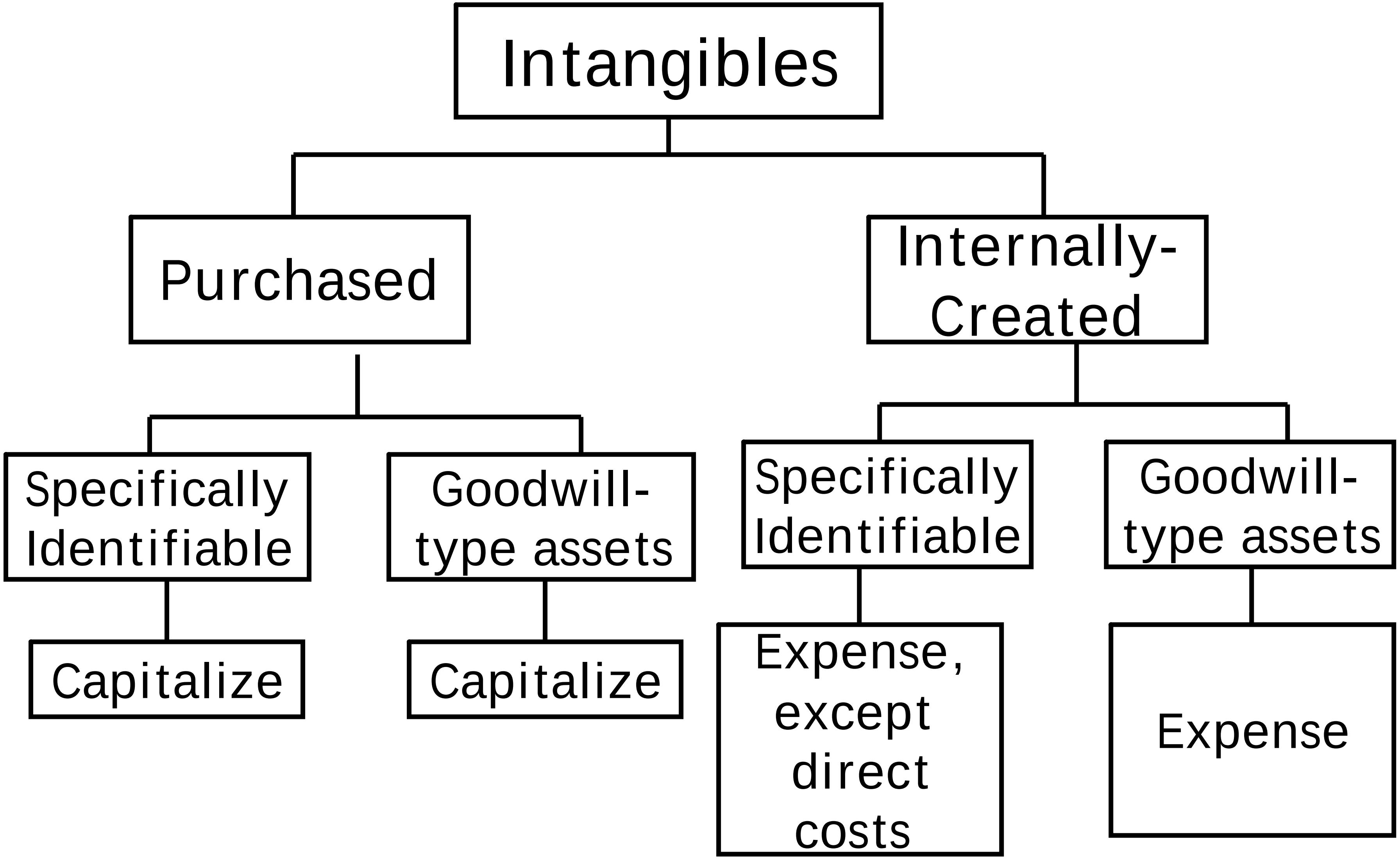


Classification of Intangibles

Intangibles are either grouped or separately identified based on the following factors:

- Are the assets developed internally, or acquired singly or in groups?
- Is the expected benefit from the asset limited or indefinite?
- Are the rights transferable or are they a substantial part of the business?

Valuation of Intangible Assets



Amortization of Intangible Assets

- Intangibles are written off over their useful lives, where the assets have determinable useful lives.
- Where the intangibles have indefinite useful lives, they are not amortized.
- Acquired intangibles should not be written off at acquisition.

Specific Intangibles: Types

- Marketing-related (i.e., trademark, trade name).
- Customer-related (i.e., customer lists, customer relationships).
- Artistic-related (i.e., copyrights).
- Contract-related (i.e., franchise, licenses or permits).
- Goodwill.
- Technology-related (i.e., product patent, process patent).

Marketing-Related Intangibles: Trademarks and Trade Names

- Trademarks and trade names are renewable indefinitely by the original user in periods of 10 years each.
- Costs of acquired trademarks or trade names are capitalized.
- If trademarks or trade names are developed by the a business, all direct costs (except R&D costs) are capitalized.

Customer-Related Intangibles

- Examples include:
  - customer lists
  - order or production backlogs
  - customer relationships
- Amortized over useful life.

Artistic-Related Intangibles: Copyrights

- Copyrights are granted for life of the creator plus 70 years.
- Copyrights can be sold or assigned, but cannot be renewed.
- Copyrights are amortized over their useful life.
- Costs of acquiring copyrights are capitalized.
- Research and development costs involved are expensed as incurred.

Contract-Related Intangibles: Franchises and Licenses

- A franchise is a contractual agreement under which:
  - The franchisor grants the franchisee:
    - the right to sell certain products or services,
    - the right to use certain trademarks or trade names, or
    - the right to perform certain functions, within a certain geographical area.

Franchises and Licenses

- A franchise may be for a limited time, for an indefinite time period, or perpetual.
- The cost of a franchise (for a limited time) is amortized over the franchise term.
- A franchise (for an unlimited time) is carried at cost and not amortized.
- Annual payments for a franchise are expensed.

Technology-Related Intangibles: Patents (Product Patents and Process Patents)

- A patent gives an exclusive right to the holder for 20 years.
- Costs of purchasing patents are capitalized.
- Costs to research and develop patents are expensed as incurred.
- Patents are amortized over the shorter of the legal life (20 years) or their useful lives.
- Legal fees incurred to successfully defend patents are capitalized.

Goodwill

- Goodwill is the most intangible of all assets.
- Goodwill can be sold only with the business.
- Goodwill is the excess of:
  - the cost (purchase price) over
  - the amounts (price) assigned to tangible and intangible net assets.
- Goodwill has an indefinite life and should not be amortized.

Goodwill

- Internally created goodwill is not capitalized.
- Purchased goodwill is recognized only when an entire business is purchased.
- The initial valuation of goodwill is:

  the excess of the purchase price over the fair value of the net assets acquired.

- It is sometimes referred to as a master valuation account (or a plug figure).

Goodwill Write-Off

- Acquired goodwill has an indefinite life and should not be amortized but is subject to impairment.
- Impairment test should be performed at least annually.
- If applicable, loss recorded.

Negative Goodwill

- Fair value of net assets acquired is higher than purchase price of assets.
- Resulting credit is negative goodwill (badwill).
- FASB requires that any remaining excess be recognized as an extraordinary gain.

Intangibles: Impairments

An impairment occurs when:

- the carrying amount of an asset is not recoverable, and
- a write-off of the impaired amount is needed

To determine the amount of impairment, a recoverability test is used.

Impairment Tests

Type of Asset	Impairment Tests
Property, Plant & Equipment	Recoverability test, then fair value test
Limited Live Intangible	Recoverability test, then fair value test
Indefinite-life intangible, other than goodwill	Fair value test
Goodwill	Fair value test on reporting unit, then fair value test on implied goodwill

Impairments: The Recoverability Test

Impairment?

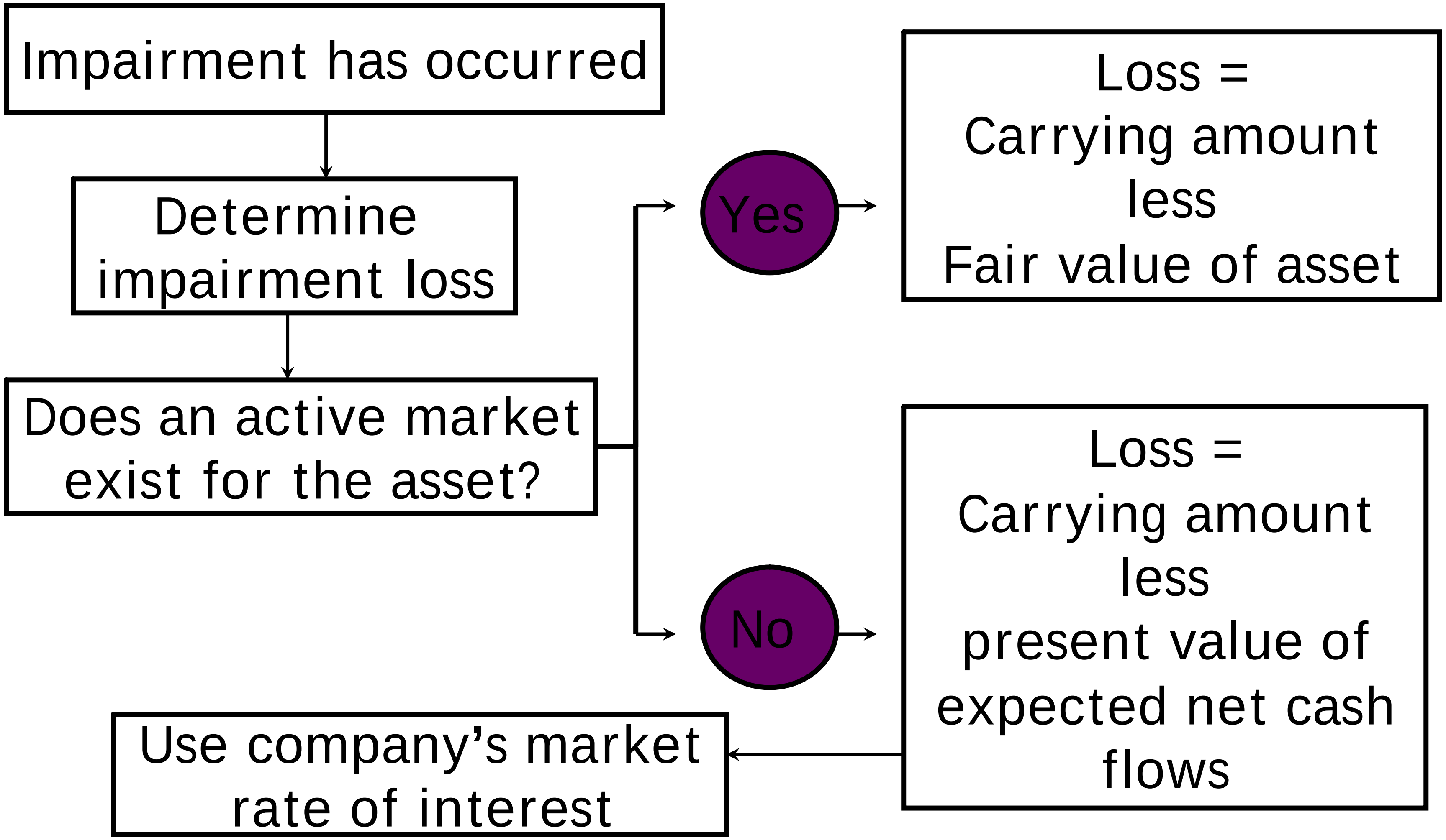
Sum of expected future net cash flows from use and disposal of asset is less than the carrying amount

Impairment has occurred

Sum of expected future net cash flows from use and disposal of asset is equal to or more than the carrying amount

No impairment

Impairments: Measuring Loss



Impairment: Accounting

Impairment has occurred

Assets are held for use

1. Loss = Carrying value less Fair value
2. Depreciate new cost basis
3. Restoration of impairment loss is NOT permitted

Assets are held for sale

1. Loss = Carrying value less Fair Value less cost of disposal
2. No depreciation is taken
3. Restoration of impairment loss is permitted

Impairment Test: Fair Value Test

- Compares fair value of intangible asset with assets' carrying amount.
- If fair value less than carrying amount, impairment recognized.

Restoration of Impairment

- Assets held for use: impairment loss may not be restored.
- Assets held for disposal can be written up or down, as long as write-up is never greater than carrying amount before impairment.
- Losses or gains reported as "income from continuing operations."

Presentation of Intangibles

- Contra accounts are not normally shown.
- On the balance sheet, all intangible assets should be reported as a separate item.
- On income statement, amortization expense and impairment losses should be presented as part of income from continuing operations.
- Unless goodwill impairment loss is associated with discontinued operations, it should also be reported as part of continuing operations.

Research and Development Costs

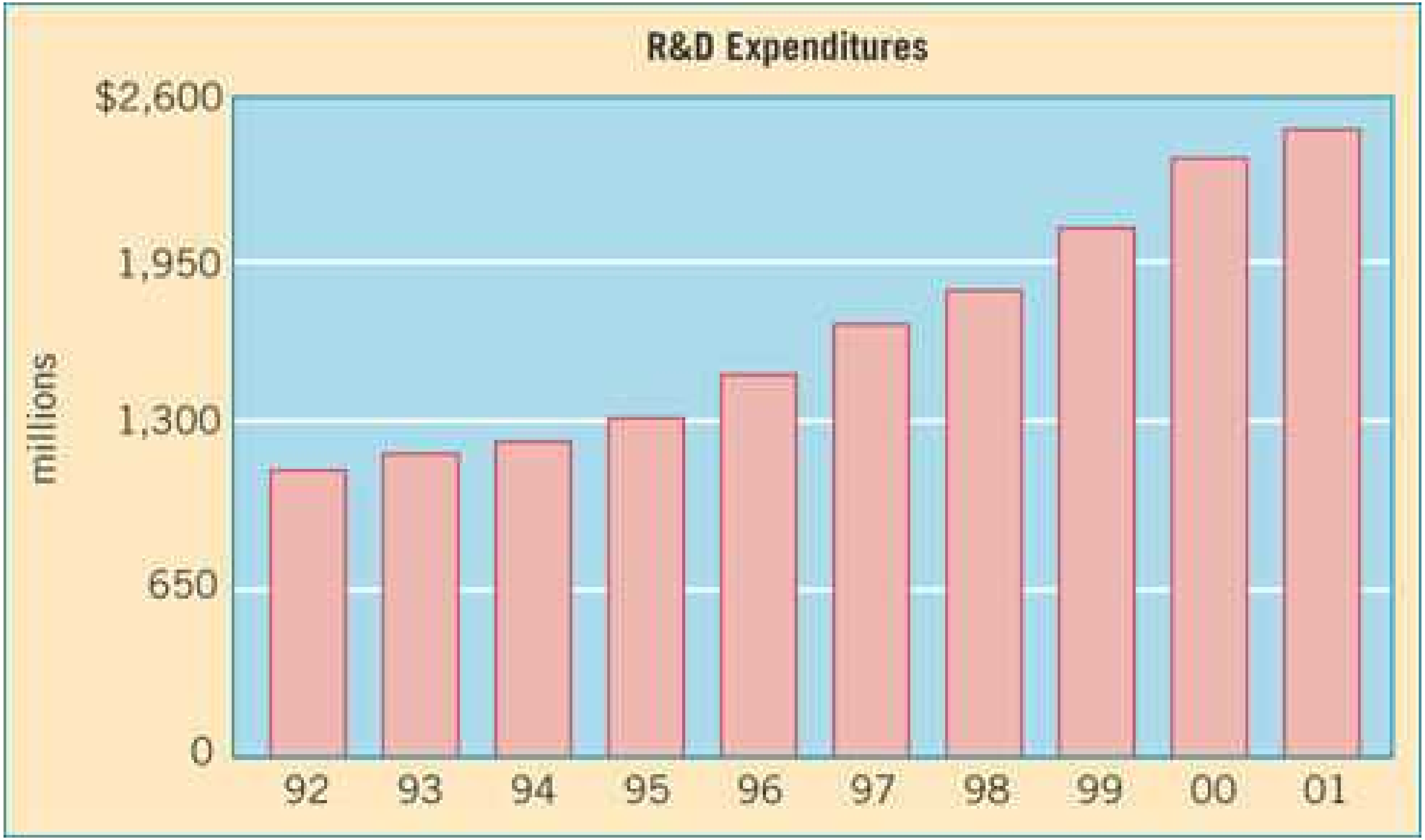
Research activities involve:

- planned search or
- critical investigation aimed at discovery of new knowledge

Example:

Laboratory research aimed at discovery of new knowledge

Merck's R&D Disclosure



Research and Development Costs

- R & D costs involve searching for new products and processes
- R & D costs are expensed unless the costs have alternative future uses: (examples)
  - Lab costs aimed at new knowledge
  - Conceptual formulation of possible product

Presentation of R&D Costs

Disclosure is required in the financial statements of the total R & D costs charged to expense each period for which an income statement is presented.

Intermediate Accounting, 11th ed.
Kieso, Weygandt, and Warfield

Chapter 13: Current Liabilities and Contingencies

Prepared by
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New Mexico State University

Chapter 13: Current Liabilities and Contingencies

After studying this chapter, you should be able to:

1. Describe the nature, type, and valuation of current liabilities.
2. Explain the classification issues of short-term debt expected to be refinanced.
3. Identify types of employee-related liabilities.
4. Identify the criteria used to account for and disclose gain and loss contingencies.

Chapter 13: Current Liabilities and Contingencies

5. Explain the accounting for different types of loss contingencies.
6. Indicate how current liabilities and contingencies are presented and analyzed.

Liabilities in General

What is a liability?

Probable future sacrifices of economic benefits arising from present obligations to transfer assets or to provide services in the future as a result of past transactions or events.

Current Liabilities

Current liabilities are:

- Obligations whose liquidation is reasonably expected to require the use of current assets or the creation of other current liabilities.

Current Liabilities

Typical current liabilities:

Accounts payable

Notes payable

Current maturities of long-term debt

Short-term obligations expected to be refinanced

Dividends

Returnable deposits

Unearned revenues

Sales taxes payable

Income taxes payable

Employee-related liabilities

Accounts Payable

Accounts payable, also referred to as trade accounts payable are:

1. Balances owed for goods, supplies, or services purchased on open account.
2. Valuation is based on invoice amount.
3. Recorded on either net or gross basis.

Notes Payable

- Notes payable may be interest-bearing or non-interest-bearing.
- For non-interest-bearing notes, the difference between the present value of the note and the face value of the note represents the discount on the note payable.
- The discount is the interest expense allocated over the term of the note.

Current Maturities of Long-Term Debt

The portion of long-term debt maturing within the next fiscal year is reported as a current liability.

Long-term debts should not be reported as current liabilities if:

1. they are retired by assets not classified as current assets
2. they are refinanced by new issues of debt
3. they are converted into capital stock.

Short-Term Obligations Expected to be Refinanced

Short-term debt must be <u>excluded</u> from current liabilities if:

1. it is to be refinanced on a long-term basis, and
2. the entity demonstrates the ability to complete the refinancing.

The entity has the <u>ability</u> to refinance if:

1. the debt is actually refinanced before issue of the financial statements, or
2. the entity enters into a refinancing agreement.

Dividends Payable and Returnable Deposits

A cash dividend payable is:

1. Payable to shareholders.
2. Declared by the board of directors.
3. Stock dividends are NOT liabilities.

Returnable deposits:

1. May have been received from customers or employees.
2. Usually retained to guarantee performance.
3. May be current or noncurrent liabilities.

Unearned Revenues

Unearned revenues represent receipts before goods or services are delivered.

- Upon receipt:

  Cash

  Unearned Revenues

- Upon delivery:

  Unearned Revenues

  Revenues

Sales Taxes and Income Taxes Payable

Sales taxes payable are:

- Payable to governmental agencies.
- May or may not be separately recognized at time of sale.

Income taxes payable are:

- Payable to governmental agencies.
- Based on taxable income.
- Not levied on partnerships or sole-proprietorships.

Employee-Related Liabilities

Employee-related liabilities are the following:

- Salaries or wages owed to employees at end of the accounting period
- Payroll deductions
- Compensated absences
- Bonuses

Payroll Deductions

Payroll deductions are taxes and miscellaneous deductions and include:

Employee Pays	Employer Pays
Income tax w/h	FICA taxes (1/2)
FICA taxes (1/2)	Fed. Unemployment
Union dues	State Unemployment
Other (e.g., medical insurance)	Other (e.g., medical insurance)

Employee-Compensated Absences

Compensated absences are absences from employment for which employees are paid

A liability for such absences must be accrued if:

1. Relates to services already rendered by employees,
2. Relates to employee's vested or accumulated rights of employee,
3. Payment of the compensation is probable, and the amount can be reasonably estimated.

The liability is recognized in the year earned by employees

Bonus Agreements

- Bonuses may be given in addition to regular salaries to all or select group of employees
- Typically tied to performance measures (e.g., net income)
- In most cases are current liabilities

Contingency: Defined

An existing condition, situation, or set of circumstances involving uncertainty as to possible gain (gain contingency) or loss (loss contingency) that will ultimately be resolved when one or more future events occur or when such event or events fail to occur.

Gain Contingencies

Gain contingencies are claims or rights to receive assets, which may become valid eventually.

Examples are:

- Pending litigation whose probable outcome is favorable
- Possible tax refunds in tax disputes

Gain contingencies are <u>not</u> accrued!

Loss Contingencies: General

Loss contingencies involve situations of possible loss that are dependent on some future event(s).

The likelihood of occurrence of the event may be:

1. Remote (slight)
2. Reasonably possible (more than remote but less than likely)
3. Probable (likely)

Loss Contingencies: Accrual

Estimated losses from loss contingencies are accrued as liabilities if:

1. It is probable that a liability has been incurred, and
2. The amount of loss can be reasonably estimated.

The interpretation of these terms is often based on lawyers' opinions.

Litigation, Claims and Assessments

To determine whether a liability should be recorded, evaluate:

1. The time period in which the underlying cause of action occurred
2. The probability of an unfavorable outcome
3. The ability to make a reasonable estimate of loss

To determine the probability of outcome, evaluate:

1. Nature of litigation and progress of case
2. Opinion of legal counsel
3. Response by management

Guarantee and Warranty Costs

A warranty is a promise (future cost) made by a seller to a buyer to make good on a deficiency.

Under the cash basis method, warranty costs are charged to the period in which the costs are paid.

Under the accrual basis method:

1. warranty costs (for warranties sold with the product) are estimated and matched with revenue.
2. extended warranty revenues are deferred and recognized over the life of the warranty contract.

Manufacturers’ Warranties: Example

Estimated warranty costs:

3% of 10,000 units at $15 each = $4,500

Adjusting journal entry:

Warranty Expense	$4,500	
Estimated Liability (warranties)		$4,500

Entry in 2004: (170 units repaired at $15 each)

Estimated Liability (warranties)	$ 2,550	
Parts Inventory		$ 850
Wages Payable		$1,700

Analysis of Current Liabilities

Two ratios often used are:

$$\text{Current} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

$$\text{Acid-test} = \frac{\text{Cash + Mkt. Sec + Net Recbls.}}{\text{Current liabilities}}$$

Both are measurements of a firm's liquidity.

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Chapter 14: Long Term Liabilities

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After studying this chapter, you should be able to:

1. Describe the format procedures associated with issuing long-term debt.
2. Identify various types of bond issues.
3. Describe the accounting valuation for bonds at date of issuance.
4. Apply the methods of bond discount and premium amortization.

Chapter 14: Long Term Liabilities

5. Describe the accounting procedures for the extinguishment of debt.
6. Explain the accounting procedures for long-term notes payable.
7. Explain the reporting of off-balance sheet financing arrangements.
8. Indicate how long-term debt is presented and analyzed.

Long Term Debt: General

Long-term debt consists of probable future sacrifices.

It has various covenants or restrictions for the protection of both lenders and borrowers.

The indenture agreement incorporates the terms of the issue and restrictions.

Issuing Bonds

Bonds are the most common type of long-term debt.

They are usually issued in denominations of $1,000.

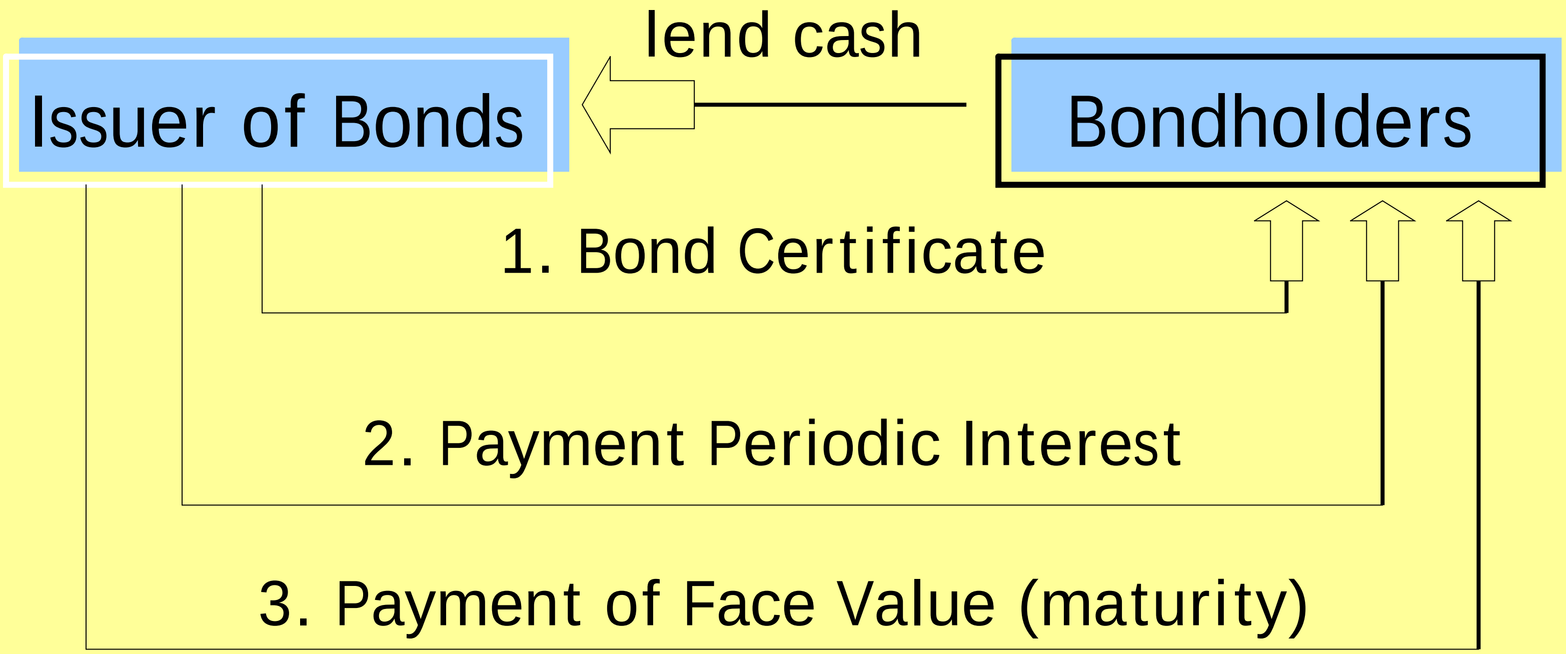
A bond indenture is a promise (by the lender to the borrower) to pay:

1. a sum of money at the designated date, and
2. periodic interest at a stipulated rate on the face value.

Selected Types of Bonds

- Secured and unsecured bonds
- Term or serial bonds
- Callable bonds
- Convertible bonds
- Bearer bonds
- Deep discount
- Commodity-backed

Bond Issues: Parties to the Contract



Valuation of Bonds: Determining Bond Prices

The price of a bond issue is determined by:

- the present value of the interest payments, and
- the present value of the face value,
- both discounted at the market (effective) rate of interest at date of issue.

Interest payments by borrower are calculated as:

Face value of bond issue x Stated (face) rate of interest

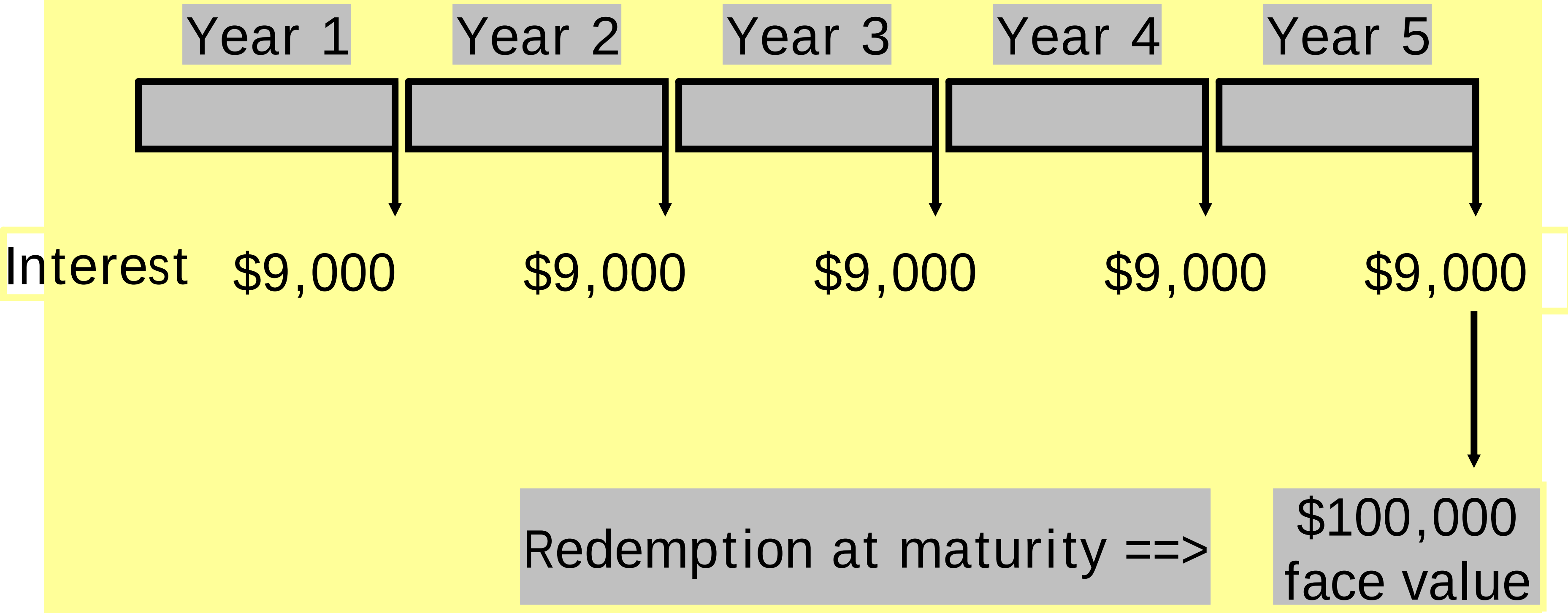
Determining Bond Prices: Example

Given:

- Face value of bond issue: $100,000
- Term of issue: 5 years
- Stated interest rate: 9% per year, payable annually end of the year
- Market rate of interest: 11%

What is the issue price of the bonds?

Determining Bond Prices: Example: Cash Flows



Interest = $100,000 x 9% per year stated rate

Determining Bond Prices: Example: Present Value of Cash Flows

	Year 1	Year 2	Year 3	Year 4	Year 5
Interest	$9,000	$9,000	$9,000	$9,000	$9,000

$ 33,263 ← Discount at market rate, 11%
$9,000 x 3.69590

plus

$ 59,345 ← Discount at market rate, 11%
$100,000 x 0.59345 ← $100,000

=$92,608 is the issue price

Bond Issue Pricing: Concept

Relationship between Stated rate and market rate	Relationship between Issue Price and face value
S.R. = Mkt Rate	Issue Price = F.V.
S.R. < Mkt Rate	Issue Price < F.V.
S.R. > Mkt Rate	Issue Price > F.V.

Discount on Bonds Payable

A discount is amortized either by the straight line method or the effective interest method.

The effective method is preferred GAAP.

Interest expense is recognized as follows:

Cash paid for interest:	$XXX
Add: Discount amortized during period:	$XXX
Interest expense recognized:	$XXX

Premium on Bonds Payable

A premium is amortized either by the straight line method or the effective interest method.

Interest expense is recognized as follows:

Cash paid for interest:		$XXX
Less: Premium amortized during period:	$XXX	
Interest expense recognized:	$XXX	

Straight-Line Method

Under this method of amortization an <u>equal</u> amount of interest expense and discount/premium amortization is recognized each period.

The amount to amortize each period =

$$\frac{\text{Total Discount/Premium}}{\text{Total Number of Periods}}$$

Effective-Interest Method

This method results in a different interest expense and amount of discount/premium amortized each period.

Bond interest expense =

Beginning Period's Carrying Value x Effective Rate at Time of Issuance

Discount/premium amortized =

The difference between interest expense and interest to be paid (plug)

Bond Discount and Premium Amortization Computation

Bond Interest Expense			−	Bond Interest Paid			=	
Carrying Value of Bonds at Beginning of Period	×	Effective Interest Rate	−	Face Amount of Bonds	×	Stated Interest Rate	=	Amortization Amount

Classification of Discount on Bonds Payable

Discount on bonds payable is a contra liability account and is shown as:

Bonds Payable (face value) :	$ XXX
less: Unamortized Discount :	($ XX)
Bonds Payable (carrying value):	$ XXX

Classification of Premium on Bonds Payable

Premium on bonds payable is an adjunct account and is shown as:

Bonds Payable (face value) :	$ XXX
add: Unamortized Premium :	$ XX
Bonds Payable (carrying value):	$ XXX

A Note on Amortization Methods

- The straight-line method allocates the same amount of discount (or premium) to each interest period.
- The effective-interest method allocates the discount or premium in increasing amounts over the bond term.
- However, the total discount or premium amortized is the same under both methods.

Bonds Issued on Interest Date

May be issued at par:

Cash

Bonds Payable

May be issued at a discount:

Cash

Discount on Bonds Payable

Bonds Payable

May be issued at a premium:

Cash

Premium on Bonds Payable

Bonds Payable

Bonds Issued Between Interest Dates

- Bonds may be issued between interest dates.
- Interest, for the period between the issue date and the last interest date, is collected with the issue price of the bonds (accrued interest).
- At the specified interest date, interest is paid for the entire interest period (semi- annual or annual).
- Premium or discount are also amortized from the date of issue of the bonds to the end of the interest period.

Accounting for the Costs of Issuing Bonds

Costs of issue must be amortized over the life of the bond issue.

Even though both straight-line and effective-interest methods are acceptable, the straight-line method is used in most cases.

Extinguishment of Debt

If extinguished at maturity there is no gain or loss.

When debt is extinguished early:

1. Amortization must be brought up to date, and
2. Any bond issue costs must be amortized up to date of extinguishment.

LT Notes Payable and Bonds Payable: A Comparison

Notes payable and bonds payable are similar in that:

both have fixed maturity dates

both have either stated or implicit rates

Like a bond, a note payable is valued at the present value of its future interest payments and face value (at maturity date).

Zero-Interest Bearing Notes

If a zero-interest bearing note is issued for cash:

1. Present value is measured by cash received.
2. Implicit interest rate is that rate that equates the cash received with the future payment amount(s).
3. Any discount/premium is amortized over term of the note.

Interest Bearing Notes

If interest bearing note is issued for cash the accounting is similar to bonds payable.

Any discount or premium is amortized over the term of the note.

Notes payable is credited in lieu of bonds payable.

Notes Issued for Property, Goods, or Services

A note may be issued for items other than cash.

The stated interest rate is presumed fair (and the note is recorded at face value) unless:

1. No interest is stated, or
2. Stated interest rate is unreasonable, or
3. Face amount is materially different from current fair value.

Notes Issued for Property, Goods, or Services

If the stated interest rate is not fair:

The present value of the note equals the fair value of the items received.

The interest element (over and above any stated rate) is the difference between the face amount of the note and the fair value of the property.

Off-Balance Sheet Financing

Off-balance-sheet financing represents borrowing arrangements that are not recorded.

- The amount of debt reported in the balance sheet does not include such financing arrangements.
- The objective is to improve certain financial ratios (such as debt-equity ratio)

Types include:

1. Non-consolidated subsidiaries
2. Special purpose entities (SPEs)
3. Operating leases

Intermediate Accounting, 11th ed.
Kieso, Weygandt, and Warfield

Chapter 15: Stockholders' Equity

Prepared by
Jep Robertson and Renae Clark
New Mexico State University

Chapter 15: Stockholders' Equity

After studying this chapter, you should be able to:

1. Discuss the characteristics of the corporate form of organization.
2. Explain the key components of stockholders' equity.
3. Explain the accounting procedures for issuing shares of stock.
4. Explain the accounting for treasury stock.

Chapter 15: Stockholders' Equity

5. Explain the accounting for and reporting of preferred stock.
6. Describe the policies used in distributing dividends.
7. Identify the various forms of dividend distributions.
8. Explain the accounting for small and large stock dividends, and for stock splits.
9. Indicate how stockholders' equity is presented and analyzed.

The Rights of Stockholders

The stockholders have the right to:

- share proportionately in profits and losses
- share proportionately in management
- share proportionately in corporate assets upon liquidation
- share proportionately in any new issues of stock of the same class (preemptive right)

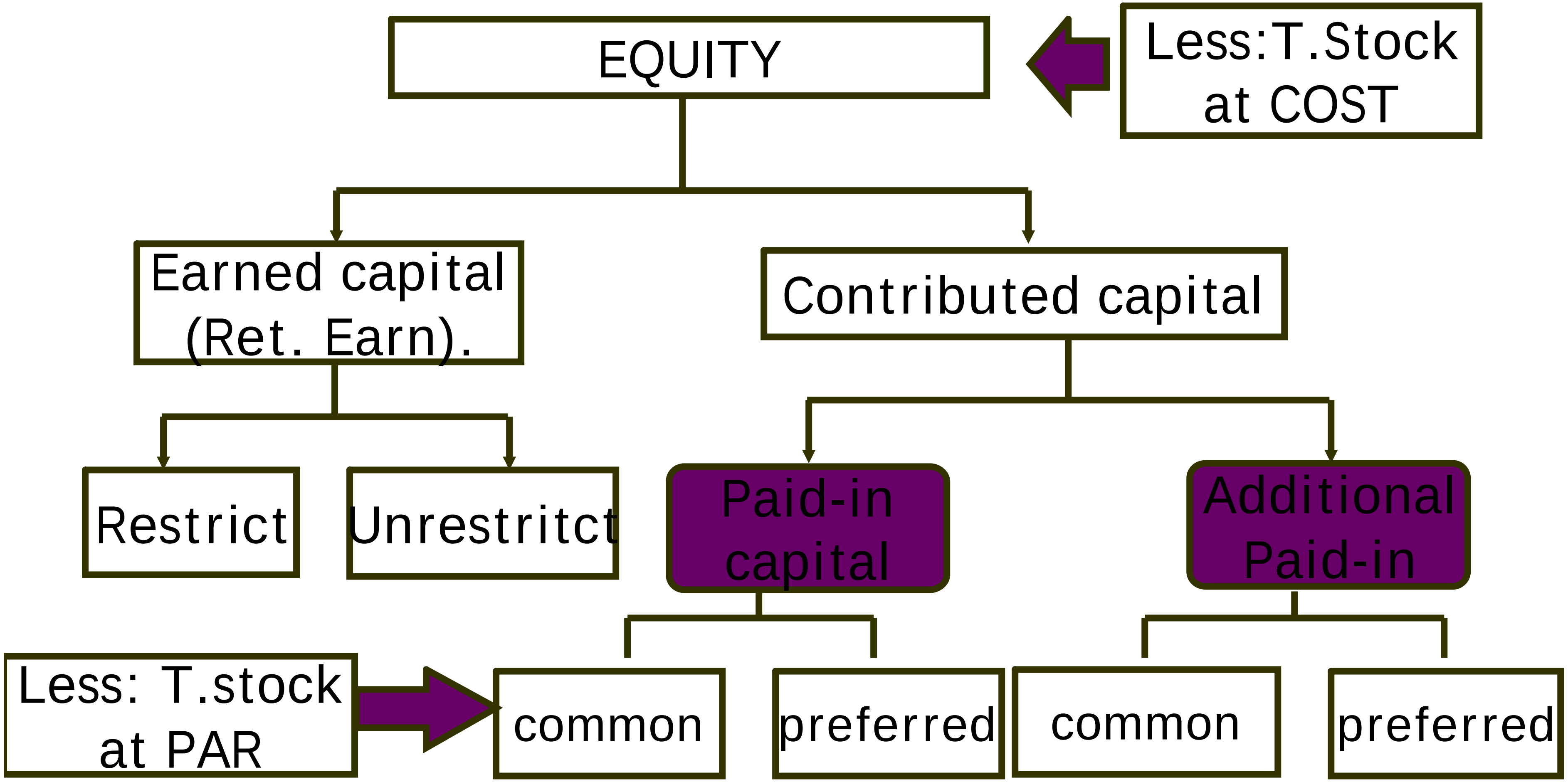
Components of Stockholders' Equity

Normally three categories:

1. Capital stock
2. Additional-paid in capital
3. Retained earnings

The first two represent contributed capital, whereas retained earnings is earned capital.

Components of Equity



Accounting for Share Issues

Accounts must be maintained for:

Par value stock

- preferred stock or common stock
- paid-in capital in excess of par
- discount on stock (if present)

No par stock

- preferred stock or common stock
- paid-in capital in excess of par

Stock Issuance

Par value has no economic significance.

- When par value stock is issued for cash:

Cash (proceeds)

Common Stock (# of Sh. X Par value)

Paid in Capital in Excess of Par (balance)

Many states permit no-par stock.

- When no-par stock is issued for cash:

Cash (proceeds)

Common Stock (proceeds)

Stock Issued in Lump-Sum Sales

Both COMMON and PREFERRED stocks are issued for cash in a single transaction.

The two methods of allocation available are:

- Proportional Method [relative fair market values]
- Incremental Method

When stock is issued for services or property other than cash, the property or services are recorded at

- either the fair market value of assets received or
- the fair value of the non-cash consideration received, whichever is more clearly determinable

Treasury Stock

Outstanding stock, purchased by the corporation, is known as treasury stock.

The reasons as to why corporations buy back their outstanding stock may include:

1. to increase earnings per share and return on equity
2. to provide tax efficient distributions of excess cash to shareholders
3. to provide stock for employee stock compensation contracts
4. to thwart takeover attempts
5. to create or improve the market for the stock

Recording Treasury Stock: Methods

COST METHOD:

- Treasury stock is recorded at purchase COST
- Treasury stock is a contra-stockholders' account.

PAR VALUE METHOD:

- Treasury stock is recorded at PAR value
- It is presented as a deduction from capital stock

Treasury Stock: Cost Method

- Debit treasury stock for purchase cost, and credit treasury stock at cost if shares reissued.
- The initial issue price of stock <u>does not</u> affect subsequent treasury stock transactions.
- No gain or loss can be recognized when treasury shares are re-issued.

Cost Method: Example

Given:

- Issued: 1,000 common shares; Par, $100; issued at $110.
- Reacquired: 100 shares at $112 each.
- 10 shares were reissued at 112 (at cost).
- 10 shares were reissued at 130 (above cost).
- 10 shares were reissued at $98 (below cost).
- 10 shares reissued at $105 (below cost).

Show journal entries for these transactions.

Cost Method: Example

1

Issued: (par, $100); 1,000 sh. at $110.

Cash	110,000	
Common stock		100,000
Additional PIC:		
Common stock		10,000

2

Reacquired: 100 at $112.

Treasury stock	11,200	
Cash		11,200

3

10 shares reissued @ 112.

Cash	1,120	
Treasury stock		1,120

Cost Method: Example

4

10 shares reissued at 130.

Cash	1,300	
Treasury stock		1,120
Additional PIC:		
Treasury stock		180

5

10 shares reissued at $98.

Cash	980	
Additional PIC:		
(T/stock)	140	
Treasury stock		1,120

Cost Method: Example

6 Reissued 10 treasury shares at $105 (cost = $112)

Use Additional PIC (Treasury stock) first to absorb any shortfall. Then, use retained earnings.

Cash	1,050	
Addl PIC (T/stock)	40	
Retained earnings	30	
Treasury stock		1120

Par Value Method: Main Points

- Treasury stock is recorded at par when bought or reissued.
- Any shortfalls between the par value and the reissue price of treasury stock is borne: first by Paid-In and then by Retained Earnings

Retirement of Treasury Stock

- Repurchase of stock does NOT mean retirement
- Retired stock becomes authorized/unissued stock
- Active retirement is effected by application to the State
- Constructive retirement is effected by Board Resolution

Preferred Stock

Preferred stock has certain preferences or features not possessed by common stock.

These features are:

- preference as to dividends
- preference as to assets in the event of liquidation
- may be convertibility into common stock at the option of the stockholders
- may be callable at the option of the issuer
- absence of voting rights

Preferred Stock: Features

- Cumulative preferred stock
- Participating preferred stock:
  - Fully Participating
  - Partially Participating
- Convertible preferred stock
- Callable preferred stock
- Redeemable preferred stock
  - Has features that make these securities more like debt than an equity instruments; therefore, these securities must be classified as liabilities

Legality of Dividends

- Dividends come from present and past earnings in majority of states.
- Dividends come also from appreciation of assets in some states.
- Dividends restrictions are based on liquidity and solvency tests.

Types of Dividends

1. Cash dividends
2. Property dividends
3. Stock dividends
4. Liquidating dividends

Cash Dividends: Important Dates

There are three important dates:

1. the declaration date (dividends are declared and accrued)
2. the record date (list of stockholders to whom dividends are to be paid is finalized)
3. the payment date (dividends are paid to stockholders of record)

Cash Dividends: Journal Entries

• DATE DECLARED	• Retained Earnings Dividends Payable
• DATE OF RECORD	• No Entry
• DATE OF PAYMENT	• Dividends Payable Cash

Property Dividends

- Are payable in assets of company
- Are non-reciprocal transfers between corporation and shareholders
- Are equal to the fair market value of assets distributed at time of declaration [except in spin-offs and reorganizations]
- Corporation recognizes gain/loss on the distribution

Stock Dividends: Concept

- Stock dividends result in more shares being issued as dividend (no cash flow is involved).
- Small stock dividends involve issues of less than 20%–25% of stock.
- The accounting for small stock dividends is based on the fair market value of stock issued.
- The accounting for large stock dividends (more than 20%–25%) is based on the par value of stock issued.

Stock Dividends and Stock Splits

Stock Dividends	Stock Splits
Par value of a share does not change	Par value of a share decreases
Total number of shares increases	Total number of shares increases
Total stockholders' equity does not change	Total stockholders' equity does not change
The composition of equity changes (less of retained earnings; more of stock)	The composition of equity does not change (same amounts of stock and RE)
Stock dividends require journal entries	Stock splits do not require journal entries

Statement of Stockholders' Equity

Typical format:

1. Balance at beginning of the period
2. Additions
3. Deductions
4. Balance at end of period

Analysis

Commonly used ratios:

1. Rate of return on equity:

$$\frac{\text{Net income} - \text{Preferred dividends}}{\text{Average common equity}}$$

2. Payout ratio:

$$\frac{\text{Cash dividends}}{\text{Net income} - \text{preferred dividends}}$$

3. Book Value per share:

$$\frac{\text{Common stockholders' equity}}{\text{Outstanding shares}}$$

Intermediate Accounting, 11th ed.
Kieso, Weygandt, and Warfield

Chapter 16: Dilutive Securities and Earnings per Share

Prepared by
Jep Robertson and Renae Clark
New Mexico State University

Chapter 16: Dilutive Securities and Earnings per Share

After studying this chapter, you should be able to:

1. Describe the accounting for the issuance, conversion, and retirement of convertible securities.
2. Explain the accounting for convertible preferred stock.
3. Contrast the accounting for stock warrants and for stock warrants issued with other securities.
4. Describe the accounting for stock compensation plans under generally accepted accounting principles.

Chapter 16: Dilutive Securities and Earnings per Share

5. Explain the controversy involving stock compensation plans.
6. Compute earnings per share in a simple capital structure.
7. Compute earnings per share in a complex capital structure.

Convertible Bonds: Concepts

- At issuance: parallels accounting for straight debt.
- At conversion, typically the book value of the bonds is removed and replaced with common stock.
- Cost of induced conversions is a period expense.
- Conversion is initiated by security holder.

Conversion of Debt: Example

Given:

- One $1,000 bond, issued at $45 premium
- The bond is convertible into 10 common shares of $10 par
- At conversion: unamortized premium is $30

Record the conversion using the book value method.

Conversion of Debt: Example

Bonds payable	1,000	
Premium on bonds payable	30	
Common stock		100
Paid-in-cap		930

Convertible Preferred Stock: Concepts

- Convertible preferred stock is equity, unless it is redeemable preferred stock.
- Conversion is an equity transaction: hence, no gains or losses are recognized.
- If converted, valuation is based on the book value of the preferred stock.

Stock Warrants: Concepts

- Stock warrants entitle the holder to acquire additional common stock within a stipulated period at a specified price.
- Typically have a dilutive effect on EPS.
- Cash is received by issuer upon exercise.
- May be issued independently or with another security.
- Stock warrants are also known as stock options.

Stock Warrants Issued with Other Securities

Stock warrants may be:

- either detachable warrants, or
- non-detachable warrants

If warrants are detachable, value of the warrants is determined by:

- either the proportional method, or
- the incremental method.

If warrants are non-detachable, no allocation to warrants is made.

Proportional Method: Example

Given:

- Bonds, with a par value of $10,000 and detachable warrants, are sold at par.
- Bonds' FMV without the warrants is $9,800.
- FMV of warrants is $400.

Allocate the $10,000 to bonds and the detachable warrants.

Proportional Method: Example

Total proceeds from the bond issue: $10,000 [given]

Allocate to Warrants:

$400/$10,200 FMV
[times]
$10,000 [issue]

$392

Allocate to Bonds:

$9,800/$10,200 FMV
X
$10,000 [issue]

$9,608

Proportional Method: Example

Journal entries:

Cash	9,608	
Discount (Bonds Payable)	392	
Bonds Payable		10,000
Cash	392	
Paid-in (Stock warrants)		392

Incremental Method: Example

Given:

- Bonds, with a par value of $10,000 and detachable warrants, are sold at par.
- Market price of warrants, $300.
- Market price of bonds without warrants, not determinable.

Determine the amounts allocated to the bonds and the warrants

Total receipt less warrants = bonds $10,000 — $300 = $9,700

Stock Rights

- Stock rights give existing shareholders preemptive rights to buy shares.
- Unlike warrants, rights are of short duration.
- No journal entries are made, when rights are issued.
- When stock rights are exercised, corporation usually receives cash.

Stock Compensation Plans

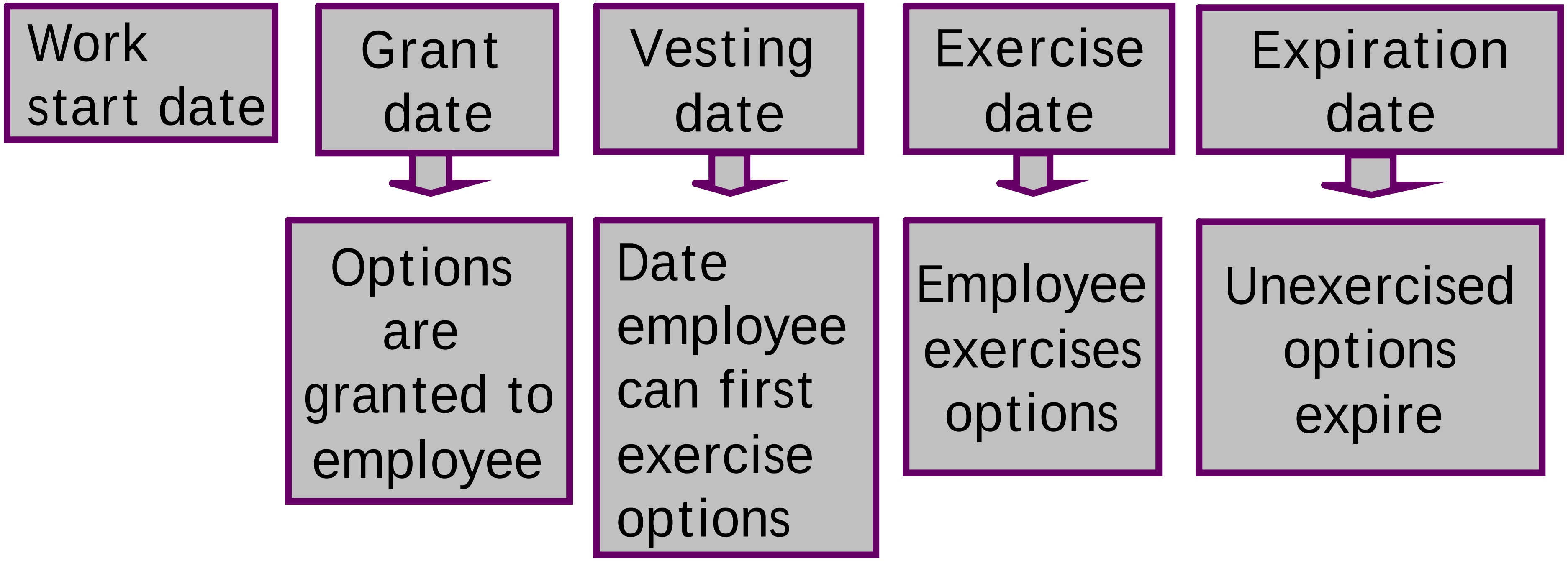
These plans provide employee incentives and may be:

1. Stock option plans:
   - incentive plans [IRS approved], or
   - non-qualified plans
2. Stock appreciation rights
3. Performance plans

Stock Option Plans: Accounting Issues

- What is the value of the compensation (if any)?
- When, if at all, should it be recognized?
- Two possible ways to measure compensation expense are:
  - the intrinsic method, or
  - the fair value method (required method)

Stock Options: Important Dates



Measuring Compensation Expense

Intrinsic value method:

- Compensation expense is the difference between:
- the market price of the stock (at grant date), and the exercise price of options (at grant date).

Fair value method (required method):

Compensation expense is:

- the fair value of the options on grant date that are expected to vest.
- option pricing models may be used to determine fair value.

Options: Allocating Compensation Expense

Compensation Expense

is determined as of the grant date

and is allocated over the service period

> The compensation expense is calculated using the fair value method.

> The service period is the period benefited by employee's service.

➢ The service period is usually the period between the grant date and the vesting date.

Stock Compensation Plans: Controversy

- The FASB amended the accounting standards requiring the fair value method for recognizing stock-based compensation in December 2004. Prior to this amendment companies could use either the intrinsic or the fair value method.

Stock Compensation Plans: Controversy

Political and economic pressures on the FASB to amend the accounting standards for recognizing stock-based compensation resulted from:

- Research indicated that use of intrinsic method results in “overstating” of earnings.
- Prior to 2002, very few companies used the fair value method, thus usually recognizing no compensation expense.

Stock Compensation Plans: Controversy

- Options granted disproportionately to a few top executives.
- Form versus substance issue.
- Users of financial statements were concerned that the intrinsic value method did not faithfully represent the economic transactions.

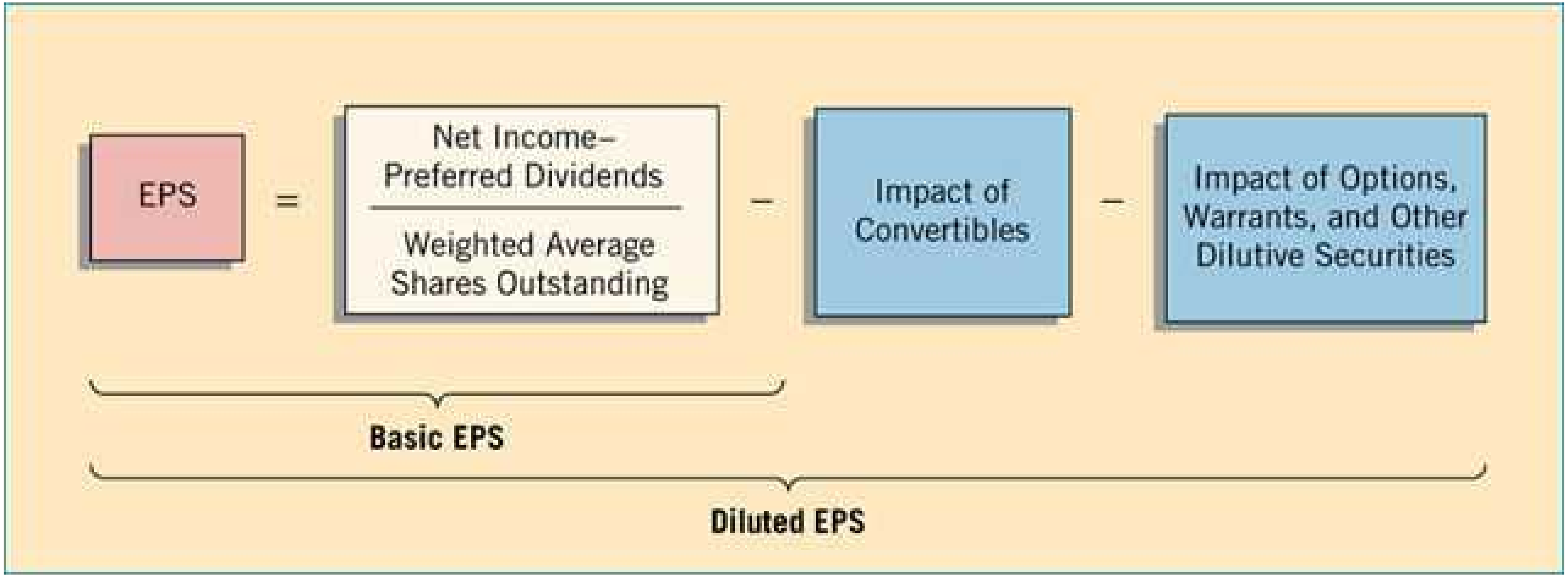
Stock Compensation Plans: Controversy

- In 2002, some companies began to voluntarily adopted the fair value method while others continued to use the intrinsic value method. Thus, similar economic transactions were not accounted for similarly.
- Lack of convergence with international accounting standards.

Earnings Per Share: Concepts

- Reported on the income statement.
- EPS is often the focus of investors.
- Dilution of EPS means reduction in EPS.
- Reduction in EPS results from conversion of other securities into common stock.
- Shareholders want to know the extent of reduction in EPS, if dilution takes place.

Relation between Basic and Diluted EPS



Simple Capital Structure: Basic EPS

- Simple capital structure:
  - Common stock only with no potentially dilutive securities
- Basic EPS:

$$\frac{\text{Net income} - \text{Preferred dividends}}{\text{Weighted average outstanding common shares}}$$

Complex Capital Structures

Complex capital structures have potentially dilutive securities, such as:

- Convertible bonds or preferred stock.
- Options or warrants, or
- Other rights that could reduce earnings per share.

Securities that could reduce EPS are dilutive.

Securities that could increase EPS are anti-dilutive.

Diluted Earnings Per Share: Methods

- The dilutive effect of convertible securities is measured by the if-converted method.
- The dilutive effect of options and warrants is measured by the treasury stock method.
- For computing dilution, the rate of conversion most advantageous to the security holder is used (maximum dilutive conversion rate).

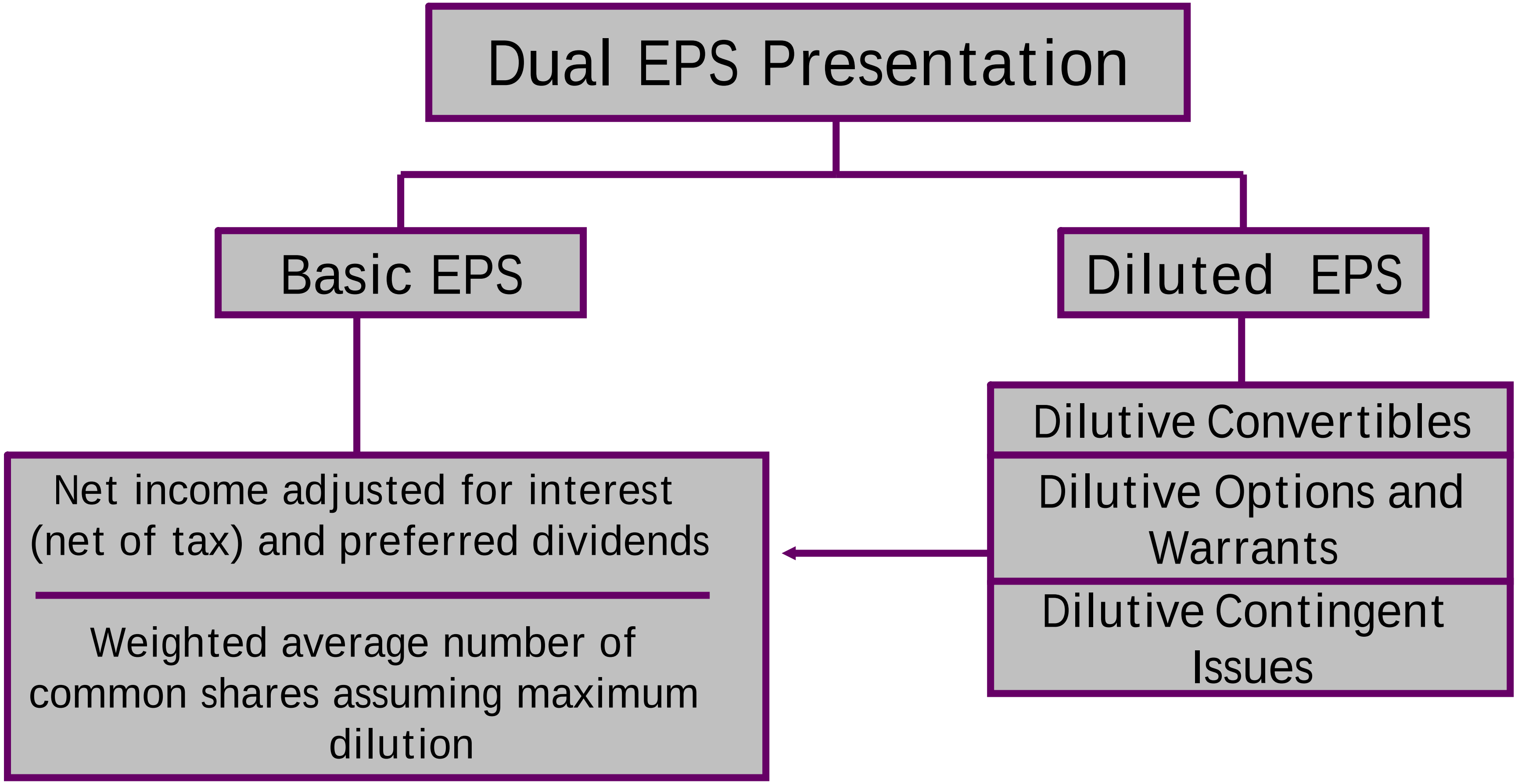
The If-Converted Method

- The conversion of the securities into common stock is assumed to occur at the beginning of the year or date of issue, if later.
- Convertible bonds: The interest expense (net of tax) is added back to net income.
- Convertible preferred: No deduction for preferred dividends.
- The weighted average number of shares is increased by the additional common shares assumed issued.

The Treasury Stock Method

- Applies to options and warrants (and their equivalents).
- Options and warrants are assumed exercised at the beginning of the year.
- The proceeds from the exercise of options are assumed used to buy back common shares at average market price.
- The exercise price per share must be less than the market price per share for dilution to occur.

Earnings Per Share: Complex Structures: Summary



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Chapter 17: Investments

Prepared by
Jep Robertson and Renae Clark
New Mexico State University

Chapter 17: Investments

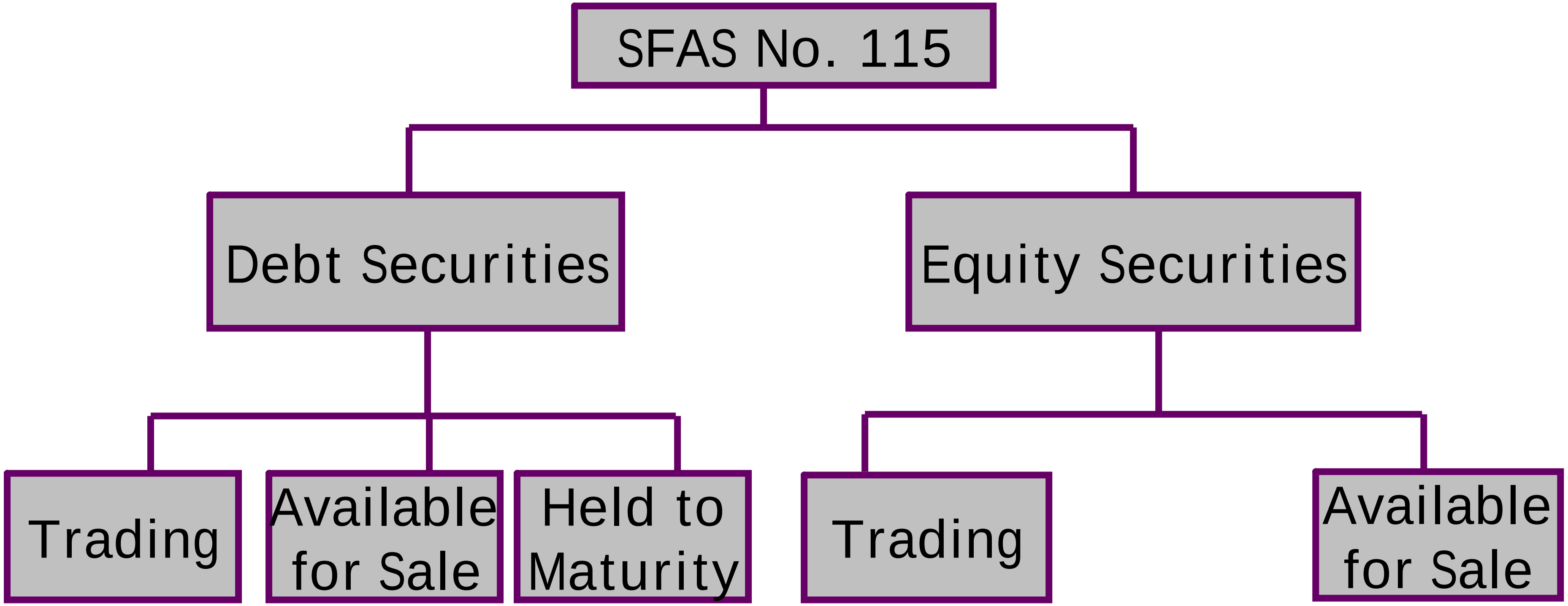
After studying this chapter, you should be able to:

1. Identify the three categories of debt securities and describe the accounting and reporting treatment for each category.
2. Understand the procedures for discount and premium amortization on bond investments.
3. Identify the categories of equity securities and describe the accounting and reporting treatment for each category.

Chapter 17: Investments

4. Explain the equity method of accounting and compare it to the fair value method for equity securities.
5. Describe the disclosure requirements for investments in debt and equity securities.
6. Discuss the accounting for impairments of debt and equity investments.
7. Describe the accounting for transfer of investment securities between categories.

Investment Categories Under SFAS 115



APB No. 118: Scope

- Equity Securities
  - Equity Method
    - If 20% to 50% voting stock
  - Consolidations
    - If more than 50% voting stock

Debt Securities: Types and Reported Amounts

Debt Instruments Represent a Creditor Relationship

- **Trading Securities**
  - Record at fair value
  - M.V.changes recorded as part of income
- **Available for Sale**
  - Record at fair value
  - M.V.changes recorded as part of equity
- **Held-to-Maturity**
  - Record at Amortized cost
  - M.V. changes not recognized

Held-to-Maturity Debt Securities

The investor has both:

- a positive intent to hold the securities, and
- the ability to hold them to maturity.

These securities are accounted for at amortized cost, not fair value.

Debt Securities: Available-for-Sale

- These investments are reported at fair value in the balance sheet.
- Differences between the fair value and amortized cost are reported as unrealized holding gains and losses (part of equity).
- When realized, gains and losses in fair value are reported as part of net income.

Debt Securities: Trading

- Trading securities are used to generate profits from short-term differences in prices.
- The holding period is usually less than 3 months.
- The securities are reported at fair value.
- Unrealized gains and losses are reported as part of net income.
- Any discount or premium is not amortized.

Debt Securities: Transfers Between Categories

Issues:

- At what value is the security transferred?
- How are gains and losses accounted for?
- What is the effect of the gain/loss accounting on income and equity?

Transfers Between Categories

Type of Transfer	Measurement Basis	Impact of Transfer on Stockholders' Equity	Impact of Transfer on Net Income
Trading to Available for Sale	Transferred at fair value to Available for Sale category and is the new COST basis of security	Unrealized gains or losses at date of transfer increase or decrease stockholders' equity.	Unrealized gains or losses at date of transfer are recognized in income.

Transfers Between Categories

Type of Transfer	Measurement Basis	Impact of Transfer on Stockholders' Equity	Impact of Transfer on Net Income
From Available for Sale to Trading	Transferred at fair value at the date of transfer and becomes the new COST basis of security	The unrealized gains or losses at the date of the transfer increase or decrease stockholders' equity	The unrealized gains or losses at date of transfer is recognized in income

Transfers Between Categories

Type of Transfer	Measurement Basis	Impact of Transfer on Stockholders' Equity	Impact of Transfer on Net Income
From Held to Maturity to Available for Sale	Transferred at fair value at date of transfer	Unrealized gains or losses at date of transfer increase or decrease a separate component of equity	None

Transfers Between Categories

Type of Transfer	Measurement Basis	Impact of Transfer on Stockholders' Equity	Impact of Transfer on Net Income
From Available for Sale to Held to Maturity	Transferred at fair value at date of transfer	The unrealized gain or loss (at date of transfer) is carried as a separate component of equity and is amortized over the remaining life of the security	None

Equity Securities

- Equity securities represent ownership interests such as common, preferred, or other capital stock.
- They include rights to buy and sell the ownership interests.
- Convertible debt and redeemable preferred stock are not equity securities for this purpose.
- The extent of ownership in common stock by an investor in an investee determines the accounting treatment for equity securities.

Investments in Equity Interests: Level of Influence

Ownership Percentage

0%	20%	50%	100%
Little or none	Significant	Control	

Absence of Significant Influence by Investor: Examples

The FASB has provided examples of cases in which significant influence <u>may not</u> exist:

- Investee opposes investor's acquisition of stock
- Investor surrenders significant shareholder rights
- Investor is unable to obtain needed financial information from investee
- Investor is unable to obtain representation on investee's board of directors

Equity Securities: Available for Sale Securities

- Securities when acquired are recorded at cost
- Subsequent to acquisition, the investments are valued and reported at fair value
- Cash dividends are reported as income
- Unrealized holding gains and losses are reported as:
  - part of comprehensive income, and
  - a component of stockholders’ equity

Equity Securities: Trading

The accounting guidelines are the same as for the available for sale securities, with one exception.

- Securities when acquired are recorded at cost
- Subsequent to acquisition, the investments are valued and reported at fair value
- Cash dividends are reported as income
- EXCEPT: Unrealized holding gains and losses are reported in net income

Equity Method

- Investor has significant influence over the investee
- Investment is initially recorded at cost
- The investment's carrying value is increased by investor's proportionate share of earnings
- The investment's carrying value is decreased by:
    - investor's proportionate share of losses
    - dividends declared by investee

Investments in Equity Securities: Consolidation

- Two models are used to determine whether consolidated financial statements should be prepared.
  - Voting-interest model – controlling voting interest
  - Risk-and-reward model – controlling financial interest

Investments in Equity Securities: Consolidation – Voting-interest Model

- A voting interest of more than 50% results in a controlling interest.
- The investor is the parent corporation; the investee is the subsidiary corporation.
- The investor prepares consolidated financial statements for the parent and the subsidiary.

Investments in Equity Securities: Consolidation - Risk-and-reward Model

- A company can have a controlling financial interest without having a controlling voting interest.
- First, determine whether the entity is a variable interest entity (VIE)
- If so, the primary beneficiary must consolidate the VIE

Investments in Equity Securities: Consolidation - Risk-and-reward Model

- An entity is a VIE is it has one of the following characteristics:
  - Insufficient equity investment at risk
  - Stockholders lack decision-making rights
  - Stockholders do not absorb the losses or receive the benefits of a normal stockholder

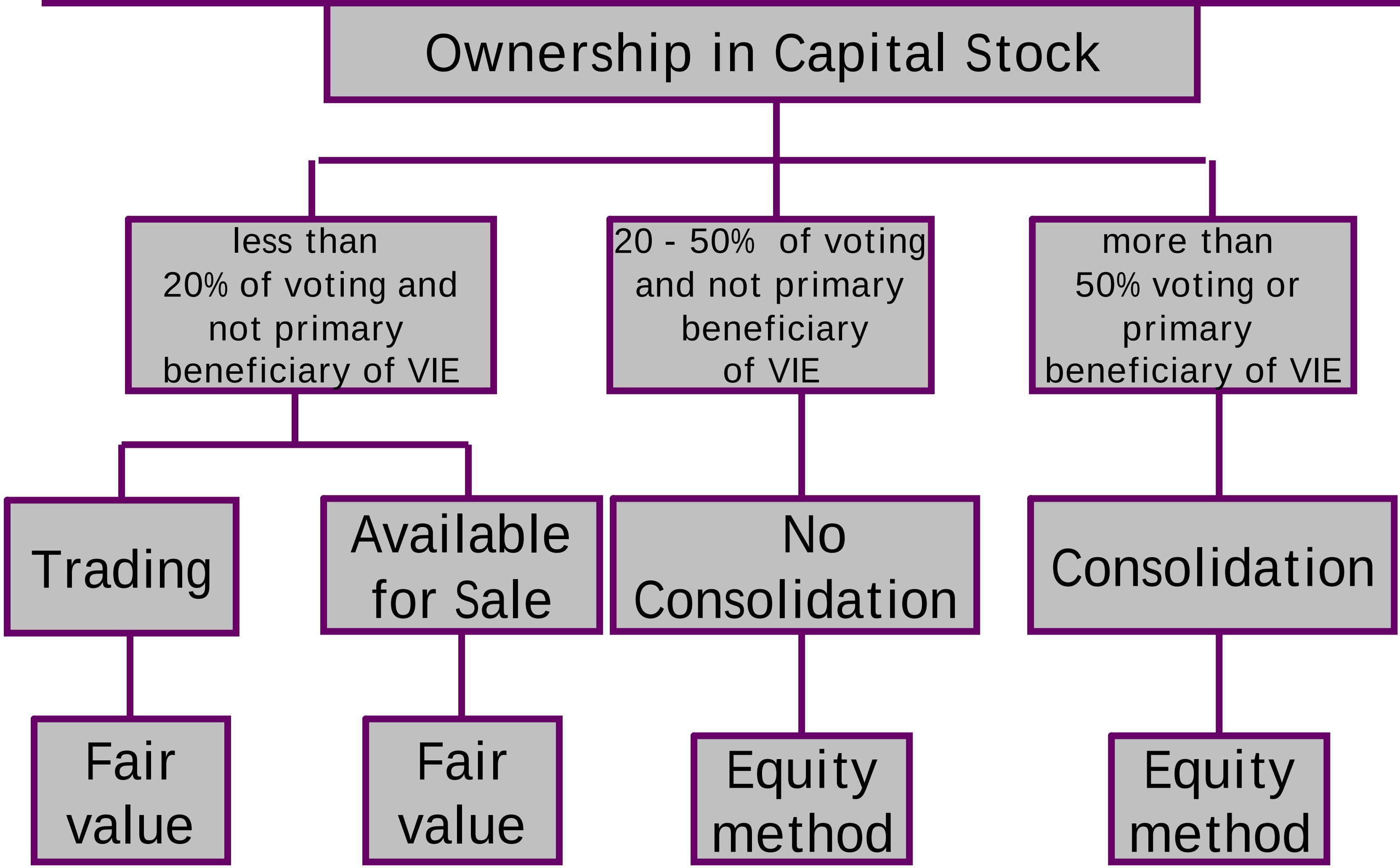
Investments in Equity Securities: Risk-and-reward Model

Investments in Equity Securities: Consolidation - Risk-and-reward Model

- The primary beneficiary is the party that has the most risks and rewards exposure.

- The primary beneficiary of the VIE must consolidate the VIE.

Investments in Equity Securities: Summary



Equity Securities: Accounting By Category

Category	Valuation	Unrealized Holding Gains and Losses	Other Income Effects
<20% Avail for sale	Fair value	Other income and Equity	Dividends; G & L (sale)
<20% Trading	Fair value	Net income	Dividends; G & L (sale)
20% - 50%	Equity	Not recognized	Proportionate investee's inc
>50% or primary beneficiary of VIE	Consolidate	Not recognized	Not applicable

Presentation

Must report amounts for each category of investments:

1. Trading: reported at aggregate fair value as current assets.
2. Available-for-sale: reported at aggregate fair value and either current or noncurrent assets.
3. Held-to-maturity: reported at amortized cost and either current or noncurrent assets.

Impairments

Impairment exists when a decline in value is other than temporary. If so, the carrying value must be written down.

Debt securities: if the investor will not collect monies owed.

Equity securities: must consider financial condition of investee to determine if decline is other than temporary.

Intermediate Accounting, 11th ed.
Kieso, Weygandt, and Warfield

Chapter 18: Revenue Recognition

Prepared by
Jep Robertson and Renae Clark
New Mexico State University

Chapter 18: Revenue Recognition

After studying this chapter, you should be able to:

1. Apply the revenue recognition principle.
2. Describe accounting issues involved with revenue recognition at point of sale.
3. Apply the percentage-of-completion method for long-term contracts.
4. Apply the completed-contract method for long-term contracts.

Chapter 18: Revenue Recognition

5. Identify the proper accounting for losses on long-term contracts.
6. Describe the installment-sales method of accounting.
7. Explain the cost recovery method of accounting.

Guidelines for Revenue Recognition

The revenue recognition principle provides that revenue is recognized:

- when it is earned, and
- when it is realized or realizable

Revenue is earned when the earnings process is substantially complete.

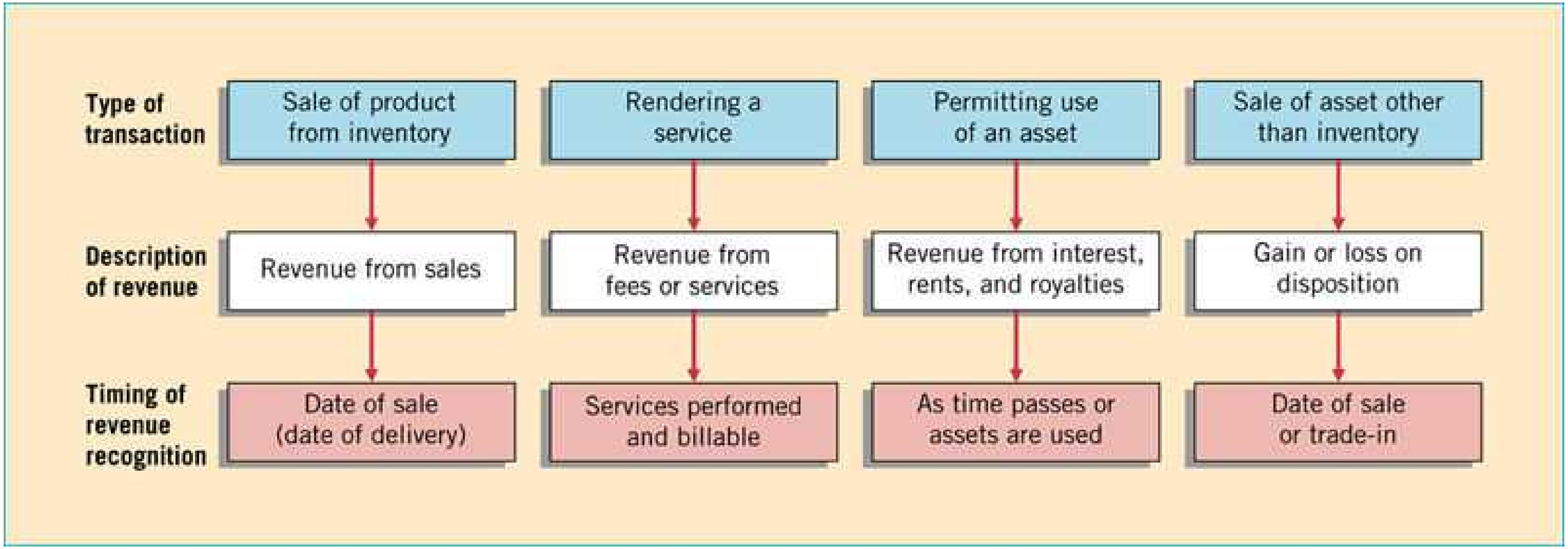
Revenue is realized when goods and services are exchanged for cash or claims to cash.

Revenue is realizable when assets received are convertible into a known amount of cash.

Four Types of Revenue Transactions

- Revenue from selling products is recognized at the date of sale (date of delivery).
- Revenue from services is recognized when services are performed and are billable.
- Revenue from the use of enterprise's assets by others is recognized as time passes or as the assets are used up.
- Revenue from disposal of assets (other than inventory) is recognized at the point of sale as gain or loss.

Revenue Recognition Classified by Nature of Transaction



Revenue Recognition at Point of Sale

Revenues from manufacturing and selling are commonly recognized at point of sale.

Exceptions:

1. Sales with buyback agreements
2. Sales when right of return exists (high rates that are not reliably estimable)
3. Trade loading and channel stuffing

Revenue Recognition Before Delivery

Revenue may be recognized before delivery under certain circumstances.

- Long-term construction contracts are a notable example

Two methods are available:

- The percentage-of-completion method, and
- The completed contract method

Revenue Recognition Before Delivery

Long-Term Construction Accounting Methods

Percentage-of-Completion Method

1) Terms of contract must be certain, enforceable.
2) Certainty of performance by both parties
3) Estimates of completion can be made reliably

Completed Contract Method

1) To be used only when the percentage method is inapplicable [uncertain]
2) For short-term contracts

Percentage-of-Completion: Steps

1. $\dfrac{\text{Costs incurred to date}}{\text{Most recent estimated total costs}}$ = Percent complete

2. Estimated total revenue x Percent complete = Revenue to be recognized to date

3. Total revenue to be recognized to date less Revenue recognized in PRIOR periods = Current period revenue

4. Current Period Revenue less current costs = Gross profit

Percentage-of-Completion: Entries

- Cost of construction:

  Construction in process (CIP)

  Materials, cash, payables, etc.

- Progress billings:

  Accounts receivable

  Billings on CIP

- Collections:

  Cash

  Accounts receivable

Percentage-of-Completion: Entries

- To recognize revenue and gross profit:

  Construction in process (gross profit)

  Construction expenses

          Revenue

- To record completion of project:

  Billings on CIP

          Construction in process

Percentage-of-Completion: Example

Data: Contract price: $4,500,000 Estimated cost: $4,000,000
Start date: July, 2003 Finish: October, 2005
Balance sheet date: Dec. 31

Given:	2003	2004	2005
Costs to date	$1,000,000	$2,916,000	$4,050,000
Estimated costs to complete	$3,000,000	$1,134,000	$ -0-
Progress Billings during year	$900,000	$2,400,000	$1,200,000
Cash collected during year	$750,000	$1,750,000	$2,000,000

What is the percent complete, revenue and gross profit recognized each year?

Percentage-of-Completion: Example

	2003	2004	2005
% complete to-date	1,000,000 / 4,000,000 = 25%	2,916,000 / 4,050,000 = 72%	100 %
Revenue recognized	4,500,000 * 25% = 1,125,000	4,500,000 * 72% less 1,125,000 = 2,115,000	4,500,000 less 3,240,000 = 1,260,000
Gross Profit recognized	1,125,000 less 1,000,000 = 125,000	2,115,000 less 1,916,000 = 199,000	1,260,000 less 1,134,000 = 126,000

Recognizing Current & Overall Losses on Long-Term Contracts

A long-term contract may produce:

- either an interim loss and an overall profit,
- or an overall loss for the project

Under the percentage-of-completion method, losses in any case are immediately recognized.

Under the completed contract method, losses are recognized immediately only when overall losses are indicated.

Recognizing Current & Overall Losses on Long-Term Contracts

Current Loss on an otherwise overall profitable contract

- Percentage Method: Recognize loss currently.
- Completed method: No adjustment needed.

Loss on an overall unprofitable contract

- Percentage Method: Recognize entire loss now.
- Completed method: Recognize loss currently.

Revenue Recognition After Delivery

Revenue recognition is deferred when collection of sales price is not reasonably assured and no reliable estimates can be made.

The two methods that are used are:

- the installment sales method
- the cost recovery method

If cash is received prior to delivery, the method used is the deposit method.

The Installment Sales Method

- This method emphasizes income recognition in periods of collection rather than at point of sale.
- Title does not pass to the buyer until all cash payments have been made to the seller.
- Both sales and cost of sales are deferred to the periods of collection.
- Other expenses, selling and administrative, are not deferred.

The Installment Sales Method: Issues

- Installment sales must be kept separate
- Gross profit on installment sales must be determinable
- The amount of cash collected from installment accounts must be known
- The cash collected from current years' and prior years' accounts must be known
- Provision must be made for the carry forward of each year's deferred gross profit

The Installment Sales Method: Steps

• For installment sales in any year	• Determine rate of gross profit on installment sales • Apply this rate to cash collections of current year's installment sales to yield realized gross profit • The gross profit not realized is deferred
• For installment sales made in prior years (realized gross profit)	• Apply the relevant rate to cash collections of prior year's installment sales

The Installment Sales Method: Example

Given:	**2003**	**2004**	**2005**
Installment sales	$200,000	$250,000	$240,000
Cost of sales	$150,000	$190,000	$168,000
Gross Profit	**$ 50,000**	**$ 60,000**	**$ 72,000**
Cash received in:			
from 2003 sales	$ 60,000	$ 100,000	$ 40,000
from 2004 sales	$ -0-	$ 100,000	$125,000
from 2005 sales	$ -0-	$ -0-	$ 80,000

Determine the realized and deferred gross profit.

The Installment Sales Method: Example

Given:	**2003**	**2004**	**2005**
Installment sales	$200,000	$250,000	$240,000
Gross Profit	$ 50,000	$ 60,000	$ 72,000
Gross profit rate	25%	24%	30%

See next slide for realized and deferred gross profit

The Installment Sales Method: Example

	2003	2004	2005
Gross profit rate	25%	24%	30%
Realized Gross Profit:			
From 2003 sales:			
Realized in	$ 15,000	$ **25,000**	**$ 10,000**
From 2004 sales:			
Realized in:	$ -0-	$ 24,(	
From 2005 sales:			
Realized in:	$ -0-	$ -0-	$ 24,000

Gross profit deferred

deferred

The Installment Sales Method: Partial Journal Entries (2003) for Gross Profit

Installment Sales	200,000		Cost of
Sales	150,000		Deferred
Gross Profit, 2003	50,000		(To close
2003 accounts)			
Deferred Gross Profit, 2003	15,000		
Realized Gross Profit		15,000	
(Realized: $60,000 x 25%)			
Realized Gross Profit	15,000		
Income Summary		15,000	
(To close to Income Summary)			

The Cost Recovery Method

Seller recognizes no profit until cash payments by buyer exceed seller's cost of merchandise.

After recovering all costs, seller includes additional cash collections in income.

This method is to be used where there is no reasonable basis for estimating collectibility as in franchises and real estate.

The income statement reports the amount of gross profit recognized and the amount deferred.

The Deposit Method

- Seller receives cash from buyer before transfer of goods or performance.
- The seller has no claim against the purchaser.
- There is insufficient transfer of risks to buyer to warrant recording a sale by seller.
- In the case of such incomplete transactions, the deposit method is used.
- The deposit method thus defers sale recognition until a sale has occurred for accounting purposes.

Intermediate Accounting, 11th ed.
Kieso, Weygandt, and Warfield

Chapter 19: Accounting for Income Taxes

Prepared by
Jep Robertson and Renae Clark
New Mexico State University

Chapter 19: Accounting for Income Taxes

After studying this chapter, you should be able to:

1. Identify differences between pretax financial income and taxable income.
2. Describe a temporary difference that results in future taxable amounts.
3. Describe a temporary difference that results in future deductible amounts.
4. Explain the purpose of a deferred tax asset valuation allowance.

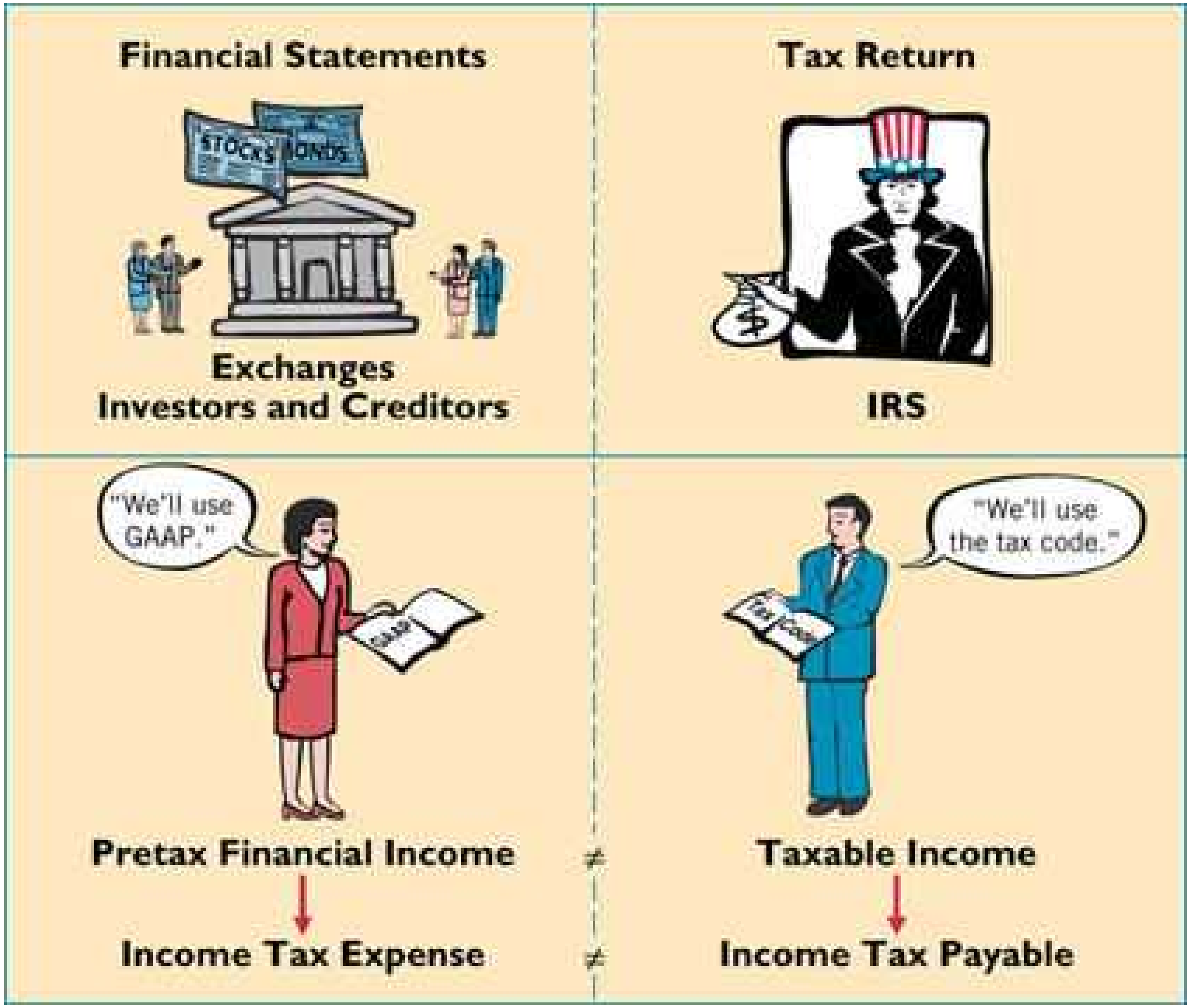
Chapter 19: Accounting for Income Taxes

5. Describe the presentation of income tax expense in the the income statement.
6. Describe various temporary and permanent differences.
7. Explain the effect of various tax rates and tax rate changes on deferred income taxes.
8. Apply accounting procedures for a loss carryback and a loss carryforward.

Chapter 19: Accounting for Income Taxes

9. Describe the presentation of deferred income taxes in financial statements.
10. Indicate the basic principles of the asset-liability method.

Fundamental Differences between Financial and Tax Reporting



Deferred Taxes: Basics

- Deferred taxes arise when income tax expense differs from income tax liability.
- The tax expense is determined under GAAP.
- The income tax liability is determined under the Internal Revenue Code.
- Some of these differences are temporary and reverse over time.
- Others are permanent and do not reverse.

Temporary Differences: Examples

- Revenues and gains, recognized in financial income, are later taxed for income tax purposes.
- Expenses and losses, recognized in financial income, are later deducted for income tax purposes.
- Revenues and gains are taxed for income tax purposes before they are recognized in financial income.
- Expenses and losses are deducted for income tax purposes before they are recognized in financial income.

Summary of Temporary Differences

Transaction	When recorded in books	When recorded on tax return	Deferred tax effect
Rev or Gain	Earlier	Later	Liability
Rev or Gain	Later	Earlier	Asset
Exp or Loss	Earlier	Later	Asset
Exp or Loss	Later	Earlier	Liability

Permanent Differences: Examples

Items, recognized for financial accounting purposes, but not for income tax purposes:

- interest income received on tax exempt securities
- fines and expenses resulting from violations of law
- Premiums paid for life insurance on key officers/employees

Permanent Differences: Examples

Items, recognized for tax purposes, but not for financial accounting purposes:

- the dividends received deduction under the Code
- percentage depletion of natural resources in excess of their cost

Summary of Permanent Differences

Sources of Permanent Differences

Some items → are recorded in Books | but NEVER on tax return

Other items → are NEVER recorded in books | but recorded on tax return

No deferred tax effects for permanent differences

Deferred Tax Asset & Deferred Tax Liability: Sources

Deferred taxes may be a:

- Deferred tax liability, or
- Deferred tax asset

Deferred tax liability arises due to net taxable amounts in the future.

Deferred tax asset arises due to net deductible amounts in the future.

Recording a Valuation Allowance for Doubtful Deferred Tax Assets

If the deferred tax asset appears doubtful, a Valuation Allowance account is needed.

Journal entry:

Income Tax Expense	$$	
Allowance to Reduce Deferred Tax Asset to Expected Realizable Value		$$

The entry records a potential future tax benefit that is *not* expected to be realized in the future.

Deferred Taxes: Applying Tax Rates

- Basic Rule: Apply the yearly tax rate to calculate deferred tax effects.
- If future tax rates change: use the enacted tax rate expected to apply in the future year.
- If new rates are not yet enacted into law for future years, the current rate should be used.
- The appropriate enacted rate for a year is the average tax rate [based on graduated tax brackets].

Revision of Future Tax Rates

- When a change in tax rate is enacted, its effect should be recorded immediately.
- The effect is reported as an adjustment to tax expense in the period of change.
- Changes in tax rates are treated just like any other change in estimate, prospectively.

Revision of Future Tax Rates: Example

End of 2002, corporate tax rate is changed from 40% to 35%.

The new rate is effective January 1, 2004.

The deferred tax account (1/1/2002) is as follows:

Excess tax depreciation: $3 million

Deferred tax liability: $1.2 million

Related taxable amounts are expected to occur equally over 2003, 2004, and 2005.

Provide the journal entry to reflect the change.

Revision of Future Tax Rates: Example

The deferred tax liability end of 2005 is as follows:

	2003	**2004**	**2005**
Future tax inc	$1,000,000	1,000,000	1,000,000
Tax rate	**40%**	35%	35%
Deferred tax liability	$400,000	350,000	350,000

Entry:

Deferred Tax Liability $100,000
Income Tax Expense $100,000*

*$1,200,000 – $1,100,000

Balance Sheet Presentation

Balance Sheet Presentation:

- The deferred tax classification relates to its underlying asset or liability.
- Classify the deferred tax amounts as current or non-current.
- Sum the various deferred tax assets and liabilities classified as current.
- Sum the various deferred tax assets and liabilities classified as non-current.

Balance Sheet Presentation

Balance Sheet Presentation:

- Sum the various deferred tax assets and liabilities classified as current:
  - If net result is an asset, report as current asset
  - If net result is a liability, report as current liability
- Sum the various deferred tax assets and liabilities classified as non-current:
  - If net result is an asset, report as long-term asset
  - If net result is a liability, report as long-term liability

Income Statement Presentation

Income tax expense, is allocated to:

- Continuing operations
- Discontinued operations
- Extraordinary items
- Cumulative effect of an accounting change, and
- Prior period adjustments

Disclose other significant components, such as:

- current tax expense,
- deferred tax expense/benefit, etc.

Net Operating Losses [NOLs]: Basic Terminology

Net operating loss is a tax terminology.

A net operating loss occurs when tax deductions for a year exceed taxable revenues.

Net loss or operating loss is a financial accounting term.

NOL can be derived from net loss, but these two amounts must be kept separately.

NOLs: Rules of Application

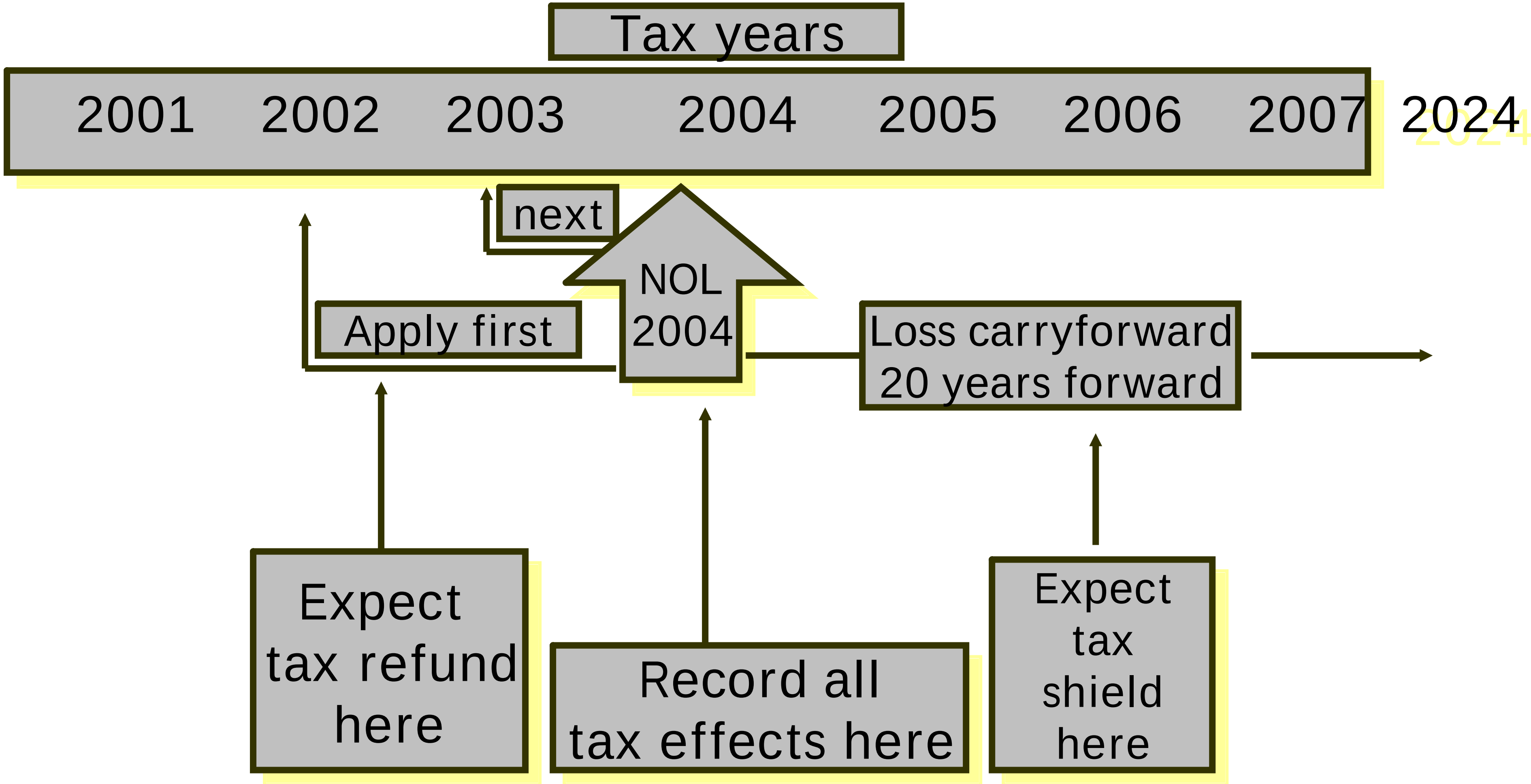
- NOL for each tax year is computed.
- The NOL of one year can be applied to offset taxable income of other years, possibly resulting in tax refunds
- NOLs can be:

  carried back 2 years and carried forward 20 years (carryback option), or carried forward 20 years (carryforward only)

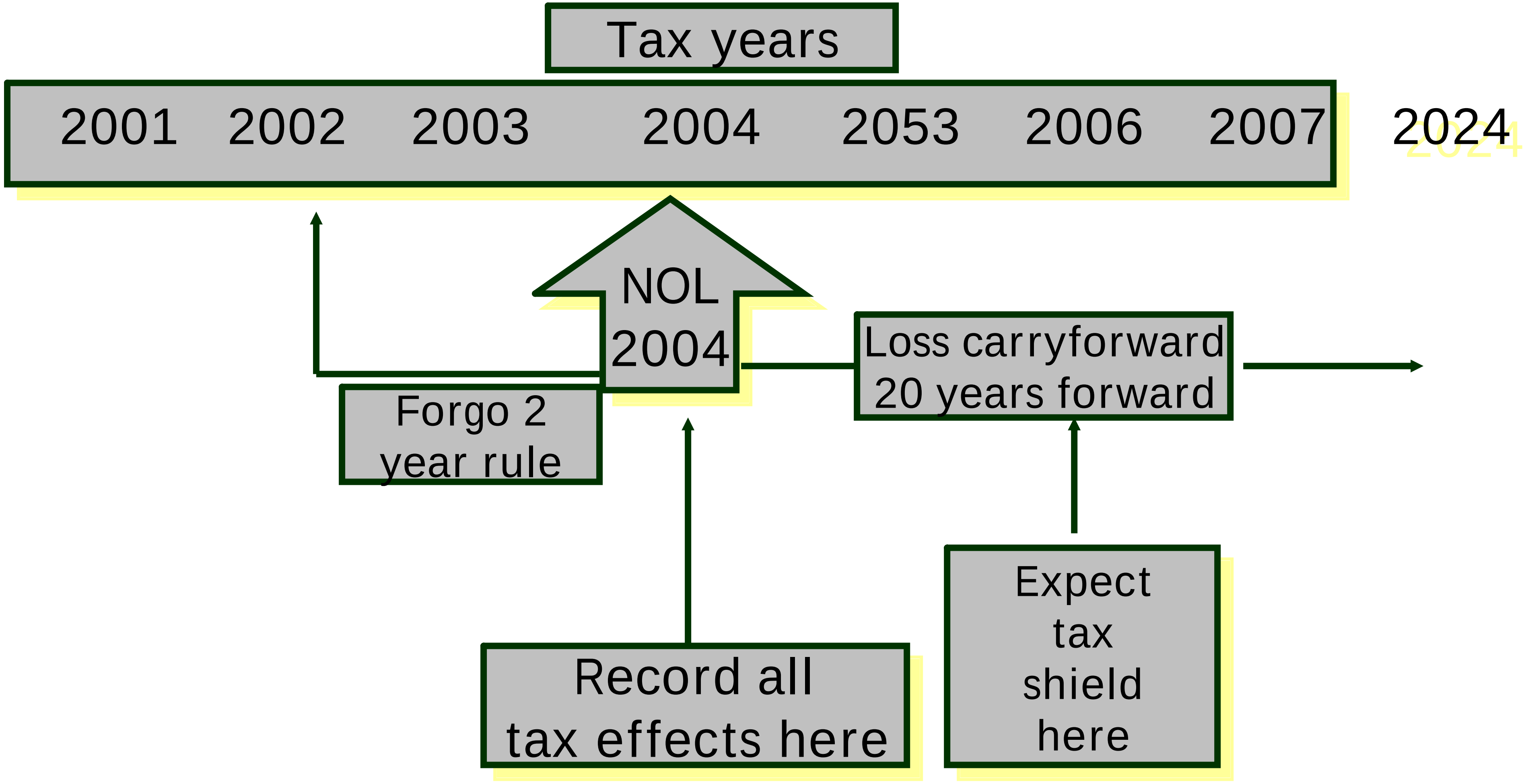
Net Operating Loss: Carryback Rules

- If NOLs are carried back 2 years and carried forward 20 years:
- NOL is applied to the earlier of the 2-year period, then to the immediately preceding year, etc.
- Remaining NOLs are applied to the following 20-year period.
- Any tax refunds are reported in the year of the original net operating loss.

NOL Carryback Rules



NOL Carryforward Rules



Basic Principles of Asset-Liability Method

- A current tax liability or asset is recognized for the estimated taxes payable or refundable on the tax return for current year.
- A deferred tax liability or asset is recognized for the estimated future tax effects attributable to temporary differences and carryforwards.
- The measurement of current and deferred tax liabilities and assets is based on provisions of enacted tax law, effects of future changes in tax law or rates are not anticipated.
- The measurement of deferred tax assets is reduced, if necessary, by the amount of any tax benefits that are not expected to be realized.

Intermediate Accounting, 11th ed.
Kieso, Weygandt, and Warfield

Chapter 20: Accounting for Pensions and Postretirement Benefits

Prepared by
Jep Robertson and Renae Clark
New Mexico State University

Chapter 20: Accounting for Pensions and Postretirement Benefits

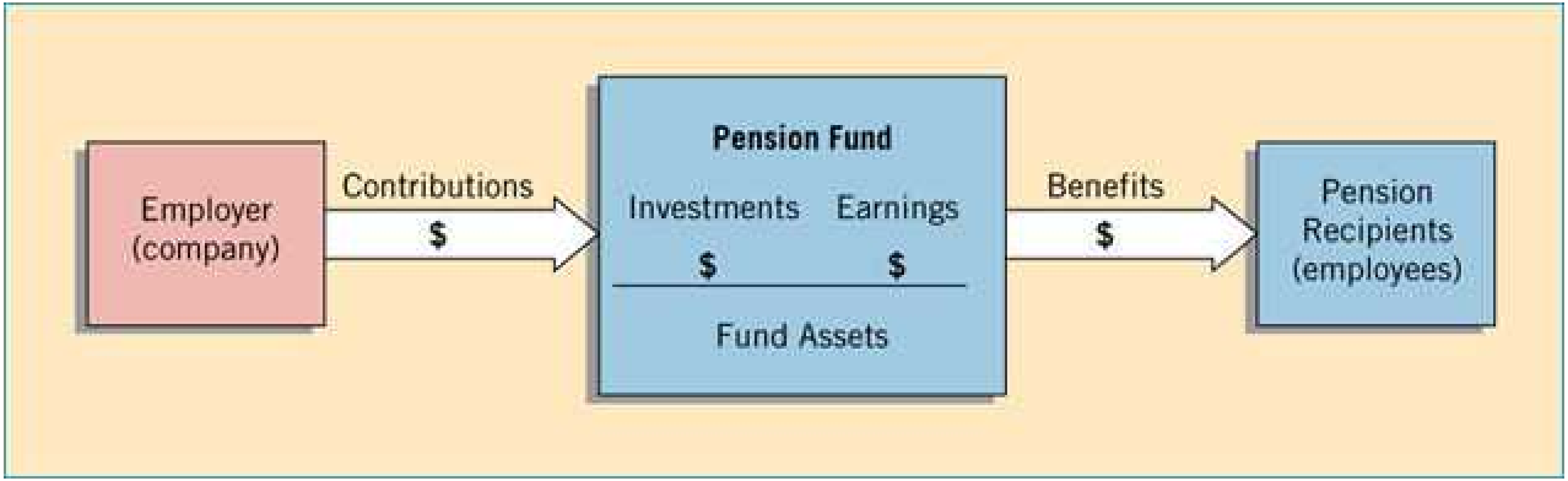
After studying this chapter, you should be able to:

1. Distinguish between accounting for employer’s pension plan and accounting for the pension fund.
2. Identify types of pension plans and their characteristics.
3. Explain alternative measures for valuing the pension obligation.
4. Identify the components of pension expense.

Chapter 20: Accounting for Pensions and Postretirement Benefits

5. Utilize a work sheet for employer's pension plan entries.
6. Describe the amortization of unrecognized prior service costs.
7. Explain the accounting procedure for recognizing unexpected gains and losses.
8. Explain the corridor approach to amortizing unrecognized gains and losses.
9. Explain the recognition of a minimum liability.
10. Describe the reporting requirements for pension plans in financial statements.

Flow of Cash among Pension Plan Participants



Types of Pension Plans

- Accounting Standard: “SFAS 87: Accounting for Pension Plans” [1985]
- A pension plan provides benefits to retirees for services provided during employment.
- There are defined contribution and defined benefit plans.

Defined Contribution Plans

- Employer contributes a defined sum to a (third party) plan trust.
- Plan accumulates assets and makes distributions to retirees.
- Employer's pension expense is equal to annual contribution needed (employees are beneficiaries).
- If contribution made is less than pension expense, employer accrues a liability.
- If contribution > expense, employer accrues an asset.

Defined Benefit Plans

- The employee is promised a certain amount of benefits at retirement (usually periodic).
- The trust accumulates assets.
- The employer remains liable to ensure benefit payments.
- Employer is the trust-beneficiary.

Defined Benefit Plans

- Employer can recapture excess plan assets from the pension plan, if employer settles the pension obligation of the employees (this is called a benefit settlement).
- The accounting guidelines for plan termination are contained in *SFAS 88* (the companion standard).
- The plan is an accounting entity separate from the employer.

Pensions: Terminology

- A plan is said to be funded, when employer makes contributions to trust.
- In contributory plans, employees bear part of the cost or contribute voluntarily.
- In non-contributory plans, employer bears the entire cost.
- In qualified plans, employer can deduct its contributions and get a tax free status of earnings from fund assets.

Benefit and Contribution Plans: A Comparison

Contribution Plans	Benefit Plans
• Employer contributions are defined	• Retiree benefits are a fixed amount
• Retiree benefits depend on fund performance	• Employer contributions to the plan depend on promised benefits to retirees
• Retirees bear the investment risk	• Employers bear the investment risk

Actuaries and Pension Accounting

Pension calculations involve actuarial assumptions.

These are estimates.

Assumptions involve: mortality rates, employee turnover, future salaries, and rates of return.

Alternative Definitions of Employee-Obligation

Determining employer's pension obligations to employees

Benefits payable to Vested and Non-vested employees: current pay

Benefits payable to Vested employees at current pay

Vested Benefit Obligation: current salary

ABO

Accumulated Benefit Obligation: current salary

PBO

Projected Benefit Obligation: Benefits to Vested and Non-vested employees at retirement salary

Measurement of Pension Cost: Components

- Service cost
- Interest cost
- Actual return on plan assets
- Amortization of unrecognized prior service cost
- Gains and losses

Pension Cost: Service and Interest Cost Components

- Service cost is the expense caused by the increase in PBO payable to employees because of services rendered during the current year.
- Interest cost:
- The promised employee benefits are a liability of the company.
- The company pays interest on the beginning balance of the PBO.
- The settlement rate determines the interest expense.

Settlement Rate and Discount Rate

- Note that the SFAS 87 refers to a discount rate and a settlement rate.
- The settlement rate determines the amount of employee benefits payable, if all employee obligations were hypothetically settled today.
- The discount rate is used to discount pension benefits (payable in future) to present value amounts.

Actual Return on Plan Assets

Actual Return on Plan Assets

=

Plan assets end of the plan year

less: Plan assets at the beginning of the plan year

less: Employer contributions to the plan during the year

add: Employee benefits paid out of plan assets during the year

Note on Actual Return on Plan Assets and Expected Return

- Pension expense is reduced by estimated return on assets (computed by the actuary.)
- The estimated return is computed as:

  the expected rate of return on assets

  X

  the market-related value of assets
- Any differences between actual and estimated returns are periodically amortized to pension expense

Why We Adjust Pension Expense for Estimated Return on Plan Assets

Using the actual return on assets will expose funding pattern to swings in market fluctuations.

Actuaries use an estimated return based on an expected rate of return and an average value of plan assets.

The average value is a calculated value based on a moving average [five years or less].

Why We Adjust for Estimated Return on Plan Assets

Any differences between actual and estimated returns are recorded in an Unexpected Gains and Losses account and amortized to pension expense.

This procedure insulates pension calculations from sudden market value changes.

Amortizing Unrecognized Gains and Losses

- Unrecognized gains and losses are deviations of actual amounts from estimated amounts.
- Amortize the Unrecognized gains & losses only if they exceed 10% of:

  the greater of the PBO or market-related value (both as of the beginning of the year).
- Amortize over the remaining service life of active employees.

Unrecognized Prior Service Cost (UPSC): Defined

- Employees may be granted additional pension benefits for services performed in prior periods.
- Benefits may be granted:
  - upon initial plan adoption, or
  - through a plan amendment.
- Interest cost is based on PBO + UPSC

Unrecognized Prior Service Cost (UPSC): Accounting

- The UPSC is allocated to pension expense based on the remaining service-years of the concerned employees.
- Unamortized Unrecognized Prior Service Cost is shown on books of pension plan: NOT on company's books.
- The employer records only the periodic amortization of Prior Service Cost.

Gains and Losses

There are two types of gains and losses:

1. Unrecognized gains and losses
2. Unrecognized Net Transition Asset or Obligation at adoption of SFAS 87

Net Transition Asset or Obligation indicates the funded status of the plan at adoption of SFAS 87

Actuarial G&L and Transition Asset or Obligation

- In both cases, total amounts are shown only on the books of the pension plan
- Employer records only the annual amortization
- For Unrecognized gains and losses, there is a 10% test (called the 10% corridor test)
- For transition gains and losses, use 15-year straight-line amortization

Prepaid and/or Accrued Pension Cost in Employer's Books

- Prepaid or Accrued cost is the difference between:

total periodic pension cost recognized and pension cost actually funded

- If pension cost is less than funded amount, it is prepaid cost
- If pension cost is more than the funded amount, it is accrued cost

Minimum Liability, UPSC, Deferred Pension Cost and Excess Additional Liability

- Non-funded ABO (minimum liability) to be recognized = ABO less fair value of plan assets
- If there is unrecognized prior service cost and the minimum liability exceeds the prior service cost, then:
- record a deferred pension cost up to the amount of the unrecognized prior service cost
- record an excess over UPSC for the excess of the minimum liability over the PSC

Pension Disclosures

1. Components of net period pension expense.
2. Schedule showing changes in the benefit obligation and plan assets.
3. Reconciliation of the funded status with amounts in balance sheet.
4. Weighted-average assumed discount rate, projected compensation rate, expected rate of return.

Intermediate Accounting, 11th ed.
Kieso, Weygandt, and Warfield

Chapter 21: Accounting for Leases

Prepared by
Jep Robertson and Renae Clark
New Mexico State University

Chapter 21: Accounting for Leases

After studying this chapter, you should be able to:

1. Explain the nature, economic substance, and advantages of lease transactions.
2. Describe the accounting criteria and procedures for capitalizing leases by the lessee.
3. Contrast the operating and capitalization methods of recording leases.
4. Identify the classifications of leases for the lessor.

Chapter 21: Accounting for Leases

5. Describe the lessor's accounting for direct-financing leases.
6. Identify special features of lease arrangements that cause unique accounting problems.
7. Describe the effect of residual values, guaranteed and unguaranteed, on lease accounting.
8. Describe the lessor's accounting for sales-type leases.
9. Describe the disclosure requirements for leases.

Leasing: Basics

- The lease is a contractual agreement between the lessor and the lessee.
- The lease gives the lessee the right to use specific property.
- The lease specifies the duration of the lease and rental payments.
- The obligations for taxes, insurance, and maintenance may be assumed by the lessor or the lessee.

Advantages of Leasing

1. Leases may not require any money down.
2. Lease payments are often fixed.
3. Leases reduce the risk of obsolescence to the lessee.
4. Leases may contain less restrictive covenants than other types of lending arrangements.
5. Leases may be a less costly means of financing.
6. Certain leases may not add to existing debt on the balance sheet.

Conceptual Nature of a Lease

According to the FASB:

- a lease transferring substantially all of the benefits and risks of ownership should be capitalized.

  Transfer of ownership can be assumed only if there is a high degree of performance to the transfer, that is, the lease is non-cancelable.

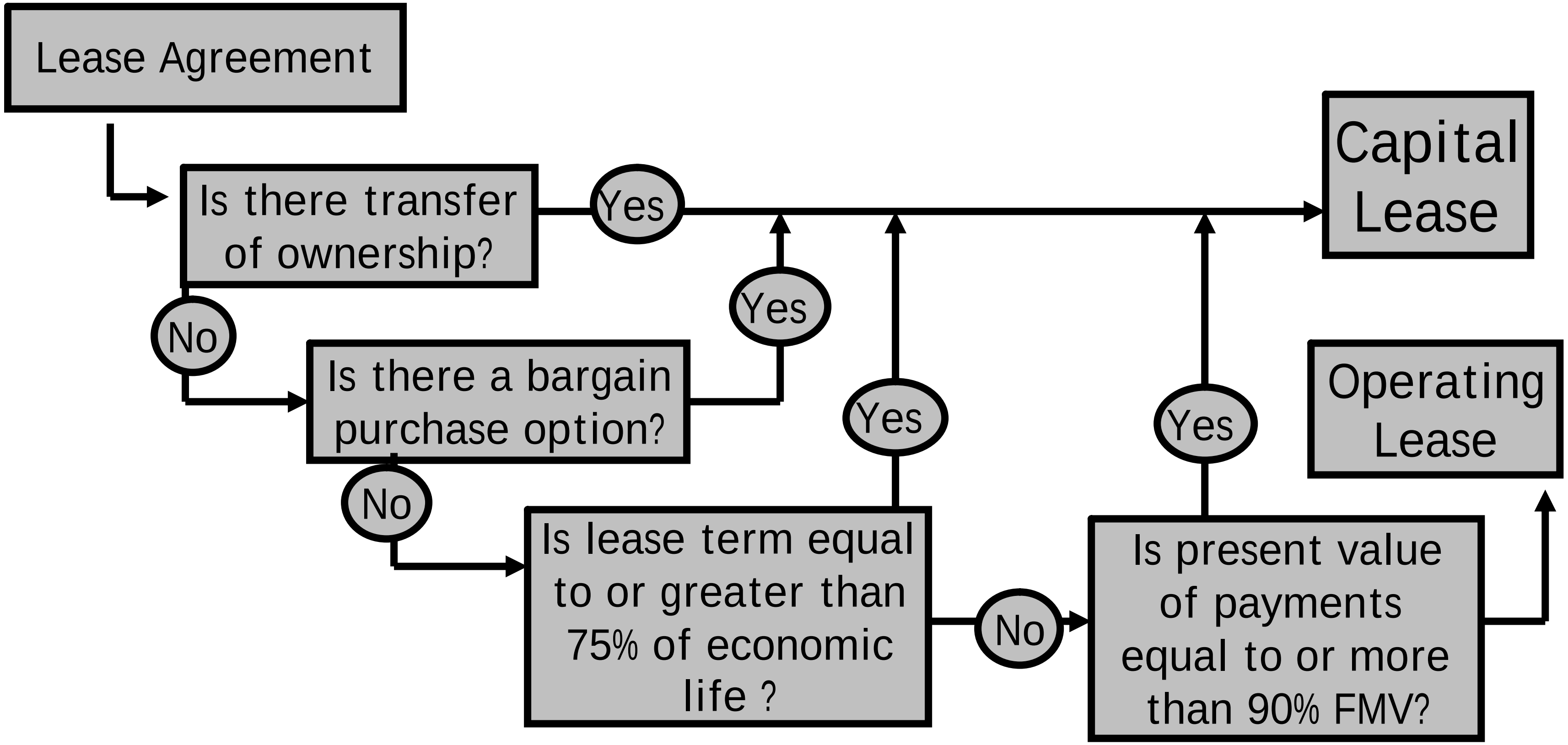
  Leases that do not substantially transfers benefits and risks are operating leases.

Accounting by Lessee

Leases that meet *any* of the following four criteria are capital leases for the lessee:

1. Leases, transferring ownership
2. Leases with bargain purchase options
3. Leases with lease terms equal to 75% or more of the economic life (75% rule)
4. Leases where the present value of lease payments is equal to 90% or more of the fair market value (90% rule)

Accounting by Lessee



The Bargain Purchase Option

A bargain purchase option

- allows the lessee to buy the leased asset
- at a price significantly lower than the asset's fair value when the option is exercisable

The difference between the option price, and the fair value (when the option is exercisable) as determined at the inception of the lease must render the option reasonably assured.

The Recovery of Investment Test (90% Test)

In determining the present value of the lease payments, three important factors are considered:

1) Minimum lease payments the lessee is expected to make under the lease,
2) Executory costs (insurance, taxes, and maintenance), and
3) Discount rate (used by the lessee to determine the present value of minimum lease payments)

Minimum Lease Payments

The minimum lease payments include:

1) minimum rental payments (which may or may not be equal to the minimum lease payments)
2) guaranteed residual value at the end of the lease term (guaranteed the lessor by the lessee or a third party)
3) any penalty required of the lessee for failure to extend or renew the lease
4) any bargain purchase option given to lessee

Discount Rate

1. The lessee computes the present value of the lease payments using the lessee's incremental borrowing rate.
2. If the lessee knows the lessor's implicit interest rate and it is less than the lessee's incremental rate, then such implicit rate must be used.
3. The lessor's implicit rate produces the following result:

present value of (minimum lease payments and unguaranteed residual value) = fair value of the asset to lessor

Accounting for Asset and Liability by Lessee

- In a capital lease transaction, the lessee records an asset and a liability.
- The asset is depreciated by the lessee over the economic life of the asset.
- The effective interest method is used to allocate the rental payments between principal and interest.
- Depreciation of the asset and discharge of the lease obligation are independent accounting procedures.

Classification of Leases: Lessor

Lessor classifies leases as one of the following:

1. Operating lease
2. Direct financing lease
3. Sales-type lease

Accounting by Lessor: Classification of Leases

To be classified as an operating lease:

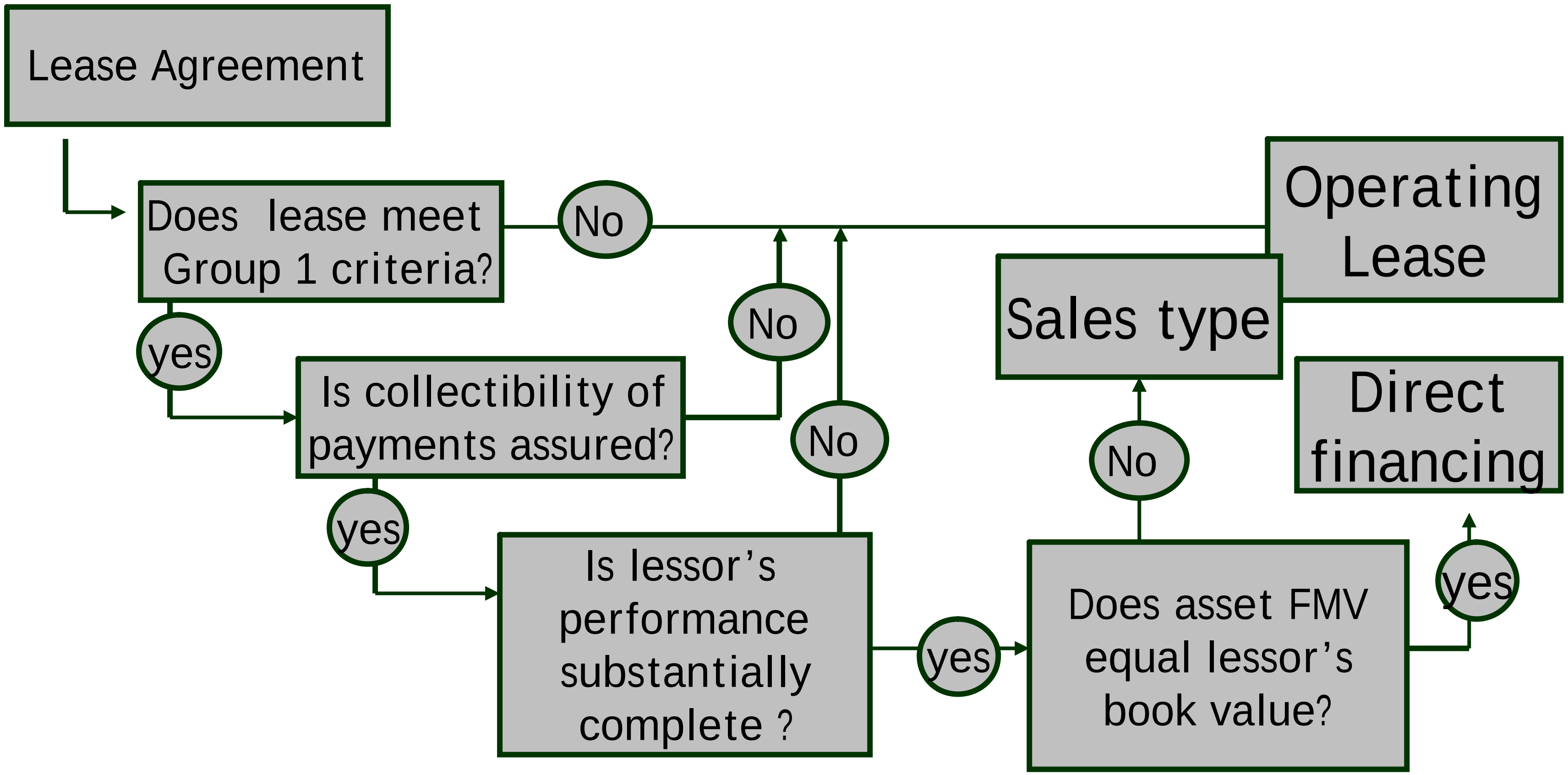
1. The lease doesn’t meet any group 1 criteria (same as lessee’s), **OR**
2. Collectibility of payments isn’t reasonably assured, **OR**
3. Lessor’s performance isn’t substantially complete.

Accounting by Lessor: Classification of Leases

To be classified as a direct financing lease the lease must meet group 1 criteria (same as lessee's), *and* the following, group 2 criteria:

1. Collectibility of payments must be reasonably assured, *and*
2. Lessor's performance must be substantially complete, *and*
3. Asset's fair value must be equal to lessor's book value

Lessor's Criteria for Lease Classification



Operating Lease: Lessor

- The lessor depreciates the leased asset according to its depreciation policy.
- Maintenance costs of the leased asset (payable by lessor) are charged to expense.
- Costs, such as finder's fees and credit checks, are amortized over the lease term.
- The leased equipment and accumulated depreciation are shown as Equipment Leased to Others.

Direct Financing: Lessor

The following information is needed by lessor to record a direct financing lease:

Gross investment (lease payments receivable), consisting of:

the minimum lease payments and any unguaranteed residual value at the end of lease term

Unearned interest revenue (difference between gross investment and the FMV of the property)

Net investment (gross investment less unearned interest revenue)

Direct-Financing Lease

Special Accounting Problems

- Residual values
- Sales-type leases (lessor)
- Bargain purchase options
- Initial direct costs
- Current versus noncurrent
- Disclosure

Residual Values

- Residual value is the estimated fair value of asset at the end of lease term
- May either be guaranteed or unguaranteed
- From lessor's perspective once the lease rate is determined, it makes no difference whether the residual value is guaranteed or unguaranteed.
- From lessee's perspective:
  - Guaranteed residual affects minimum lease payment calculation
  - Unguaranteed residual does not

Sales-Type Lease

Initial Direct Costs

Two types:

- Incremental directs costs paid to third parties at origination of lease
- Internal direct costs paid by lessor at origination of lease.

Disclosure Requirements: Lessee

For the lessee, the requirements for capital leases are:

- gross amount of assets
- future minimum lease payments
- total non-cancelable minimum sublease rentals
- total contingent rentals
- identify assets separately
- general description of lessee’s arrangements

Disclosure Requirements: Lessor

For the lessor, the requirements for sales-type and direct-financing leases are:

- components of net investment
- future minimum lease payments
- amount of unearned revenue included in revenue
- total contingent rentals
- general description of lessor’s leasing arrangements

Disclosure Requirements: Lessor

For the lessor, the requirements for operating leases:

- cost and carrying amount
- minimum future rentals
- total contingent rentals
- general description of lessor’s leasing arrangements

Intermediate Accounting, 11th ed.
Kieso, Weygandt, and Warfield

Chapter 22: Accounting Changes and Error Analysis

Prepared by
Jep Robertson and Renae Clark
New Mexico State University

Chapter 22: Accounting Changes and Error Analysis

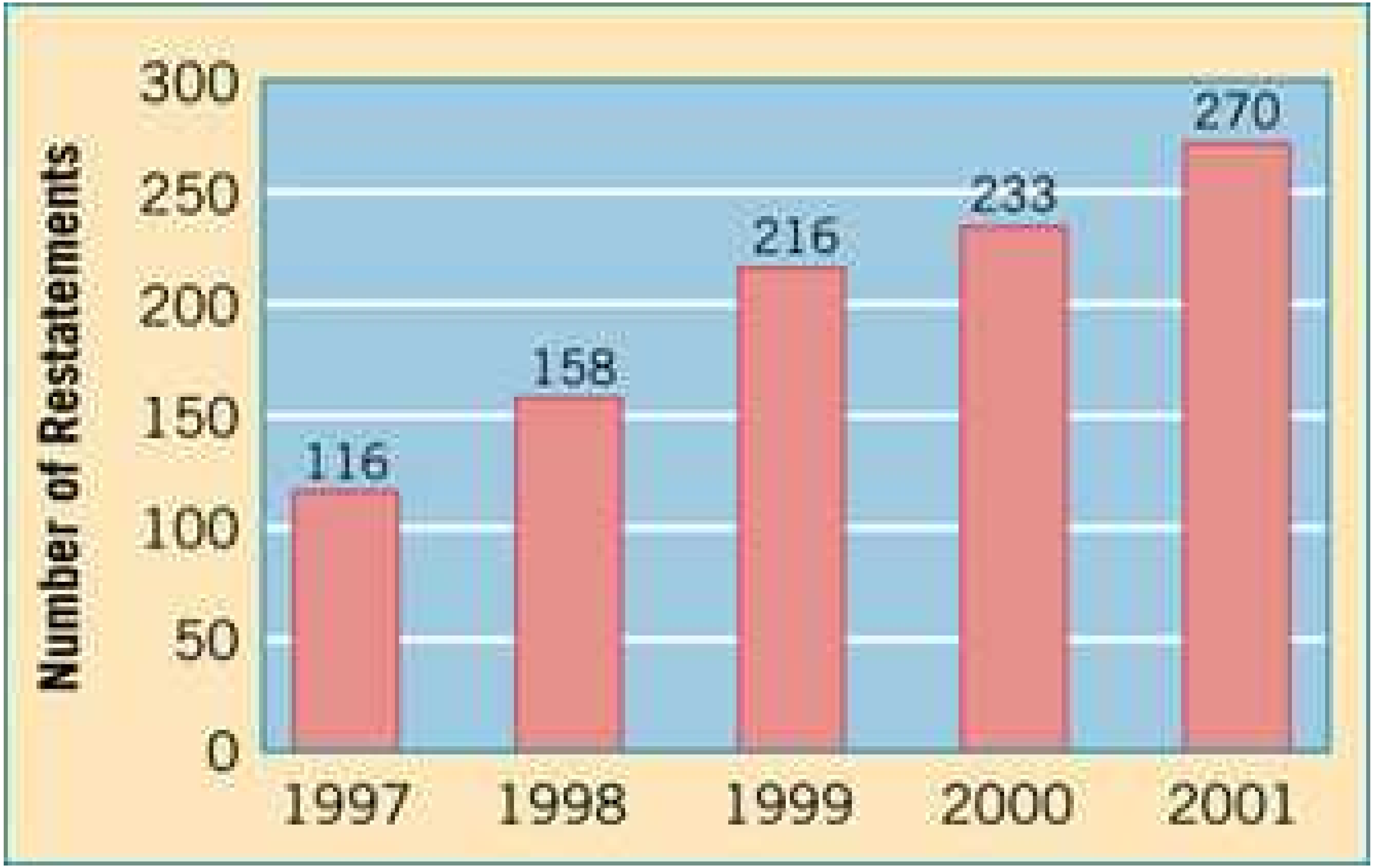
After studying this chapter, you should be able to:

1. Identify the types of accounting changes.
2. Describe the accounting for changes in accounting principles.
3. Understand how to account for cumulative-effect accounting changes.
4. Understand how to account for retroactive accounting changes.
5. Understand how to account for changes to LIFO.

Chapter 22: Accounting Changes and Error Analysis

6. Describe the accounting for changes in estimates.
7. Identify changes in a reporting entity.
8. Describe the accounting for correction of errors.
9. Identify economic motives for changing accounting methods.
10. Analyze the effect of errors.

Restatements Everywhere



Types of Accounting Changes

APB Opinion No 20 limits the flexibility in accounting treatments for similar situations.

The types of accounting changes are:

1. Changes in Accounting Principle
2. Changes in Accounting Estimates
3. Changes in Reporting Entity
4. Errors in Financial Statements

Changes in Accounting Principle

- A change in principle involves a change from one generally accepted principle to another.
- A change in principle does not result from the adoption of a new accounting principle.
- A change to a generally accepted principle (from an incorrect principle) is a correction of an error.

Changes in Accounting Principle

Changes in accounting principle are classified into:

1. Cumulative-effect type of accounting change
2. Retroactive-effect type of accounting change
3. Change to the LIFO method of inventory

Cumulative-Effect Type of Accounting Change

- The catch up method should be used to account for these changes.
- Financial statements for prior periods are not restated.
- For all prior periods, the following items are shown on an as-if basis (as if the new principle had been applied):
  - income before extraordinary items
  - net income

Cumulative-Effect Type of Accounting Change

- The adjusting entry is effective as of the beginning of the year.
- Pro forma information is shown only as supplementary information.
- Such information may be reported:
  - in the income statement, or
  - in a separate schedule, or
  - in the notes to the financial statements

Cumulative Effect: Example

- XYZ company changes from the sum-of-the-years' digits method to the straight-line method of depreciation on Jan. 1, 2004.
- The depreciation amounts are:

Year	SYD	ST.LINE
2002	$15,000	$8,000
2003	$14,000	$8,000

- The company's tax rate is 40%.

Record the change as of the beginning of 2004.

Cumulative Effect: Example

Year	SYD	SL	Diff	Tax Effect
2002	$15,000	$8,000	$7,000	$2,800
2003	$14,000	$8,000	$6,000	$2,400
			--------	--------
			$13,000	$5,200
			--------	--------

- Tax liability increases by $5,200
- Tax effect is the difference times the tax rate

Cumulative Effect: Example

Journal Entry:

- Accumulated Depreciation $13,000
  - Deferred Tax Asset $5,200
  - Cumulative Effect of Change in Principle $7,800

The debit to accumulated depreciation restores the account balance on a straight- line basis.

The credit to Cumulative Effect is the income effect (net of tax effect).

Retroactive-Effect Type of Accounting Change

- The cumulative effect of the new method at the beginning of the period is determined.
- Prior period statements are recast based on the new principle.
- Any cumulative effect of prior periods is adjusted to the beginning retained earnings balance.

Retroactive-Effect Type of Accounting Change

The five situations requiring restatement of all prior period statements are:

- A change from the LIFO inventory method to another method
- A change in the method of accounting for long-term construction type contracts
- A change from or to the full-cost method in extractive industries
- Issue of financials to obtain first time financing
- A pronouncement recommending retroactive adjustment

Income Statement Presentation

Retained Earnings account is shown as follows:

Balance at beginning of year : $ XXX

Adjustment for the cumulative
effect on prior years: $ XX

Balance at beginning (as adjusted): $ XX

Net Income : $ XXX

Balance at end of year: $ XXX

Reporting a Change in Estimate

- Changes in estimates are accounted for on a prospective basis
- Estimates that are later determined to be incorrect should be corrected as changes in estimates
- Examples of changes in estimates involve:
  - Service life of depreciable assets
  - Salvage values of assets
  - Estimates of bad debts

Reporting a Change in Entity

- An accounting change may result in a different reporting entity.
- Financial statements are then restated for all prior periods presented.
- **Examples of a change in reporting entity are**:
  - consolidated statements in lieu of individual financials
  - changes in subsidiaries in a consolidated group
  - a change in method for accounting for subsidiaries and investments

Reporting the Correction of an Error

Corrections are treated as prior period adjustments to retained earnings for the earliest period being reported.

Examples of accounting errors are:

- A change from an accounting principle that is not generally accepted to one that is accepted
- Mathematical errors
- Changes in estimates that were not prepared in good faith
- A failure to properly accrue or defer expenses or revenues
- A misapplication or omission of relevant facts

When is a Change in Accounting Principle Appropriate?

- Changes are appropriate when the new principle is preferable to the existing accounting principle.
- The new principle should result in improved financial reporting.
- A change is considered preferable if a FASB standard:
  - creates a new accounting principle, or
  - expresses preference for a new principle, or
  - rejects a specific accounting principle

Motivations for Change

Managers and others may have a self- interest in adopting principles or standards:

Companies may want to be less politically visible to avoid regulation;

A company’s capital structure may affect its selection of accounting standards;

Managers may select accounting standards to maximize their performance-related bonuses;

Companies have an incentive to manage or smooth earnings

Error Analysis in General

- Firms do not correct errors that are insignificant.
- Three questions must be answered in this regard:

  What type of error is involved?

  What correcting entries are needed?

  How are financial statements to be restated?
- Error corrections are reported as prior period adjustments to the beginning retained earnings balance in the current year.

Types of Errors

Errors can occur in the following financial statements:

- Balance sheet
- Income statement
- Balance sheet and the income statement
- Errors can be:

Counterbalancing (or self-correcting over two accounting periods)

Non-counterbalancing (more than two periods needed)

Counterbalancing Errors

Questions to be considered are:

- Are the books closed?
- Are comparative statements presented?

An entry is needed to adjust the beginning retained earnings balance if:

- the books are closed, and the error is not counterbalanced, or
- the books are not closed, and the company is in the second year, and the error is already counterbalanced.

Changing From and to the Equity Method

- A change to or from the equity method requires restatement of all prior period statements.
- A change from the equity method to the fair value method must be made when:

  the investor's level of influence falls below the required percentage of ownership
- A change from the fair value method to the equity method must be made when:

  the investor's level of influence rises above the required percentage of ownership

Changing from the Equity Method

- The cost basis for accounting purposes is the carrying amount of the investment at the date of the change.
  - The earnings and losses (previously recognized) remain part of the carrying value
  - Any amortization previously needed under the equity method ceases
- To the extent that dividends received by investor exceed investor's share of investee's earnings in subsequent periods:
  - Such excesses are reductions of the investment carrying amount

Changing to the Equity Method

The following amounts are retroactively adjusted (as if the investor had held the investment during all prior periods):

- The carrying value of the investment
- The results of current and prior period operations
- The retained earnings of the investor
- Any balances in unrealized holding gains and losses are eliminated.
- The available-for-sale classification is also removed.

Intermediate Accounting, 11th ed.
Kieso, Weygandt, and Warfield

Chapter 23: Statement of Cash Flows

Prepared by
Jep Robertson and Renae Clark
New Mexico State University

Chapter 23: Statement of Cash Flows

After studying this chapter, you should be able to:

1. Describe the purpose of the statement of cash flows.
2. Identify the major classifications of cash flows.
3. Differentiate between net income and net cash flows from operating activities.
4. Contrast the direct and the indirect methods of calculating net cash flow from operating activities.

Chapter 23: Statement of Cash Flows

5. Determine net cash flows from investing and financing activities.
6. Prepare a statement of cash flows.
7. Identify sources of information for a statement of cash flows.
8. Identify special problems in preparing a statement of cash flows.
9. Explain the use of a work sheet in preparing a statement of cash flows.

Usefulness of the Statement of Cash Flows

The information may help users assess the following aspects:

- The entity's ability to generate future cash flows
- The entity's ability to pay dividends and meet obligations
- The reasons as to why net income and net cash flow from operating activities differ
- Cash and non-cash investing and financing activities during the year

The Cash Flow Statement

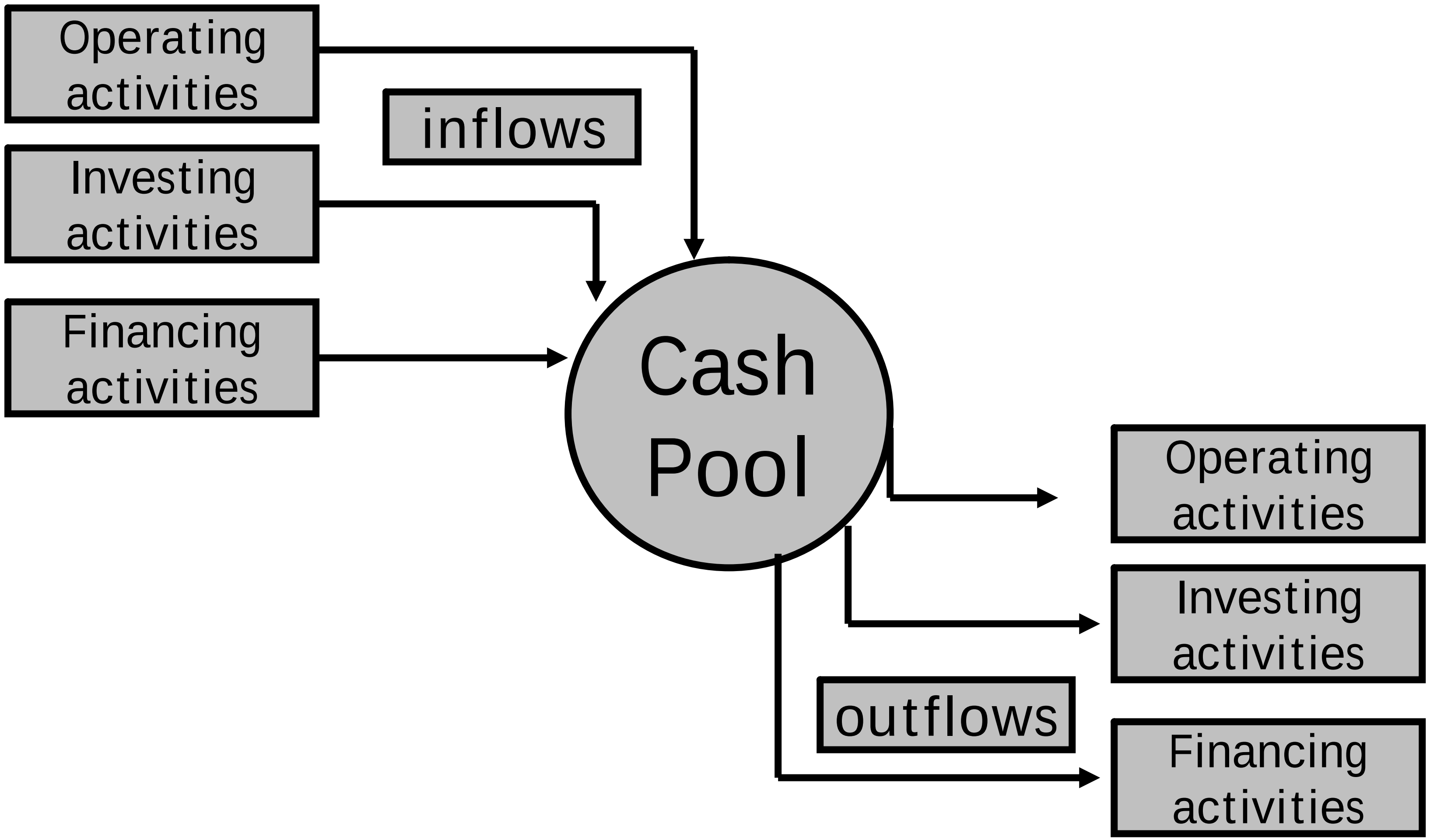
The cash flow statement provides information about:

- the cash receipts (cash inflows), and
- uses of cash (cash outflows) during the period

Inflows and outflows are reported for:

- operating activities,
- investing activities, and
- financing activities during the period

Statement of Cash Flows: Concept



Preparing a Statement of Cash Flows

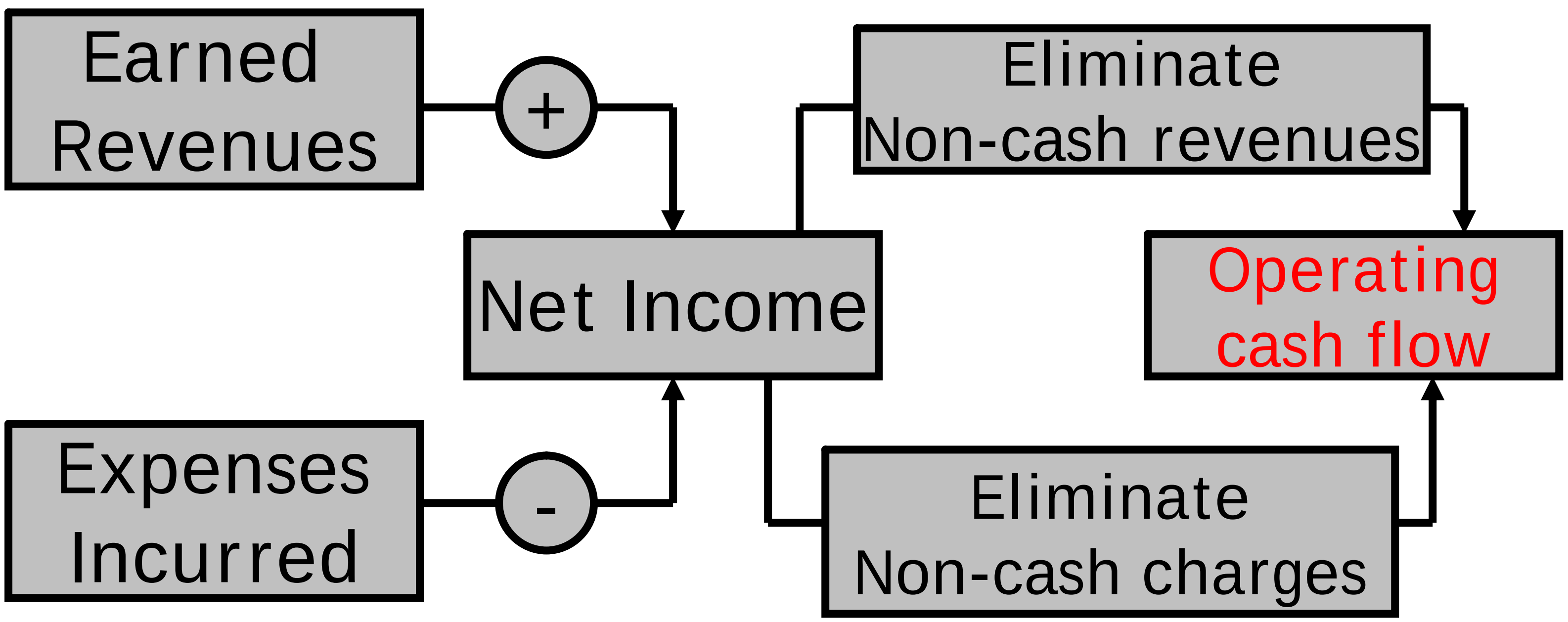
There are two methods of preparing the statement of cash flows:

1. the indirect method and
2. the direct method

The indirect method derives cash flows from accrual basis statements.

The direct method determines cash flows directly for each source or use of cash.

Statement of Cash Flows: Indirect Method: Concept



The Statement of Cash Flows: Indirect Method

Accrual Basis Statements	Cash Flow Statement
Income Statement items & Changes in Current Assets and Current Liabilities	Operating activities: Adjust net income for accruals and non-cash charges to get cash flows
Balance Sheet: Changes In Non-Current Assets	Investing activities: Inflows from sale of assets and Outflows from purchases of assets
Balance Sheet: Changes in Non-Current Liabilities and Equity	Financing activities: Inflows and outflows from loan and equity transactions

Direct Method: Operating Activities

Inflows	Outflows
• From sales of goods or services • From returns on loans (interest) and returns on equity securities (dividends)	• To suppliers for inventory • To employees for services • To government for taxes • To lenders for interest • To others for expenses

Investing and Financing Activities

- For the direct and indirect methods the sections reporting investing and financing activities are the same.
- The net inflows or outflows for each section (under the two methods) are identical.
- The operating activities are reported differently.

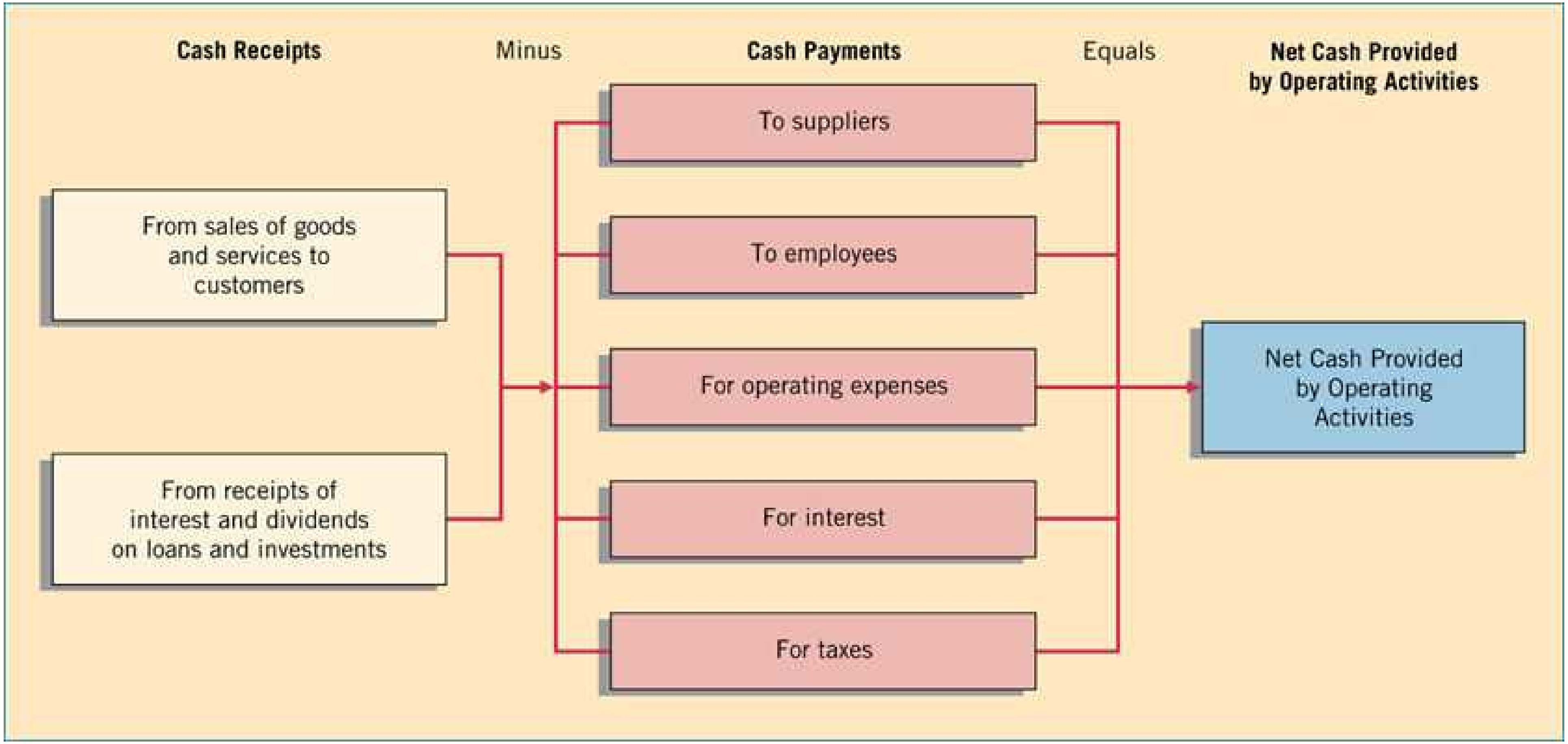
Format of the Statement of Cash Flows: Indirect Method

Cash flows from operating activities:	
Net Income	$ XXX
Adjustments (to arrive at cash flow from operations)	$ XX
(List of individual inflows and outflows)	
Net cash flow from operating activities	$ XXX

Cash flows from investing activities:	
(List of individual inflows and outflows)	$ XX
Net cash flow from investing activities	$ XXX

Cash flows from financing activities:	
(List of individual inflows and outflows)	$ XX
Net cash flow from financing activities	$ XXX

Major Classes of Cash Receipts and Payments



Formula to Compute Cash Receipts from Customers

$$\text{Cash receipts from customers} = \text{Revenues from sales} \left\{ \begin{array}{c} + \text{ Decrease in accounts receivable} \\ \text{or} \\ - \text{ Increase in accounts receivable} \end{array} \right.$$

Formula to Compute Cash Payments for Operating Expenses

Cash payments to suppliers = Cost of goods sold $\begin{cases} + \text{Increase in inventory} \\ \text{or} \\ - \text{Decrease in inventory} \end{cases}$ $\begin{cases} + \text{Decrease in accounts payable} \\ \text{or} \\ - \text{Increase in accounts payable} \end{cases}$

Indirect Method: Special Items

Note the following adjustments to net income in deriving operating cash flow:

- Loss on sale of assets is added to net income
- Gain on sale of assets is deducted from net income
- Discount on bonds payable (as amortized) is added to net income
- Premium on bonds payable (as amortized) is deducted from net income

Format of the Statement of Cash Flows: Direct Method

Cash flows from operating activities:	
Cash receipts (individually): Inflows	$ XXX
Cash payments to suppliers (separately): outflows	($ XXX)
Net cash flow from operating activities	$ XXX

Cash flows from investing activities:	
(List of individual inflows and outflows)	$ XX
Net cash flow from investing activities	$ XXX

Cash flows from financing activities:	
(List of individual inflows and outflows)	$ XX
Net cash flow from financing activities	$ XXX

Direct Method: Concept

Cash Receipts

From sale of goods and services to customers

From receipts of interest and dividends

less

Cash Payments

To suppliers

To employees

For operating exp

For interest

For taxes

equals

Cash flow from operations

Cash Flow Statement: Direct Method

<u>Cash receipts from customers</u>:

= Revenue from credit sales + Decrease in A/Rec balances

- Increase in A/Rec balances

Cash Flow Statement: Direct Method

<u>Cash payments to suppliers:</u>

= Cost of goods sold + Increase in inventory
- Decrease in inventory

+ Decrease in accounts payable
- Increase in accounts payable

Cash Flow Statement: Direct Method

<u>Cash payments for operating and other expenses:</u>

= Operating expenses
+ Increase in prepaid expenses
- Decrease in prepaid expenses

+ Decrease in accrued expenses payable
- Increase in accrued expenses payable

Reporting Significant Non-Cash Transactions

- Transactions not involving cash inflows or cash outflows are non-cash transactions.
- They are not reported in the body of the cash flow statement.
- If material, they are reported as notes to the statement or in a supplementary schedule to the financial statements.
- Example: Issue of bonds (payable) for purchase of land.

Worksheet

- A work sheet may be useful when a number of adjustments are needed.
- Involves three steps:
  1. Enter beginning and ending balance sheet data.
  2. Enter the data that explains the changes in balance sheet accounts (other than cash).
  3. Enter the increase or decrease in cash on cash line and at the bottom of the work sheet. This entry results in the totals of the reconciling items to agree.

Intermediate Accounting, 11th ed.
Kieso, Weygandt, and Warfield

Chapter 24: Full Disclosure in Financial Reporting

Prepared by
Jep Robertson and Renae Clark
New Mexico State University

Chapter 24: Full Disclosure in Financial Reporting

After studying this chapter, you should be able to:

1. Review the full disclosure principle and describe problems of implementation.
2. Explain the use of notes in financial statement preparation.
3. Describe the disclosure requirements for major segments of a business.
4. Describe the accounting problems associated with interim reporting.

Chapter 24: Full Disclosure in Financial Reporting

5. Identify the major disclosures found in the auditor's report.
6. Understand management's responsibilities for financials.
7. Identify issues related to financial forecasts and projections.
8. Describe the profession's response to fraudulent financial reporting.

The Full Disclosure Principle

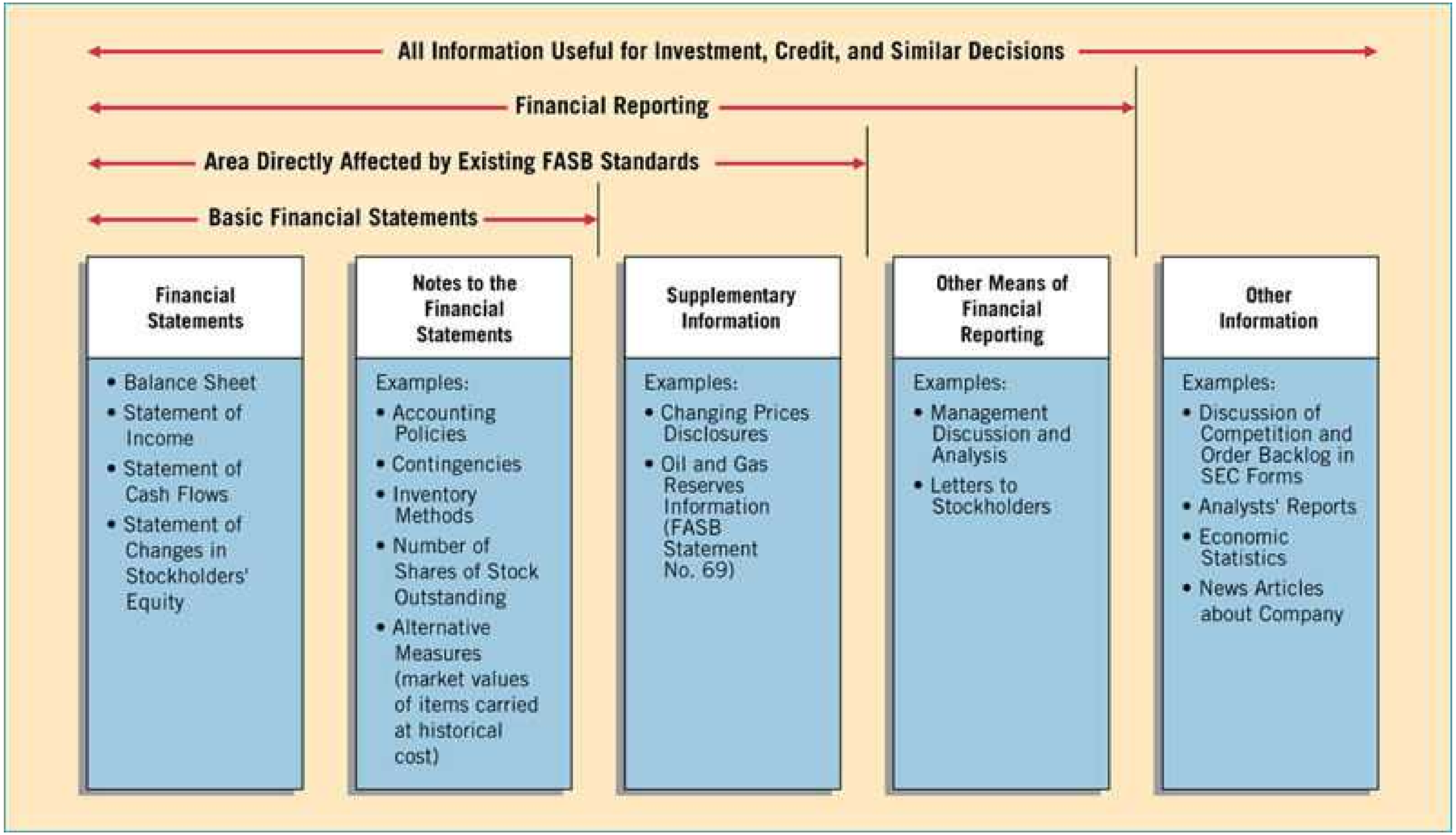
The full disclosure principle calls for financial reporting of significant facts affecting the judgment of an informed reader.

Two problems of implementing this principle are costs of disclosure and information overload.

The profession is still in the process of developing guidelines as to:

- whether a given transaction should be disclosed
- what format this disclosure should take

Types of Financial Information



Increase in Reporting Requirements

Reasons for increasing reporting requirements:

- Complexity of the business environment (derivatives, business combinations, pensions)
- Necessity for timely information (interim data, forecasts)
- Accounting used as a control and monitoring device

Notes to the Financial Statements

1. Notes amplify or explain items presented in the body of the financial statements.
2. A statement that identifies the accounting policies of the entity must be disclosed (Summary of Significant Accounting Policies).
3. Some common notes are:
   - Inventory
   - Deferred taxes
   - PPE
   - Contingencies and commitments
   - Changes in accounting policies

Disclosure of Special Transactions or Special Issues

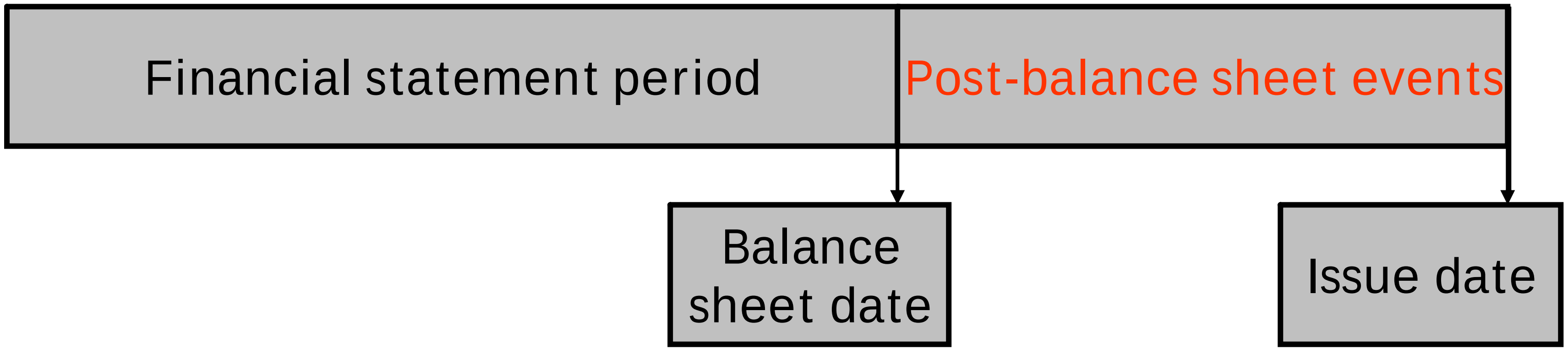
Related party transactions (transactions not carried out at arm's-length)

Required disclosures:

- The nature of the relationship
- A description of the transactions
- The dollar amounts of transactions
- Amounts due from or due to related parties at the balance sheet date

Post-Balance Sheet Events

Notes to the financial statements must explain any significant financial events that occurred after the balance sheet date, but before the issue of the financial statements.



Types of Transactions to be Disclosed

Two types of post-balance sheet events must be disclosed:

1. Events that provide additional evidence about conditions that existed at the balance sheet date that require adjustments.
2. Events that arose subsequent to the balance sheet date, not requiring adjustments.

Reporting by Conglomerates

- Investors need information regarding income statement, balance sheet, and cash flow statement.
- Investors also need information about segments to assess profitability.
- Segmented information may however harm reporting firms (disclosure of data useful to competitors).

Reporting by Conglomerates

Objectives of reporting segmented information are to provide information about different types of business activities and the different economic environments in which the entities operate.

Identifying Operating Segments

An operating segment is a component that:

- engages in business activities,
- is reviewed by the conglomerate's chief operating officer; and
- produces discrete financial information from the internal financial reporting system.

Aggregation of Operating Segments

Operating segments may be aggregated if they have the same basic characteristics in:

- products and services rendered
- production process
- type or class of customer
- methods of product or service distribution
- regulatory environment

Reportable Segments

An operating segment is identified as a reportable segment if it satisfies one or more of the following criteria:

1. revenue criterion
2. profit or loss criterion
3. identifiable assets criterion

Reportable Segments

Criterion	Thresholds
• Segment revenue	• Is more than **ten percent** of the **combined revenue** of all operating segments
• Segment profit or loss	• Is **ten percent** or more of the <u>greater of</u>: the combined profit of all operating segments not showing a loss, or the combined loss of all operating segments reporting a loss
• Identifiable assets	• **Ten percent** or more of the combined assets of all <u>operating</u> segments

Required Segmented Information

- General information about its operating segments
- Segment profit and loss and related information
- Segment assets
- Reconciliation of segment revenues, profits and losses, and segment assets
- Information about products and services and geographical areas
- Major customers

Interim Reporting Requirements

- Two approaches: integral and discrete
- Most companies employ both approaches for
- Reporting requirements:
  - Use of same accounting principles
  - Period costs often charged as incurred
  - Not required to publish Balance Sheet or SCF

Problems of Interim Reporting

- Advertising and similar costs
- Expenses subject to year-end adjustments
- Income taxes
- Extraordinary items
- Changes in accounting principles
- Earnings per share

Auditor’s Reports

Auditor’s reporting standards:

- states whether the financial statements are in conformity with GAAP
- identify circumstances in which GAAP have not been consistently applied
- disclosures in financial statements are deemed adequate unless otherwise stated
- an opinion on the financial statements, if possible

Auditor's Opinion

The auditor can render or provide:

- A qualified opinion
- An unqualified opinion
- Reasons requiring the addition of explanatory paragraphs to the unqualified report
- An adverse opinion (circumstances)
- A disclaimer

Management's Report

- Management's Discussion and Analysis covers three aspects of an enterprise
  1. Liquidity
  2. Capital resources
  3. Results of operations
- Identifies favorable or unfavorable trends
- Identifies any significant events and uncertainties that affect the three aspects

Financial Forecasts and Projections

- The investing public needs and wants more and better information about corporate expectations.
- The disclosures take one of two forms:

1. Financial forecast of an entity's expected financial position
2. Financial projection based on hypothetical assumptions

Internet Financial Reporting

- Corporations can reach more users by the internet
- Internet reporting can make traditional reports more useful:
- Corporations can report more timely information;
- They can also report disaggregated data;
- There is, however, concern about security on the internet (hackers).

Fraudulent Financial Reporting

Defined as "intentional or reckless conduct, whether act or omission, that results in materially misleading financial statements."

Could be gross and deliberate distortions

Could be misapplication of accounting principles or failure to properly disclose material items

Fraudulent Financial Reporting: Causes

- **Impacted by internal and external environments**
- **Opportunities increase in certain situations:**

1. Weak board of directors or audit committee
2. Weak internal controls
3. Unusual or complex transactions
4. Accounting issues requiring significant subjective judgments
5. Ineffective internal audit function

Criteria for Making Accounting and Reporting Choices

- Accounting is greatly influenced by its environment.
- Alternative presentations of certain transactions will continue to exist.
- The *Conceptual Framework* will hopefully eliminate unneeded diversity in reporting practices.
- New oversight environment will impact accounting choices.

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