

Chapter 3: Operating Decisions and the Statement of Income

CHAPTER SUMMARY

This chapter discusses the accounting concepts relevant to income determination. The time period assumption, definitions for the income statement elements (revenues, expenses, gains, and losses), the revenue principle, and the matching principle are included. These accounting principles are defined in accordance with the accrual basis of accounting that requires revenues to be recognized when earned and expenses to be reported when incurred in generating net income for the period.

The operating cycle is discussed as it applies to income measurement. The operating cycle is the span of time it takes a company to acquire and pay for goods or services, sell them to customers, and receive cash from customers. The length of the operating cycle varies by industry and by company. A service company will have a much shorter operating cycle than a merchandising or manufacturing company.

The accounting cycle is the record keeping process used during the accounting period (usually a month, quarter, or year) that results in financial statements.

The transaction model introduced in Chapter 2 is completed by adding revenues, gains, expenses, and losses.

Based on the balances in the T-accounts in the chapter illustrations, an income statement, statement of retained earnings, balance sheet, and statement of cash flows are prepared. Adjusting entries are discussed in Chapter 4.

The asset turnover ratio indicates whether a company uses its assets efficiently.

CHAPTER OBJECTIVES

LO1 Describe a typical business operating cycle and explain the necessity for the time period assumption.

LO2 Explain how business activities affect the elements of the income statement.

LO3 Explain the accrual basis of accounting and apply the revenue and matching principles to measure income.

LO4 Apply transaction analysis to examine and record the effects of operating activities on the financial statements.

LO5 Prepare financial statements.

LO6 Compute and interpret the total asset turnover ratio.

CHAPTER OUTLINE

I. UNDERSTANDING THE BUSINESS

- A.** Executives develop strategies, plans, and measurable indicators of progress toward their goals.
 - 1.** Projecting income statement items is important to the achievement of targeted performance.
 - 2.** Published income statement amounts can be compared with forecasted income statement amounts to determine if the company's goals were met. Financial analysts also develop their own expectations of a company's future performance.
- B.** It is important to ask:
 - 1.** How do business activities affect the income statement?
 - 2.** How are business activities measured?
 - 3.** How are business activities reported on the income statement?

II. LO1 DESCRIBE A TYPICAL BUSINESS OPERATING CYCLE AND EXPLAIN THE NECESSITY FOR THE TIME PERIOD ASSUMPTION.

- A.** The Operating Cycle
 - 1.** The "cash to cash" cycle (earnings process).
 - a.** Long-term objective: turn cash into more cash.
 - b.** Cycle represents the time it takes to
 - 1.** Purchase goods or services
 - 2.** Pay the suppliers for these goods or services
 - 3.** Sell goods and services to customers
 - 4.** Collect cash from customers.
 - c.** Applies to merchandising, manufacturing, and service companies.
 - d.** Length of time depends on the nature of a company's business.
 - e.** Reducing the operating cycle can lead to greater profits and faster expansion.
- B.** The Time Period Assumption
 - 1.** Recognizes that decision makers need periodic information about a company.
 - 2.** The company's life is broken down into artificial periods.
 - 3.** Annual income statements are for the period of a year.
 - 4.** "Interim" reports are prepared more frequently (monthly or quarterly).
 - 5.** Two issues arise in reporting periodic income to users:
 - a.** Recognition issues: When should the effect of operating activities be recognized?
 - b.** Measurement issues: What amounts should be recognized?

III. LO2 EXPLAIN HOW BUSINESS ACTIVITIES AFFECT THE ELEMENTS OF THE INCOME STATEMENT.

- A.** Income Statement reports on the profitability of a company over a given period.
 - 1.** Revenues – Expenses = Net Income (Net Loss)
 - 2.** Subtotals, such as operating income and income before income tax, are presented in a multi-step income statement.
 - 3.** In a single-step income statement, all of the revenues are listed together, and all of the expenses are subtracted to derive net income.
- B.** Elements of the Income Statement
 - 1.** Operating Revenues – Results from the sale of goods or services:
 - a.** Inflows of net assets from normal ongoing operations. (A – L)
 - b.** When revenues are recognized, assets increase or liabilities decrease (or both).
 - c.** Revenue accounts for different companies vary widely.
 - 2.** Operating Expenses – Costs incurred for the normal operations:
 - a.** Outflows of net assets from normal ongoing operations.
 - b.** When expenses are recognized, assets decrease or liabilities increase (or both).
 - c.** Necessary to generate revenue.
 - d.** Examples: costs of supplies used, cost of goods sold, wages expense, rent expense, depreciation expense.

3. Other Revenues (Gains), Other Expenses (Losses)
 - a. Other revenues and gains are inflows of net assets from non-operating activities (activities other than the central operations of a business i.e. peripheral).
 1. When recognized, assets increase or liabilities decrease (or both).
 2. Examples: interest income, gain on sale of plant asset (a non-inventory asset).
 - b. Other expenses and losses are outflows of net assets from non-operating activities (activities other than the central operations of a business i.e. peripheral).
 1. When recognized, assets decrease or liabilities increase (or both).
 2. Examples: interest expense, loss on sale of plant asset (a non-inventory asset).
4. Income Tax Expense
 - a. The last expense listed on the income statement for profit-making corporations.
 - b. Calculated on pretax income (all revenues and gains less all costs, expenses, and losses).
 - c. When recognized, assets increase or liabilities decrease (or both).
5. Earnings per Share
 - a. Required disclosure on corporate income statements.
 - b. Calculation:

$$\text{EPS} = \frac{\text{Net income}}{\text{Weighted average number of shares}}$$
 - c. Used to evaluate operating performance and profitability

IV. LO3 EXPLAIN THE ACCRUAL BASIS OF ACCOUNTING AND APPLY THE REVENUE AND MATCHING PRINCIPLES TO MEASURE INCOME.

- A. Cash basis vs. Accrual accounting:
 1. Cash basis accounting:
 - a. Records revenue when cash is received and expenses when cash is paid.
 - b. Adequate for use by many small companies who are not required to report to external users.
 - c. Violates GAAP for preparation of income statement and balance sheet.
 - d. The Cash Flow Statement converts accrual to cash basis – cash in and cash out
 2. Accrual basis accounting
 - a. Requires the reporting of revenues when earned and expenses when incurred, regardless of timing of cash receipts and cash payments.
 - b. Is in agreement with GAAP for the preparation of balance sheet, statement of retained earnings, statement of stockholders' equity, and the income statement.
- B. Principles of accrual accounting
 1. Revenue Principle
 - a. Revenue is normally recognized when earned (at the point of the sale) regardless of when cash is actually received. Revenue is earned when title, risk, and rewards of ownership transfer to the customer.
 1. If cash is collected before goods or services are delivered, a liability account, not a revenue account, is used, because revenue has not yet been earned. (The revenue is deferred)
 2. If goods or services are delivered and cash is not collected, an asset account (a receivable) is used. (The asset results from a revenue accrual because the earnings are accrued or increased before cash is actually collected.)
 - b. Four conditions must be met for revenue recognition
 1. The earnings process is complete or nearly complete; i.e., goods have been delivered or services have been rendered.
 2. An exchange transaction takes place (the customer pays or promises to pay for the performed act); i.e., an agreement for customer payment is acknowledged.
 3. The price is fixed or determinable.
 4. Collection is reasonably assured.
 - c. Revenues are inflows of net assets: increases in assets or decreases in liabilities.

2. Matching Principle

- a. Requires that costs incurred to generate revenues must be recognized in the same period.
 - 1. A matching of costs with benefits.
 - 2. This recognition is required regardless of when cash is actually paid.
 - 3. Expenses are resources used up to generate revenues.
- b. An asset account is established when cash is paid for property or services before they are “used up”. The asset results from an expense deferral since it will be used in the future (deferred).
- c. If employees provide services or goods are received from suppliers and payment has not yet been made, a liability account is used.
 - 1. The liability results from an expense accrual because the expense has been accrued or increased before cash is actually spent.
 - 2. The cash payment will occur in the future.
- d. Expenses are outflows of net assets.
 - 1. Expenses cause decreases of assets or increases in liabilities.
 - 2. Expenses are recorded by the historical cost expended or to be expended (cost principle).

V. LO4 APPLY TRANSACTION ANALYSIS TO EXAMINE AND RECORD THE EFFECTS OF OPERATING ACTIVITIES ON THE FINANCIAL STATEMENTS.

A. Transaction Analysis Rules

- 1. Retained earnings (in the stockholders’ equity portion of the accounting equation) is affected by
 - a. The recognition of revenues and expenses.
 - b. Distributions to shareholders (dividends declared), which must be authorized by the board of directors.
- 2. Debits decrease retained earnings, and credits increase retained earnings.
 - a. Revenues are increased by credits and have normal credit balances.
 - b. Expenses and dividends are increased by debits and have normal debit balances.

Expanded Transaction Analysis Model

Assets (A)		=	Liabilities (L)		=	Stockholders’ Equity (SE)	
Increase	Decrease		Decrease	Increase		Decrease	Increase
Debit	Credit		Debit	Credit		Debit	Credit
			Expenses and Losses			Revenues and Gains	
			Increase	Decrease		Decrease	Increase
			Debit	Credit		Debit	Credit

- c. Revenues follow the same debit/credit rules as stockholders’ equity because revenues increase stockholders’ equity.
- d. Expenses and Dividends have the opposite debit/credit rules as stockholders’ equity because expenses and dividends decrease stockholders’ equity.

B. Transaction Analysis Rules Summary

- 1. Identify the accounts affected (at least two accounts).
- 2. Determine which accounts are increased and which accounts are decreased.
- 3. The accounting equation must always be in balance.
- 4. The total dollar value of the debits in the transaction should equal the total dollar value of the credits.

C. Recording Revenues, Expenses, and Dividends

- 1. When recording revenue (a credit), an asset or liability is debited by the same amount.
- 2. When recording an expense (a debit), an asset or liability is credited by the same amount. (The asset is decreased or the liability is increased).

VI. LO5 PREPARE FINANCIAL STATEMENTS.

A. Income Statement

1. Income statement can now be prepared.
2. Adjusting entries have not yet been prepared, so this income statement is not complete and is not in conformity with GAAP.
3. Accounts need to be updated for revenues earned and expenses incurred.
4. Updating the accounts is the focus of chapter 4.

$$\text{Revenues} - \text{Expenses} = \text{Net Income}$$

B. Statement of Retained Earnings

1. Statement of retained earnings can be prepared next.
2. Start with the beginning balance of retained earnings and add the net income (or subtract the net loss) for the period. Then, deduct distributions to shareholders (dividends declared), which must be authorized by the board of directors, from retained earnings. The result is the ending balance of retained earnings.
3. Net income or net loss comes from the income statement, so the income statement must be prepared first.
4. The ending retained earnings will be put on the balance sheet as the value of retained earnings.
5. The statement of retained earnings ties together information on the income statement and the balance sheet.

$$\text{Beginning RE} + \text{Net Income (or - Net Loss)} - \text{Dividends Declared} = \text{Ending RE}$$

C. Balance Sheet

1. Balance sheet can be prepared next.
2. Reflects balances of assets, liabilities, and stockholders' equity accounts before end-of-period adjustments.
3. Proof of the equality in the accounting equation.

$$\text{Assets} = \text{Liabilities} + \text{Stockholders' Equity}$$

D. Statement of Cash Flows

1. Shows changes in cash from operating, investing, and financing activities.
2. Ending cash balance comes from the balance sheet.
3. Uses cash basis, not accrual basis, accounting.

VII. LO6 COMPUTE AND INTERPRET THE TOTAL ASSET TURNOVER RATIO.

1. Measures the amount of sales generated per dollar invested in assets.
2. Indicates whether a company uses its assets efficiently.

$$\text{Asset Turnover} = \frac{\text{Sales (Operating) Revenue}}{\text{Average Total Assets}}$$