

ACCOUNTING FUNDAMENTALS

WILLIAM RULAND
Professor of Accounting
Baruch College
City University of New York

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Preface

This book is a step-by-step introduction to financial accounting fundamentals. It is designed for persons who use financial statements, documents that summarize results of the accounting process. Consequently, informed financial statement analysis requires an understanding of accounting.

The accounting system provides for recording financial information, classifying this information, and developing financial statements. People in business use these financial statements in their work and in managing personal investments. These financial statement users include investors when considering whether to buy, sell, or hold securities; lenders when evaluating loan requests; and suppliers when deciding whether to extend credit. Many business managers rank financial statements among their most important tools.

People sometimes ask why people in business should be trained to use financial statements. Given that the future analyst can read English, he or she might wonder about the need for specific training. One answer is that accounting is really a language. Accountants use vocabulary and conventions that are not obvious without specific orientation. Successful athletes know the rules of their games. Similarly, successful professionals in business know the accounting system.

Much of the book consists of examples and practice exercises. Specific terminology is less important than understanding procedures for developing financial statements and interpreting the income statement and balance sheet. Learning is by progression through a series of short but increasingly challenging exercises. Readers are advised to practice the concepts rather than try to memorize the material. The recommended approach is to review the text and numerical examples and then to work all exercises as a self-test. If you stumble on an exercise, review the earlier material and work the exercise again.

**Financial
statements**

**Why
statement
users need
specific
training**

Chapter 1

Past performance and current status (The income statement and balance sheet)

All financial statements include income statements and balance sheets. A major objective of this book is to make you comfortable with both documents. While working through this material, you will become very familiar with income statements and balance sheets and their relationship to cash flow.

Learning objectives

The objectives of this chapter include the following:

- To learn the exact meaning of revenues and expenses and how this knowledge assists in interpreting the income statement.
- To learn the exact meaning of assets, liabilities, and owners' equity and how to interpret the balance sheet.
- To understand how retained earnings are developed and how users should interpret this disclosure.
- To work with the balance sheet equation and see how this helps in evaluating financial statements.
- To learn the money measurement principle.

The income statement

Income measures financial performance. It addresses the question of How well did we do? Income is always measured over a prescribed period of time; this may be a month, a quarter, or a full year. Following is the income statement for Millennium Music Corporation, a store that sells records, tapes, and CDs:

Millennium Music Corporation
Income for the year ended December 31, 20x0

| | | |
|--------------------|---------------|----------------|
| Sales Revenue | | \$ 240,000 |
| Expenses | | |
| Cost of Goods Sold | \$ 90,000 | |
| Other Expenses | <u>80,000</u> | <u>170,000</u> |
| Income | | \$ 70,000 |

Millennium Music's income statement begins with the name of the business and the period over which income is measured. In this case, income is for the full year ending December 31, 20x0. The statement shows three components common to all income statements: revenues, expenses, and income.

Revenues

Revenues are inflows to the business from providing services. Record shops and other retailers have sales revenue; advertising agencies have service revenues. Later we will see that revenues do not necessarily mean that cash is collected. For now, think of revenues simply as providing services.

Expenses

Expenses reflect the use of services. Millennium Music's income statement shows three categories of expenses. One is the Cost of Goods Sold. As the title suggests, this is simply the cost of the goods that were sold during the period. Other expenses include rent, salaries, and electricity usage. Now try the following exercises to be sure that you understand revenues and expenses.

Exercise 1-1 **Revenues and Expenses.** Professional Employment Agency, Inc. is preparing its income statement. One item is the cost of preparing and mailing advertising brochures. This would include word processing, printing, and mailing. Is the cost of preparing and mailing advertising brochures an expense?

Solution Yes, the cost of mailing is an expense. Word processing, printing, and mailing all entail the use of services.

Exercise 1-2 **Revenues and Expenses.** Three of the following items relate to revenues and three relate to expenses for Gloria's Garage, a gas station and repair business. Indicate R(for revenue) or E(for expense) as appropriate:

- R E The garage sells oil and gas.
- R E Gloria’s Garage pays the rent.
- R E The business bills a customer \$ 325 for car repairs.
- R E The garage earns \$ 25 interest on its bank balance.
- R E Phone calls for the period cost \$ 90.
- R E Property tax payments are \$ 500.

Tip: Does the transaction provide a service (revenue) or use a service (expense)?

Solution

The first, third, and fourth items are revenues for Gloria’s Garage. The second, fifth, and sixth items are expenses. Remember that revenues mean providing services. When a service station provides gas, repairs cars, or earns interest on its bank deposits it has revenue. The business uses services when it rents space, makes phone calls, and pays taxes (for services provided by the government).

Income

Income is the difference between revenues and expenses. It measures financial performance. When revenues exceed expenses, the firm has income. Income is also called profit or earnings.

Exercise 1-3

Income. A portion of Whitestone Company’s income statement for the year shows the following:

Whitestone Company
Income for the year ended December 31, 20x0

| | | |
|--------------------|--------------|--------------|
| Sales Revenue | | \$ 1,800,000 |
| Expenses | | |
| Cost of Goods Sold | \$ 1,200,000 | |
| Rent Expense | 300,000 | |
| Salaries | 50,000 | |
| Income | | 1,550,000 |
| | | ? |

What is Whitestone’s income?

Solution

The company’s income is \$ 250,000. This is the difference between revenues and expenses.

Usually, revenues exceed expenses resulting in income or a profit. When expenses exceed revenues, the difference is a loss.

Exercise 1-4 **Income and Losses.** A portion of North End Company’s income statement for the year shows:

North End Company
Income for the year ended December 31, 20x0

| | | | |
|--------------------|------------|------------|---|
| Sales Revenue | | \$ 500,000 | |
| Expenses | | | |
| Cost of Goods Sold | \$ 450,000 | | |
| Rent Expense | 50,000 | | |
| Salaries | 100,000 | 600,000 | |
| Income or loss | | | ? |

Which of the following reflects North End Company’s income or loss ?

Remember that losses result from expenses in excess of revenue (bad news).

- a. \$ 100,000 income
- b. \$ 500,000 income
- c. \$ 100,000 loss

Solution

C. When expenses exceed revenues, income is negative. This is a loss.

Balance sheets

Balance sheets report the firm’s situation at a particular point in time. While income statements show performance over a period of time, balance sheets give us a picture of the situation at a particular point in time. Balance sheet disclosures include assets, liabilities, and owners’ equity.

Assets

Assets are items of value to the business. Examples include cash, inventories, investments, equipment, and buildings. Most of us are familiar with cash, investments, equipment, and buildings. Inventories are items purchased or manufactured for resale.

Specific balance sheet disclosures are referred to as accounts. For example, Cash, Investments, and Equipment on the balance sheet are accounts.

Liabilities

Liabilities are amounts owed. These are the creditor's claims against the business. One example is loans payable. The account titles of many liabilities include the word payable.

Exercise 1-5

Assets or Liabilities. Three of the following items are assets and three are liabilities. Indicate A(asset) or L(liability), as appropriate, for each item.

Tip: Is the item valuable to the business (an asset) or does it reflect an obligation (a liability)?

- A L Machinery
- A L Loan payable to a supplier
- A L Computer
- A L Loan payable to the bank
- A L Truck
- A L Loan payable to truck dealer

Solution

Machinery, computers, and trucks are assets. The other items are liabilities. Remember that assets are items of value. Machinery, computers, and trucks certainly fall into this category. Liabilities are amounts that the business owes.

Exercise 1-6

Assets and Liabilities. Anderson Company reports the following asset and liability accounts:

Anderson Company assets and liabilities For the year ended December 31, 20x0

| | |
|-------------------|-----------|
| Cash | \$ 60,000 |
| Bank Loan Payable | 70,000 |
| Inventory | 130,000 |
| Buildings | 100,000 |
| Equipment | 200,000 |

Which of the following is the amount of Anderson Company's total assets ?

- a. \$ 490,000
- b. \$ 500,000
- c. \$ 530,000

Solution

A. All items except the bank loan payable are assets, items of value to the business. These four items total \$ 490,000. The loan payable is a liability.

Owners' equity

Owners' equity is the third major component of the balance sheet. This is the owners' interest in the business. Owners' equity represents the owners' claims against the business assets. The two components of owners' equity are contributed capital and retained earnings.

Contributed capital

Contributed capital is the portion of owners' equity that owners contribute to the business. Owners of corporations hold shares of stock and are referred to as shareholders. One category of contributed capital is capital stock.

Example

Capital Stock. Everest Corporation began with a \$ 20,000,000 investment from the owners who later contributed an additional \$ 55,000,000. The Capital Stock account balance is now \$ 75,000,000.

**Everest Corporation
Changes in capital stock**

| | |
|-------------------------|---------------|
| Beginning Capital Stock | \$ 20,000,000 |
| Additional Investment | 55,000,000 |
| Ending Capital Stock | \$ 75,000,000 |

Retained earnings

Retained earnings represent the second main component of owners' equity. Retained earnings increase as corporations earn income. Dividends are distributions of cash to shareholders. Declaring dividends reduces retained earnings.

Exercise 1-7

Retained Earnings. During the year, Valley Corporation's income is \$ 300,000 and its dividends declared are \$ 200,000. You can use the following table to find the increase in retained earnings.

**Valley Corporation
Change in retained earnings**

| | |
|-------------------------------|--|
| Add: Income | |
| Less: Dividends Declared | |
| Increase in Retained Earnings | |

Tip: Think of retained earnings as the earnings retained in the business (not declared as dividends).

Which of the following shows the increase in retained earnings ?

- a. \$ 75,000
- b. \$ 100,000
- c. \$ 200,000

Solution

B. The increase in retained earnings is \$ 100,000. This is the current period's income less the dividends declared.

Retained Earnings account balances are cumulative. For profitable companies, the balances typically increase every year.

Example Retained Earnings. Prince Company begins the year with \$900,000 of retained earnings and earns \$500,000 during the year. Prince then declares dividends meaning that the company promises to distribute a certain amount of cash to owners. In this case, \$300,000 is distributed. At the end of the year, retained earnings are \$1,100,000 as follows:

Prince Company
Change in retained earnings

| | |
|-----------------------------|--------------|
| Beginning Retained Earnings | \$ 900,000 |
| Add: Income | 500,000 |
| Less: Dividends Declared | 300,000 |
| Ending Retained Earnings | \$ 1,100,000 |

Note that dividends do not reduce income. Income measures financial performance, which is not influenced by dividend payments.

Exercise 1-8 Retained Earnings. Forest Corporation earns \$90,000 in its first year, \$120,000 in its second year, and \$110,000 during the third year. Dividends declared are \$60,000 each year.

Forest Corporation
Change in retained earnings

| | |
|-----------------------------|-------|
| Beginning Retained Earnings | \$ 0 |
| Add: Cumulative Income | _____ |
| Less: Dividends Declared | _____ |
| Ending Retained Earnings | _____ |

Which of the following represents retained earnings at the end of the third year ?

- a. \$ 30,000
- b. \$ 320,000
- c. \$ 140,000

Solution

C. Cumulative income increases retained earnings. Declaring dividends reduces retained earnings.

Forest Corporation
Change in retained earnings

| | |
|-----------------------------|----------------|
| Beginning Retained Earnings | \$ 0 |
| Add: Cumulative Income | 320,000 |
| Less: Dividends Declared | <u>180,000</u> |
| Ending Retained Earnings | \$ 140,000 |

.....

We know that ending retained earnings consists of beginning retained earnings plus income less dividends declared. Analysts can use this relationship to determine dividends or income given the other elements of retained earnings.

.....

Exercise 1-9

Retained Earnings. Farmingdale Company begins the year with retained earnings of \$ 50,000. During the year, the company earns \$ 30,000. Ending retained earnings are \$ 70,000. Use the following table to find the amount of dividends declared.

Farmingdale Company
Change in retained earnings

| | |
|-----------------------------|-----------|
| Beginning Retained Earnings | \$ 50,000 |
| Add: Cumulative Income | _____ |
| Less: Dividends Declared | _____ |
| Ending Retained Earnings | \$ 70,000 |

Select the amount of dividends declared:

- a. \$ 5,000
- b. \$ 10,000
- c. \$ 30,000

Solution

B. Retained earnings begin at \$50,000. Income then adds \$30,000, bringing the total to \$80,000. Since the ending account balance is only \$70,000, we know that dividends declared are \$10,000.

Farmingdale Company
Change in retained earnings

| | |
|-----------------------------|---------------|
| Beginning Retained Earnings | \$ 50,000 |
| Add: Cumulative Income | 30,000 |
| Less: Dividends Declared | <u>10,000</u> |
| Ending Retained Earnings | \$ 70,000 |

Exercise 1-10

Retained Earnings. Scoop Garden Company begins the year with retained earnings of \$300,000. During the year, the company reports income. It then declares dividends of \$25,000. Ending retained earnings are \$325,000.

Scoop Garden Company
Change in retained earnings

| | |
|-----------------------------|------------|
| Beginning Retained Earnings | \$ 300,000 |
| Add: Cumulative Income | _____ |
| Less: Dividends Declared | _____ |
| Ending Retained Earnings | |

Scoop's income for the year is

- a. \$ 25,000.
- b. \$ 50,000.
- c. \$ 250,000.

Solution B. Retained earnings increased from \$ 300,000 to \$ 325,000. The \$ 25,000 in dividends declared, however, *reduces* retained earnings. Therefore, we know that income had to be \$ 50,000.

**Scoop Garden Company
Change in retained earnings**

| | |
|-----------------------------|---------------|
| Beginning Retained Earnings | \$ 300,000 |
| Add: Income | 50,000 |
| Less: Dividends Declared | <u>25,000</u> |
| Ending Retained Earnings | \$ 325,000 |

Review the previous examples until you're comfortable with these retained earnings exercises.

Exercise 1-11

Income, Dividends, and Retained Earnings. This exercise tests your ability to develop an income statement. Revenues, expenses, and dividends declared for Bread and Burger Inc. , a restaurant chain, are as follows:

**Bread and Burger Inc.
Income for the year ended December 31, 20x1**

| | |
|--------------------|--------------|
| Sales Revenue | \$ 1,500,000 |
| Cost of Goods Sold | 500,000 |
| Rent Expense | 300,000 |
| Salaries | 200,000 |
| Dividends Declared | 100,000 |

Income and the increase in retained earnings for 20x1 are

- a. \$ 500,000 and \$ 400,000.
- b. \$ 400,000 and \$ 400,000.
- c. \$ 400,000 and \$ 0.

Remember that dividends declared never show on the income statement.

Solution

A. Income is \$ 500,000. This is the revenue less the three expenses as shown on the following income statement:

Bread and Burger Inc.
Income for the year ended December 31, 20x1

| | | |
|--------------------|----------------|------------------|
| Sales Revenue | | \$ 1,500,000 |
| Cost of Goods Sold | \$ 500,000 | |
| Rent Expense | 300,000 | |
| Salaries | <u>200,000</u> | <u>1,000,000</u> |
| Income | | \$ 500,000 |

Retained earnings increase by \$ 400,000 (\$ 500,000 income less \$ 100,000 dividends declared). Dividends declared reduce retained earnings but do not reduce income.

Please return to the beginning discussion of retained earnings and rework the previous exercises if you had trouble with this exercise.

Exercise 1-12

Owners' Equity. Owners of Southworth Corporation invested \$ 200,000 to begin the business and an additional \$ 600,000 in later years. Southworth Corporation earned \$ 500,000 over the years and declared dividends of \$ 100,000.

Tip: Remember that capital stock is the amount invested in the business and that retained earnings is cumulative earnings less dividends.

Which of the following are the correct balances in the Capital Stock and Retained Earnings accounts ?

- a. \$ 200,000 and \$ 400,000
- b. \$ 800,000 and \$ 400,000
- c. \$ 1,200,000 and \$ 0

Solution

B. Capital stock is the total amount invested in the business— \$ 200,000 initially and \$ 600,000 in later years for a total of \$ 800,000. Southworth's retained earnings are \$ 400,000, the cumulative earnings less dividends declared.

**Southworth Corporation
Change in capital stock**

| | |
|----------------------------|----------------|
| Beginning Capital Stock | \$ 200,000 |
| Increases in Capital Stock | <u>600,000</u> |
| Ending Capital Stock | \$ 800,000 |

**Southworth Corporation
Change in retained earnings**

| | |
|-------------------------------------|----------------|
| Cumulative Income | \$ 500,000 |
| Less: Cumulative Dividends Declared | <u>100,000</u> |
| Ending Retained Earnings | \$ 400,000 |

Go back to the contributed capital and retained earnings examples if you need help with this exercise.

**A sample
balance
sheet**

Earlier we looked at the income statement for Millennium Music Corporation, the record shop. Now we consider the corresponding balance sheet:

**Millennium Music Corporation
Balance sheet at December 31, 20x0**

| Assets | | Liabilities and Equity | |
|-----------|----------------|------------------------|---------------|
| Cash | \$ 75,000 | Loan Payable | \$ 20,000 |
| Inventory | 20,000 | Capital Stock | 120,000 |
| Land | <u>105,000</u> | Retained Earnings | <u>60,000</u> |
| | \$ 200,000 | | \$ 200,000 |

Balance sheets and income statements always show the name of the business. This tells us that Millennium Music Corporation rather than some other entity holds the listed assets and is responsible for the liabilities. Similarly, income statements include only the income of the particular entity designated in the title of the statement. If owners have other sources of income or other assets, the other items are shown on separate financial statements for these businesses.

Tip: Remember to note the exact business name and date on financial statements.

In addition, balance sheets are always dated. This particular balance sheet shows account balances at the end of 20x0.

Exercise 1-13 **Assets.** Referring to Millennium's balance sheet, which of the following totals relates to items of value to the business?

- a. \$ 75,000
- b. \$ 95,000
- c. \$ 200,000

Solution C. Cash, inventory, and land are all assets. These are the items of value to the business. The Loan Payable is a liability and Capital Stock is an owners' equity account.

Exercise 1-14 **Owners' Equity.** Select the correct amount of Millennium's owners' equity from the following choices:

- a. \$ 120,000
- b. \$ 180,000
- c. \$ 200,000

Tip: If the account title says "payable," it isn't owners' equity.

Solution B. The owners' equity accounts are Capital Stock (\$ 120,000) and Retained Earnings (\$ 60,000). These accounts reflect the owners' interest in the business. The loan payable is a liability and is not part of owners' equity.

Go back to the descriptions of capital stock and retained earnings if you missed this one.

The balance sheet equation

Assets, liabilities, and owners' equity are closely related. Reference to Millennium Music's balance sheet shows the following relationship:

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