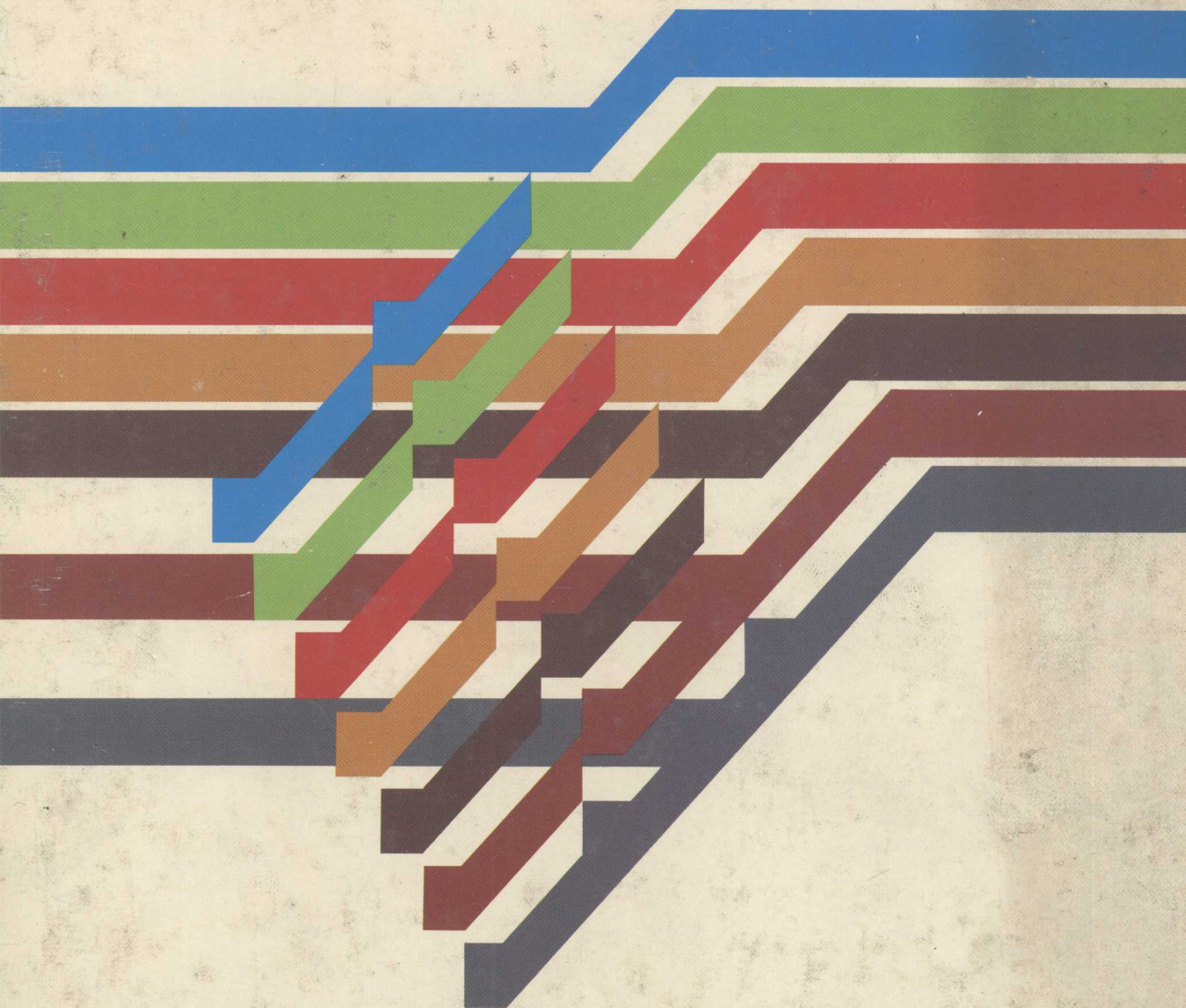


COLLEGE ACCOUNTING

ELEVENTH EDITION

PARTS 1-2



CARLSON-HEINTZ-CARSON

COLLEGE ACCOUNTING

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PREFACE

College Accounting is for students of accounting, business administration, and secretarial science. An understanding of the principles of business accounting is essential for anyone who aspires to a successful career in business, in many of the professions, and in numerous branches of government. Those who manage or operate a business, its owners, its prospective owners, its present and prospective creditors, governmental taxing authorities, and other government agencies have need for various types of information. Accounting systems are designed to fill such needs. The particular practices followed are tailored to meet the requirements and the circumstances in each case. However, the same accounting principles underlie all of the practices — just as the same principles of structural engineering apply to the construction of a one-car garage and of a fifty-floor steel and concrete office building.

This eleventh edition of **College Accounting** continues the pattern of earlier editions — explanations of principles with examples of practices. Numerous forms and documents are illustrated. Because the terminology of accounting is undergoing gradual change, the currently preferred terms are used throughout the textbook. Diagrams and color are used both to facilitate understanding and, in the case of many of the color illustrations, to conform to practice. New features of this eleventh edition include “Chapter Objectives” at the beginning of each chapter, “Building Your Accounting Knowledge” review questions at the end of each chapter section (there are one or

more sections per chapter), and “Expanding Your Business Vocabulary” terms at the end of each chapter. The vocabulary terms are referenced to the textbook pages on which they appear.

A new chapter on Internal Accounting Control (Chapter 14) has been added to this edition. In addition, the material on accounting for merchandise has been split into two chapters: Chapter 6 on Accounting for Purchases of Merchandise, and Chapter 7 on Accounting for Sales of Merchandise.

The textbook is organized to facilitate the use of various supplementary learning aids. Workbooks containing study assignments correlated with the chapter sections are available. Each workbook study assignment (called a **report**) includes an exercise on principles and one or more problems bearing on the material discussed in the related section of the textbook. A compilation of check figures for selected workbook problems is available for distribution to students. Additional accounting problems to be used for either supplementary or remedial work are included following Chapters 5, 10, 15, and 20. Three practice sets (the last of which is entirely new) are available: the first involves the accounting records of a professional person (John H. Roberts, a management consultant), the second involves the accounting records of a retail clothing store (Boyd’s Clothiers), and the third involves the accounting records of a wholesale and retail bakery business (the partnership of Fishler & Marvon). These sets provide realistic work designed to test the student’s ability to apply the knowledge of accounting principles which has been gained from studying the textbook and completing the workbook assignments. Upon completion of each practice set, a test is provided to determine the student’s ability to interpret intelligently the records and financial statements of the enterprise. An expanded comprehensive periodic testing program is provided. Tests are available for use following completion of Chapters 2, 5, 7, 10, 13, 15, 17, and 20.

The authors acknowledge their indebtedness and express their appreciation to the considerable number of accounting instructors, business executives, accountants, and other professional people whose suggestions contributed to the preparation of this textbook.

A. E. Carlson

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CHAPTER 1



THE NATURE OF BUSINESS ACCOUNTING

CHAPTER OBJECTIVES

The objectives of this chapter are to enable you:

- ▶ To describe business accounting as it applies to profit-seeking enterprises.
- ▶ To define certain business accounting terms.
- ▶ To explain how selected business transactions affect the business entity, using the accounting equation.
- ▶ To explain the nature of the income statement and the balance sheet, and how they relate to one another.
- ▶ To explain the double-entry framework.
- ▶ To explain the function of the trial balance.

The purpose of business accounting is to provide information about the current financial operations and condition of an enterprise to individuals, agencies, and organizations who have the need and the right to be so informed. These interested parties normally include:

- (1) The **owners** of the business — both present and prospective.
- (2) The **managers** of the business — managers may or may not own the business. (Often, but not always, the owners and the managers are the same persons.)

- (3) The **creditors**, or **suppliers**, of the business — both present and prospective. Creditors or suppliers are those who supply goods and services on credit — meaning that payment need not be made on the date of purchase. The creditor category also includes banks and individuals who lend money to the business.
- (4) **Government agencies** — local, state, and national. For purposes of either regulation or taxation — sometimes both — various governmental agencies must be given certain financial information.

In connection with many businesses, some or all of the following also make use of accounting information: customers or clients, labor unions, competitors, trade associations, stock exchanges, commodity exchanges, financial analysts, and financial writers.

Although the information needed by all types of users is not identical, most want data regarding (1) the results of operations — net income or loss — for the current period and (2) the financial status of the business as of a recent date. The demand for the greatest quantity and variety of information usually comes from the managers of the business. They constantly need up-to-the-minute information about the financial activities of every department in their organization. Because accounting relates to so many phases of business, it is not surprising that there are several fields of accounting specialization such as tax work, cost accounting, information systems design and installation, management services, and budget preparation.

Many accountants have but one employer whereas others become qualified as public accountants and offer their services as independent contractors or consultants. Public accountants perform various functions. One of their major activities is **auditing**. This involves the application of standard testing and checking procedures to the records of an enterprise to be certain that acceptable accounting policies and practices have been consistently followed. The purpose of the audit is to provide an independent opinion that the financial information about a business is fairly presented. Public accountants frequently extend their activities into the area of “management services” — a term that covers a variety of specialized consulting assignments. Some states license individuals as **Public Accountants** or **Registered Accountants**, although this practice is declining. All states grant the designation of **Certified Public Accountant** (CPA) to those who meet various prescribed requirements, including the passing of a uniform examination prepared by the American Institute of Certified Public Accountants. A uniform examination is also offered in numerous cities throughout the country by the Institute of Management Accounting of the National Associa-

tion of Accountants, leading to the designation of **Certified Management Accountant (CMA)**. This certificate is designed to give professional status to one-employer accountants.

All of the foregoing comments have related to accounting and accountants in connection with profit-seeking organizations. There are thousands of not-for-profit organizations such as governments, educational institutions, churches, and hospitals that also need to accumulate and dispense information. These organizations also engage a large number of accountants. While the “rules of the game” are somewhat different for not-for-profit organizations, much of the record keeping is identical with that found in profit-seeking organizations.

The accountant has the task of accumulating and dispensing the financial information needed by users. Since such activities touch upon nearly every aspect of the business operation and since financial information is communicated in accounting terms, accounting is said to be the “language of business.” Anyone intending to engage in any type of business activity is well advised to learn this language.

THE ACCOUNTING PROCESS

Business accounting may be defined as the art of analyzing and recording financial transactions and certain business-related economic events in a manner that (1) classifies and summarizes the information and (2) reports and interprets the results. The accounting process itself provides the basis for this definition.

Analyzing is the first step in the accounting process. The accountant must look at a transaction or event that has occurred and determine its fundamental significance to the business so that the information may be properly processed.

Recording traditionally meant writing something by hand. Much of the record keeping in accounting still is done manually, however, technological advances have introduced a variety of bookkeeping machines which typically combine the major attributes of typewriters, calculators, and electronic printing. Today the initial processing sometimes takes the form of holes punched in certain places on a card or a paper tape, of invisible magnetized spots on a special type of tape, or of special characters that can be magnetically or electronically “read” from source documents and thus used to feed information into an electronic computer. Because of the multiple ways information may be processed, the term “data entry” may be substituted for the term “recording” in the accounting process.

Classifying relates to the process of sorting or grouping like things together rather than merely keeping a simple, diary-like narrative record of numerous and varied transactions and events.

Summarizing is the process of bringing together various items of information to determine or explain a result.

Final processing, or reporting, refers to the process of communicating the results. In accounting, it is common to use tabular arrangements rather than narrative-type reports. Sometimes, a combination of the two is used.

Interpreting refers to the steps taken to direct attention to the significance of various matters and relationships. Percentage analyses and ratios often are used to help explain the meaning of certain related bits of information. Footnotes to financial reports and special captions may also be valuable in the interpreting phase of accounting.

ACCOUNTING AND BOOKKEEPING

A person involved with or responsible for such functions as forms and records design, accounting policy making, data analysis, report preparation, and report interpretation may be referred to as an **accountant**. A person who records or enters information in accounting records may be referred to as a **bookkeeper**. Bookkeeping is the recording phase of the accounting process. That term goes back to the time when formal accounting records were in the form of books — pages bound together. While this still is sometimes the case, modern practice favors the use of loose-leaf or computer-generated records and cards. When the language catches up with practice, the designation “record keeper” or **information processor** may replace “bookkeeper.”

ACCOUNTING ELEMENTS

A **business entity** is a particular individual, association, or other organization for which formal records are kept and periodic reports are made. Properties of value that are owned by a business entity are called **assets**.

Assets. Properties such as money, accounts receivable, merchandise, furniture, fixtures, machinery, buildings, and land are common examples of business assets. An **account receivable** is an

unwritten promise by a customer to pay at a later date for goods sold or for service rendered.

It is possible to conduct a business or a professional practice with very few assets. A doctor of medicine, for example, may have relatively few assets, such as money, accounts receivable, instruments, laboratory equipment, and office equipment. In many cases, a variety of assets are necessary. A merchant must have a large selection of merchandise to sell and store equipment with which to display the merchandise. A manufacturer must have an inventory of parts and materials, tools and various sorts of machinery with which to make or assemble the product.

Liabilities. A legal obligation of a business to pay a debt is a business **liability**. Debts can be paid with money, goods, or services, but usually are paid in cash. Liabilities represent one type of ownership interest in a business — an outside interest.

The most common liabilities are accounts payable and notes payable. An **account payable** is an unwritten promise to pay a supplier for property purchased on credit or for a service rendered. Formal written promises to pay suppliers or lenders specified sums of money at definite future times are known as **notes payable**. A business also may have one or more types of taxes payable classified as a liability.

Owner's Equity. The amount by which the business assets exceed the business liabilities is termed the **owner's equity** in the business. The word "equity" used in this sense represents a second type of ownership interest in a business — an inside interest. The terms **proprietorship**, **net worth**, or **capital** are sometimes used as synonyms for owner's equity. If there are no business liabilities, the owner's equity in the business is equal to the total amount of the assets of the business.

A business that is owned by one person traditionally is called a **proprietorship**. The person owning the interest in a business is known as the proprietor. A distinction must be made between the business assets and liabilities and nonbusiness assets and liabilities that a proprietor may have. For example, the proprietor probably owns a home, clothing, and a car, and perhaps owes the dentist for medical service. These are personal, nonbusiness assets and liabilities. The formal accounting records for the enterprise will relate to the business entity only; any nonbusiness assets and liabilities of the proprietor should be excluded. While the term "owner's equity" can be used in a very broad sense, its use in accounting is nearly always limited to the meaning: business assets minus business liabilities.

Frequent reference will be made to the owner's acts of investing money or other property in the business and to the withdrawal of money or other property from the business. In either case, property is changed from the category of a nonbusiness asset to a business asset or vice versa. These distinctions are important if the owner is going to make decisions based on the financial condition and results of the business apart from nonbusiness affairs.

THE ACCOUNTING EQUATION

The relationship between the three basic accounting elements can be expressed in the form of a simple equation known as the **accounting equation**.

$$\text{ASSETS} = \text{LIABILITIES} + \text{OWNER'S EQUITY}$$

This equation reflects the fact that outsiders and insiders have an interest in all of the assets of a business. When the amounts of any two of these elements are known, the third can always be calculated.

$$\text{LIABILITIES} = \text{ASSETS} - \text{OWNER'S EQUITY}$$

$$\text{OWNER'S EQUITY} = \text{ASSETS} - \text{LIABILITIES}$$

For example, Nancy Deppen has business assets on December 31 in the sum of \$30,200. The business liabilities on that date consist of \$1,200 owed for supplies purchased on account and \$1,500 owed to a bank on a note. The owner's equity element of the business may be calculated by subtracting the total liabilities from the total assets, $\$30,200 - \$2,700 = \$27,500$. These facts about the business can also be expressed in equation form as follows:

ASSETS = LIABILITIES + OWNER'S EQUITY		
\$30,200	\$2,700	\$27,500

A closer examination of the owner's equity will show how the equation maintains equality. One way to increase the owner's equity in the business is to increase the assets. To increase the assets and owner's equity, Deppen may (1) invest more money or other property in the business or (2) operate the business profitably.

For example, if one year later the assets are \$45,700 and the liabilities are \$2,600, the status of the business would be as follows:

ASSETS = LIABILITIES + OWNER'S EQUITY		
\$45,700	\$2,600	\$43,100

The fact that Deppen's equity in the business had increased by \$15,600 (from \$27,500 to \$43,100) does not prove that she had made a profit (often called net income) equal to the increase. Increases and decreases in owner's equity must be analyzed. If the records indicated that she invested additional money during the year in the amount of \$7,000 and did not withdraw any funds for personal use, the remainder of the increase in her equity (\$8,600) would have been due to profit (net income).

If the records indicated she invested no additional funds, withdrew assets in an amount of \$9,400 cash for personal use, and increased her equity by \$25,000 as a result of a profitable operation, the net effect would also account for the \$15,600 (\$25,000 – \$9,400) increase. It is essential that the business records show the changes in owner's equity due to events that are part of regular business operations and the changes in owner's equity due to investments and withdrawals of assets by the owner.

TRANSACTIONS

Any activity of an enterprise which involves the exchange of values is referred to as a **transaction**. These values frequently are expressed in terms of money. Buying and selling property and performing services are common transactions. The following typical transactions are analyzed to show that each represents an exchange of values.

Typical Transactions

- (1) Purchased equipment for cash, \$1,250.
- (2) Received cash in payment of professional fees, \$300.
- (3) Paid office rent, \$250.
- (4) Paid an amount owed to a supplier, \$700.
- (5) Paid wages in cash, \$150.
- (6) Borrowed \$3,000 at a bank giving a 9 percent interest-bearing note due in 30 days.
- (7) Purchased office equipment on account, \$500.

Analysis of Transactions

Money was exchanged for equipment.

Professional service was rendered in exchange for money.

Money was exchanged for the right to use property.

Money was given in settlement of a debt that may have resulted from the purchase of property on account or from services rendered by a supplier.

Money was exchanged for services rendered.

A liability known as a note payable was incurred in exchange for money.

A liability known as an account payable was incurred in exchange for office equipment.

EFFECT OF TRANSACTIONS ON THE ACCOUNTING EQUATION

Each transaction affects one or more of the three basic accounting elements. For example, in transaction (1) the purchase of equipment for cash represents both an increase and a decrease in assets. The assets increased because equipment was acquired; the assets decreased because cash was disbursed. The office equipment in transaction (7) had been purchased on account, thereby creating a liability. The transaction results in an increase in assets (equipment) with a corresponding increase in liabilities (accounts payable). Neither of these transactions has any effect upon the owner's equity element of the equation.

The effect of any transaction on the basic elements of the accounting equation may be indicated by increasing or decreasing a specific asset, liability or owner's equity account. To illustrate: assume that Edward Foote, an attorney, decided to go into practice for himself. During the first month of this venture (June, 1982), the following transactions relating to the practice took place:

Transaction (a)

An Increase in an Asset Offset by an Increase in Owner's Equity

Foote opened a bank account with a deposit of \$8,000. This transaction caused the new business to receive the asset cash; and since Foote contributed the assets, the owner's equity element was increased by the same amount. As a result of this transaction, the equation for the business would appear as follows:

$$\left. \begin{array}{r} \text{ASSETS} \\ \text{Cash} \\ \text{(a) } \$8,000 \end{array} \right\} = \left\{ \begin{array}{l} \text{LIABILITIES} + \text{OWNER'S EQUITY} \\ \text{Edward Foote, Capital} \\ \$8,000 \end{array} \right.$$

Transaction (b)

An Increase in an Asset Offset by an Increase in a Liability

Foote purchased office equipment (desk, chairs, file cabinet, etc.) for \$4,100 on 30 days credit. This transaction caused the asset office equipment to increase by \$4,100 and resulted in an equal increase in the liability accounts payable. Updating the foregoing equation by this (b) transaction gives the following result:

$$\left. \begin{array}{r} \text{ASSETS} \\ \text{Cash} + \text{Office Equipment} \\ \text{Bal. } \$8,000 \\ \text{(b) } \quad \quad \$4,100 \\ \text{Bal. } \$8,000 \quad \$4,100 \end{array} \right\} = \left\{ \begin{array}{l} \text{LIABILITIES} + \text{OWNER'S EQUITY} \\ \text{Accounts Payable} \quad \text{Edward Foote, Capital} \\ \quad \quad \quad \$8,000 \\ \quad \quad \quad \$4,100 \\ \quad \quad \quad \$4,100 \quad \$8,000 \end{array} \right.$$

Transaction (c)**An Increase in One Asset Offset by a Decrease in Another Asset**

Foote purchased office supplies (stationery, legal pads, pencils, etc.) for cash, \$640. This transaction caused a \$640 increase in the asset office supplies that exactly offset the \$640 decrease in the asset cash. The effect on the equation is as follows:

ASSETS			}	=	LIABILITIES + OWNER'S EQUITY	
Cash	Office Equipment	Office Supplies			Accounts Payable	Edward Foote, Capital
Bal. \$8,000	\$4,100				\$4,100	\$8,000
(c) - 640		\$640				
Bal. \$7,360	\$4,100	\$640			\$4,100	\$8,000

Transaction (d)**A Decrease in an Asset Offset by a Decrease in a Liability**

Foote paid \$2,500 on account to the company from which the office equipment was purchased. (See Transaction (b).) This payment caused the asset cash and the liability accounts payable both to decrease \$2,500. The effect on the equation is as follows:

ASSETS			}	=	LIABILITIES + OWNER'S EQUITY	
Cash	Office Equipment	Office Supplies			Accounts Payable	Edward Foote, Capital
Bal. \$7,360	\$4,100	\$640			\$4,100	\$8,000
(d) - 2,500					- 2,500	
Bal. \$4,860	\$4,100	\$640			\$1,600	\$8,000

Transaction (e)**An Increase in an Asset Offset by an Increase in Owner's Equity Resulting from Revenue**

Foote received \$1,800 cash from a client for professional services. This transaction caused the asset cash to increase \$1,800, and since the cash was received for services performed by the business, the owner's equity increased by the same amount. The effect on the equation is as follows:

ASSETS			}	=	LIABILITIES + OWNER'S EQUITY	
Cash	Office Equipment	Office Supplies			Accounts Payable	Edward Foote, Capital
Bal. \$4,860	\$4,100	\$640			\$1,600	\$8,000
(e) 1,800						1,800
Bal. \$6,660	\$4,100	\$640			\$1,600	\$9,800