

# INTRODUCTION TO HEALTHCARE FINANCIAL MANAGEMENT

## Learning Objectives

After studying this chapter, readers should be able to

- explain the difference between accounting and financial management;
- discuss the role of financial management in health services organizations;
- explain how the goals of investor-owned and not-for-profit businesses differ;
- describe, in general terms, the tax laws that apply both to individuals and to healthcare businesses; and
- assess the implications of the major changes facing healthcare delivery for the financial management of healthcare organizations.

## Introduction

The study of healthcare financial management is fascinating and rewarding. It is fascinating because so many of the concepts involved have implications for both professional and personal behavior. It is rewarding because the healthcare environment today, and in the foreseeable future, is forcing managers to place increasing emphasis on financial implications when making operating decisions.

First and foremost, financial management is a *decision science*. Whereas accounting provides decision-makers with a rational means by which to budget for and measure a business's financial performance, financial management provides the theory, concepts, and tools necessary to make better decisions. Thus, the primary purpose of this textbook is to help healthcare managers and students become better decision-makers. The text is designed primarily for nonfinancial managers, although financial specialists—especially those

with accounting rather than finance backgrounds or those moving into the health services sector from other industries—will also find the text useful.

The major difference between this text and corporate finance texts is that we focus on factors unique to the health services sector. For example, the provision of health services is dominated by *not-for-profit* or *nonprofit* organizations (private and governmental), which are inherently different from *investor-owned* businesses.<sup>1</sup> Also, the majority of payments made to healthcare providers for services are not made by patients—the consumers of the services—but rather by some third-party payer (e.g., a commercial insurance company, a government program). This text emphasizes ways in which the unique features of the health services sector affect financial management decisions.

Although *Understanding Healthcare Financial Management* contains some theory and a great number of financial management concepts, its primary emphasis is on how managers can apply the theory and concepts; thus, it does not contain the traditional end-of-chapter questions and problems. (Note, however, that end-of-chapter problems in spreadsheet format are available as ancillary materials.) Rather, the text is designed to be used with the book *Cases in Healthcare Finance*, sixth edition, which contains cases based on real-life decisions faced by practicing healthcare managers. The cases are designed to enable students to apply the skills learned in this text's chapters in a realistic context, where judgment is just as critical to good decision-making as numerical analysis. Furthermore, the cases are not directed, which means that although students receive some guidance, they must formulate their own approach to the analyses, just as real-world decision-makers must do.<sup>2</sup>

This text and the casebook are oriented toward the use of spreadsheets that can help managers make better decisions. This text has accompanying spreadsheet models that illustrate the key concepts presented in many of the chapters. The casebook has spreadsheet models that make the quantitative portion of the case analyses easier to do and more complete.

It is impossible to create a text that includes everything that a manager needs to know about healthcare financial management. It would be foolish even to try because the field is so vast and is changing so rapidly that many of the details needed to become completely knowledgeable in the field can be learned only through contemporary experience. Nevertheless, this text provides the core competencies readers need to (1) judge the validity of analyses performed by others, usually financial staff specialists or consultants; and (2) incorporate sound financial management theory and concepts in their own managerial and personal decision-making.

## How to Use This Book

The overriding goal in creating this text was to provide an easy-to-read, content-filled book on healthcare financial management. The text contains several features designed to assist in learning the material.

First, pay particular attention to the learning objectives listed at the beginning of each chapter. These objectives give readers a feel for the most important topics in each chapter and set learning goals for that chapter. After each major section, except the introduction, one or more self-test questions are listed. Answers to these questions are not provided. When you finish reading each major section, try to provide reasonable answers to these questions. Your responses do not have to be perfect, but if you are not satisfied with your answer, reread that section before proceeding.

In the book, italics and boldface are used to indicate special terms. *Italics* are used whenever a key term is introduced; thus, italics alert readers that a new or important concept is being presented. **Boldface** is used solely for emphasis; thus, the meaning of a boldface word or phrase has unusual significance to the point being discussed. Boxes are used to highlight key formulae or equations. As indicated in the preface, the book has accompanying spreadsheet models that match—and sometimes expand on—selected calculations in the text. The sections of the text that have accompanying models are indicated by a web icon (see the margin).

In addition to in-chapter learning aids (e.g., sidebars, time lines, solutions), materials designed to help readers learn healthcare financial management are included at the end of each chapter. First, many chapters contain an integrative application section that shows how a method covered in the chapter can be used to solve a practical problem. Second, a feature called Chapter Supplement can be found online at [ache.org/HAP/PinkSong8e](http://ache.org/HAP/PinkSong8e) for many chapters; this includes materials that are important but not essential to the concepts discussed. Third, a summary section titled Chapter Key Concepts briefly reviews the most important topics covered in the chapter. If the meaning of a key concept is not apparent, you may want to review the applicable section. Fourth, a section called Chapter Models, Problems, and Minicases indicates whether spreadsheet models, problem sets, and minicases are available for that chapter. (See the preface for more information on these ancillaries.) Finally, each chapter includes a selected bibliography and list of selected websites. The books and articles listed in the bibliography can provide a more in-depth understanding of the material covered in the chapter, while the list of websites is designed just to scratch the surface of relevant material available online.



On the web at:  
[ache.org/HAP/  
PinkSong8e](http://ache.org/HAP/PinkSong8e)

Taken together, the pedagogic structure of the book is designed to make the learning of healthcare financial management as easy and efficient as possible.

### SELF-TEST QUESTION

1. Briefly describe the key features of the text designed to enhance the learning experience.

## The Role of Financial Management in the Health Services Sector

The primary role of financial management is to plan for, acquire, and use funds (capital) to maximize the efficiency and value of the enterprise. Because of this role, financial management is known also as *capital finance*. The specific goals of financial management depend on the nature of the business, so we will postpone that discussion until later in the chapter. In larger organizations, financial management and accounting are separate functions, although the accounting function typically is carried out under the direction of the organization's chief financial officer and hence falls under the overall category of "finance."

In general, the financial management function includes the following activities:

- **Evaluation and planning.** First and foremost, financial management involves evaluating the financial effectiveness of current operations and planning for the future.
- **Long-term investment decisions.** Although these decisions are more important to senior management, managers at all levels must be concerned with the capital investment decision process. Such decisions focus on the acquisition of new facilities and equipment (fixed assets) and are the primary means by which businesses implement strategic plans; hence, they play a key role in a business's financial future.
- **Financing decisions.** All organizations must raise funds to buy the assets necessary to support operations. Such decisions involve the choice between the use of internal versus external funds, the use of debt versus equity capital, and the use of long-term versus short-term debt. Although senior managers typically make financing decisions, these choices have ramifications for managers at all levels.
- **Working capital management.** An organization's current, or short-term, assets—such as cash, marketable securities, receivables,

and inventories—must be properly managed to ensure operational effectiveness and reduce costs. Generally, managers at all levels are involved, to some extent, in short-term asset management, which is often called *working capital management*.

- **Contract management.** Health services organizations must negotiate, sign, and monitor contracts with managed care organizations and third-party payers. The financial staff typically has primary responsibility for these tasks, but managers at all levels are involved in these activities and must be aware of their effect on operating decisions.
- **Financial risk management.** Many financial transactions that take place to support the operations of a business can increase a business's risk. Thus, an important financial management activity is to control financial risk.

In times of high profitability and abundant financial resources, the finance function tends to decline in importance. Thus, when most health-care providers were reimbursed on the basis of costs incurred, the role of finance was minimal. At that time, the most critical finance function was cost accounting because it was more important to account for costs than to control them. Today, however, healthcare providers are facing an increasingly hostile financial environment, and any business that ignores the finance function runs the risk of financial deterioration, which ultimately can lead to bankruptcy and closure.

In recent years, providers have been redesigning their finance functions to recognize the changes that have been occurring in the health services sector. Historically, the practice of finance had been driven by the Medicare program, which demanded that providers (primarily hospitals) churn out a multitude of reports to comply with regulations and maximize Medicare revenues. Third-party reimbursement complexities meant that a large amount of time had to be spent on cumbersome accounting, billing, and collection procedures. Thus, instead of focusing on value-adding activities, most finance work focused on bureaucratic functions. Today, to be of maximum value to the enterprise, the finance function must support cost-containment efforts, managed care and other payer contract negotiations, joint venture decisions, and participation in accountable care organizations and integrated delivery systems. Finance must help lead organizations into the future rather than merely record what has happened in the past.

In this text, the emphasis is on financial management, but there are no unimportant functions in health services organizations. Managers must understand a multitude of functions, such as marketing, accounting, and human resource management, in addition to financial management. Still, all business decisions have financial implications, so all managers—whether

in operations, marketing, personnel, or facilities—must know enough about financial management to incorporate financial implications in decisions about their own specialized areas. An understanding of the theory and principles of financial management will make them even more effective at their own specialized work.

### SELF-TEST QUESTIONS

1. What is the role of financial management in today's health services organizations?
2. How has this role changed over time?

## Current Challenges

In February 2019, the American College of Healthcare Executives (ACHE) announced the top issues confronting hospitals. Responses to a 2018 survey of 355 community hospital CEOs were used to determine these issues. The top five concerns identified by respondents are as follows:

1. Financial challenges
2. Governmental mandates
3. Patient safety and quality
4. Personnel shortages
5. Behavioral health and addiction issues

The specific financial challenges facing hospitals, as reported by the CEOs, are as follows (ACHE 2019):

- Increasing costs for staff, supplies, and so on
- Medicaid reimbursement
- Reducing operating costs
- Bad debt
- Competition from other providers
- Managed care and other commercial insurance payments
- Medicare reimbursement
- Government funding cuts
- Transition from volume to value
- Revenue cycle management (converting charges to cash)
- Inadequate funding for capital improvements

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- Emergency department overuse
- Moving away from fee-for-service care
- Pricing and price transparency

Financial challenges were at the top of the list of hospital CEOs' concerns in 2018, just as they had been for the past ten years. As such, financial issues are of primary importance to today's healthcare managers. The remainder of this book is dedicated to helping you confront and solve these issues.

1. What are some important issues confronting hospitals today?

**SELF-TEST  
QUESTION**

## Organizational Goals

This text focuses on business finance. Because most healthcare managers work for corporations and because not-for-profit businesses are organized as corporations, this text emphasizes this form of organization. The other forms of business organization and alternative forms of ownership are described in the chapter supplement [ache.org/HAP/PinkSong8e](http://ache.org/HAP/PinkSong8e).

Financial decisions are not made in a vacuum but with an objective in mind. An organization's financial management goals must be consistent with and support the overall goals of the business. Thus, by discussing organizational goals, health services organizations develop a framework for financial decision-making.

In a proprietorship, partnership, or small, privately owned corporation, the owners of the business generally are also its managers. In theory, the business can be operated for the exclusive benefit of the owners. If the owners want to work hard to maximize wealth, they can. On the other hand, if every Wednesday is devoted to golf, no one is hurt. (Of course, the business still has to cater to its customers or else it will not survive.) It is in large publicly owned corporations, in which owners and managers are separate parties, that organizational goals become most important.

### **Large, Investor-Owned Corporations**

From a financial management perspective, the primary goal of investor-owned corporations is generally assumed to be *shareholder wealth maximization*, which translates to stock price maximization. Investor-owned corporations do, of course, have other goals. Managers, who make the decisions, are interested in their own personal welfare, in their employees' welfare, and in the good of the community and society at large. Still, the goal of stock price

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maximization is a reasonable operating objective on which to build financial decision rules.

The primary obstacle to shareholder wealth maximization as the goal of investor-owned corporations is the *agency problem*. An agency problem exists when one or more individuals (the *principals*) hire another individual or group of individuals (the *agents*) to perform a service on their behalf and then delegate a decision-making authority to those agents. In a healthcare financial management framework, the agency problem exists between stockholders and managers and between debtholders and stockholders.

The agency problem between stockholders and managers occurs because the managers of large, investor-owned corporations hold only a small proportion of the firm's stock, so they benefit little from stock price increases. On the other hand, managers often benefit substantially from actions detrimental to stockholders' wealth, such as increasing the size of the firm to justify higher salaries and more fringe benefits; awarding themselves generous retirement plans; and spending too much on such items as office space, personal staff, and travel. Clearly, many situations can arise in which managers are motivated to take actions that are in their own best interests, rather than in the best interests of stockholders.

However, stockholders recognize the agency problem and counter it by creating the following mechanisms to keep managers focused on shareholder wealth maximization:

- **The creation of managerial incentives.** More and more firms are creating *incentive compensation plans* that tie managers' compensation to the firm's performance. One tool often used is *stock options*, which allow managers to purchase stock at some time in the future at a given price. Because the options are valuable only if the stock price climbs above the *exercise price* (the price that the managers must pay to buy the stock), managers are motivated to take actions to increase the stock price. However, because a firm's stock price is a function of both managers' actions and the general state of the economy, a firm's managers could be doing a superlative job for shareholders but the options could still be worthless. To overcome the inherent shortcoming of stock options, many firms use *performance shares* as the managerial incentive. Performance shares are given to managers on the basis of the firm's performance as indicated by objective measures, such as earnings per share, return on equity, and so on. Not only do managers receive more shares when targets are met—the value of the shares is also enhanced if the firm's stock price rises. Finally, many businesses use the concept of *economic value added (EVA)* to structure managerial compensation. (EVA is discussed in chapter 13.)

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All incentive compensation plans—stock options, performance shares, profit-based bonuses, and so forth—are designed with two purposes in mind. First, they offer managers incentives to act on factors under their control in a way that will contribute to stock price maximization. Second, such plans help firms attract and retain top-quality managers.

- **The threat of firing.** Until the 1980s, the probability of a large firm's stockholders ousting its management was so remote that it posed little threat. Ownership of most firms was so widely held, and management's control over the proxy (voting) mechanism was so strong, that it was almost impossible for dissident stockholders to fire a firm's managers. Today, however, about 70 percent of the stock of an average large corporation, such as pension funds and mutual funds, is held by institutional investors rather than individual investors. These institutional money managers have the clout, if they choose to use it, to exercise considerable influence over a firm's managers and, if necessary, to remove the current management team by voting it off the board.
- **The threat of takeover.** A *hostile takeover*—the purchase of a firm against its management's wishes—is most likely to occur when a firm's stock is undervalued relative to its potential because of poor management. In a hostile takeover, a potential acquirer makes a direct appeal to the shareholders of the target firm to tender, or sell, their shares at some stated price. If 51 percent of the shareholders agree to tender their shares, the acquirer gains control. When a hostile takeover occurs, the managers of the acquired firm often lose their jobs, and any managers permitted to stay generally lose the autonomy they had prior to the acquisition. Thus, managers have a strong incentive to take actions to maximize stock price. In the words of the president of a major drug manufacturer, "If you want to keep control, don't let your company's stock sell at a bargain price."

In summary, managers of investor-owned firms can have motivations that are inconsistent with shareholder wealth maximization. Still, sufficient mechanisms are at work to force managers to view shareholder wealth maximization as an important, if not primary, goal. Thus, shareholder wealth maximization is a reasonable goal for investor-owned firms.

### ***Not-for-Profit Corporations***

Because not-for-profit corporations do not have shareholders, shareholder wealth maximization is not an appropriate goal for such organizations. Not-for-profit firms consist of a number of classes of *stakeholders* who are directly affected by the organization. Stakeholders include all parties who have an

interest—usually financial—in the organization. For example, a not-for-profit hospital's stakeholders include the board of trustees, managers, employees, physicians, creditors, suppliers, patients, and even potential patients (who may include the entire community). An investor-owned hospital has the same set of stakeholders, plus one additional class—stockholders. While managers of investor-owned firms have to please only one class of stakeholders—the shareholders—managers of not-for-profit firms face a different situation. They have to please all of the organization's stakeholders because no single, well-defined group exercises control.

Many people argue that managers of not-for-profit firms do not have to please anyone because they tend to dominate the board of trustees, who are supposed to exercise oversight. Others argue that managers of not-for-profit firms have to please all of the firm's stakeholders because all are necessary to the successful performance of the business. Of course, even managers of investor-owned firms should not attempt to enhance shareholder wealth by treating any of their firm's other stakeholders unfairly because such actions ultimately will be detrimental to shareholders. Typically, the goal of not-for-profit firms is stated in terms of a mission. An example is the mission statement of Bayside Memorial Hospital, a 450-bed, not-for-profit, acute care hospital: "Bayside Memorial Hospital, along with its medical staff, is a recognized, innovative healthcare leader dedicated to meeting the needs of the community. We strive to be the best comprehensive healthcare provider through our commitment to excellence."

Although this mission statement provides Bayside's managers and employees with a framework for developing specific goals and objectives, it does not provide much insight into the goals of the hospital's finance function. For Bayside to accomplish its mission, its managers have identified five financial goals:

1. The hospital must maintain its financial viability.
2. The hospital must generate sufficient profits to continue to provide its current range of healthcare services to the community. Buildings and equipment must be replaced as they become obsolete.
3. The hospital must generate sufficient profits to invest in new medical technologies and services as they are developed and needed.
4. The hospital should not rely on its philanthropy program or government grants to fund its operations and growth, although it will aggressively seek such funding.
5. The hospital will strive to provide services to the community as inexpensively as possible, given these financial requirements.

In effect, Bayside's managers are saying that to achieve the hospital's commitment to excellence as described in its mission statement, the hospital must remain financially strong and profitable. Financially weak organizations cannot continue to accomplish their stated missions over the long run. What is interesting is that Bayside's five financial goals are probably not much different from the financial goals of Jefferson Community Medical Center (JCMC), a for-profit competitor. Of course, JCMC has to worry about providing a return to its shareholders, and it receives only a small amount of contributions and grants. To maximize shareholder wealth, JCMC also must retain its financial viability and have the financial resources necessary to offer new services and technologies. Furthermore, competition in the market for hospital services will not permit JCMC to charge appreciably more for services than its not-for-profit competitors.

1. What is the difference between the goals of investor-owned and not-for-profit firms?
2. What is the agency problem, and how does it apply to investor-owned firms?
3. What factors tend to reduce the agency problem?

### SELF-TEST QUESTIONS

## Tax Laws

The value of any financial asset (such as a share of stock issued by Tenet Healthcare ([www.tenethealth.com](http://www.tenethealth.com)) or a municipal bond issued by the Alachua County Health Facilities Authority (<http://advisoryboards.alachuacounty.us/boards/info.aspx>) on behalf of UF Health Shands Hospital (<https://ufhealth.org/shands-university-florida>) and the value of many real assets (e.g., MRI [magnetic resonance imaging] machines, medical office buildings, hospitals) depend on the stream of usable cash flows that the asset is expected to produce. Because taxes reduce the cash flows that are usable to the business, financial analyses must include the impact of local, state, and federal taxes. Local and state tax laws vary widely, so we do not attempt to cover them in this text. Rather, we focus on the federal income tax system because these taxes dominate the taxation of business income. In our examples, we typically increase the effective tax rate to approximate the effects of state and local taxes.

Congress can change tax laws, and major changes have occurred every three to four years, on average, since 1913, when the federal tax system was initiated. Furthermore, certain aspects of the tax code are tied to inflation, so

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changes based on the previous year's inflation rate automatically occur each year. Therefore, although this section gives you an understanding of the basic nature of our federal tax system, **it is not intended to be a guide for application**. Tax laws are so complicated that many law and business schools offer a master's degree in taxation, and many who hold this degree are also certified public accountants. Managers and investors should rely on tax experts rather than trust their own limited knowledge. Still, it is important to know the basic elements of the tax system as a starting point for discussions with tax specialists. In a field complicated enough to warrant such detailed study, we can cover only the highlights.

Current (2019) federal income tax rates on **personal income** go up to 37 percent, and when state and local income taxes are added, the marginal rate can approach 52 percent. **Business income** is also taxed heavily. The income from partnerships and proprietorships is reported by the individual owners as personal income and, consequently, is taxed at rates of up to 53 percent. However, such income can now qualify for pass-through tax deductions of up to 20 percent. Corporate income, in addition to state and local income taxes, is taxed by the federal government at 21 percent. Because of the magnitude of the tax bite, taxes play an important role in most financial management decisions made by individuals and by for-profit organizations.

### **Individual (Personal) Income Taxes**

Individuals pay personal taxes on wages and salaries; on investment income such as dividends, interest, and profits from the sale of securities; and on the profits of sole proprietorships, partnerships, and S corporations (S corporations are ordinary business corporations that elect to pass corporate income, losses, deductions, and credits through to their shareholders for federal tax purposes.). For tax purposes, investors receive two types of income: (1) ordinary and (2) dividends and capital gains. *Ordinary income* includes wages and salaries and interest income. *Dividend income* (which arises from stock ownership) and *capital gains* (which arise from the sale of assets, including stocks) generally are taxed at lower rates than is ordinary income.

### **Taxes on Wages and Salaries**

Federal income taxes on ordinary income are **progressive**—that is, the higher one's income, the larger the *marginal tax rate*, which is the rate applied to the last dollar of earnings. Marginal rates on ordinary income begin at 10 percent; then rise to 12, 22, 24, 32 and 35 percent; and finally top out at 37 percent. Because the levels of income for each bracket are adjusted for inflation annually, and because the brackets are different for single individuals and married couples who file a joint return, we do not provide a complete discussion here. In brief, in 2019, it takes a taxable income of \$600,000 for

married couples to be in the highest (37 percent) bracket, so most people fall into the lower brackets.

### Taxes on Interest Income

Individuals can receive *interest income* on savings accounts, certificates of deposit, bonds, and the like. Like wages and salaries, interest income is taxed as ordinary income and hence is taxed at federal rates of up to 37 percent, in addition to applicable state and local income taxes.

Note, however, that under federal tax laws, interest on most state and local government bonds, called *municipals* or *munis*, is not subject to federal income taxes. Such bonds include those issued by municipal healthcare authorities on behalf of not-for-profit healthcare providers. Thus, investors get to keep all of the interest received from municipal bonds but only a proportion of the interest received from bonds issued by the federal government or by corporations. Therefore, a lower interest rate muni bond can provide the same or higher after-tax return as a higher yielding corporate or Treasury bond. For example, consider an individual in the 32 percent federal tax bracket who can buy a taxable corporate bond that pays a 10 percent interest rate. What rate would a similar-risk muni bond have to offer to balance out its appeal with that of a corporate bond?

Here is a way to think about this problem:

$$\begin{aligned}
 \text{After-tax rate on corporate bond} &= \text{Pretax rate} - \text{Yield lost to taxes} \\
 &= \text{Pretax rate} - \text{Pretax rate} \times \text{Tax rate} \\
 &= \text{Pretax rate} \times (1 - T) \\
 &= 10\% \times (1 - 0.32) = 10\% \times 0.68 = \\
 &6.8\%.
 \end{aligned}$$

Here,  $T$  is the investor's marginal tax rate. Thus, the investor would be indifferent between a corporate bond with a 10 percent interest rate and a municipal bond with a 6.8 percent rate.

If the investor wants to know what yield on a taxable bond is equivalent to, say, an 8.0 percent interest rate on a muni bond, they would follow this procedure:

$$\begin{aligned}
 \text{Equivalent rate on taxable bond} &= \text{Rate on municipal bond} \div (1 - T) \\
 &= 8.0\% \div (1 - 0.32) = 8.0\% \div 0.68 = 11.76\%.
 \end{aligned}$$

The exemption of municipal bonds from federal taxes stems from the separation of power between the federal government and state and local governments, and its primary effect is to allow state and local governments (as well

as not-for-profit healthcare providers) to borrow at lower interest rates than otherwise would be possible.

### Dividend Income

In addition to interest income on securities, investors can receive dividend income from securities (stocks). Because investor-owned corporations pay dividends out of earnings that have already been taxed, there is double taxation on corporate income. Given that taxes have already been paid on these earnings, dividend income is taxed at the same rates as long-term capital gains income; these rates are lower than those on ordinary and interest income. If an individual is in the 35 percent or higher tax bracket, dividends are taxed at 20 percent. If an individual is in the 12 to 32 percent tax bracket, dividends are taxed at only 15 percent. To see the advantage, consider an individual in the 35 percent tax bracket who receives both \$100 in interest income and \$100 in dividend income. The taxes on the interest income would be  $0.35 \times \$100 = \$35$ , while the taxes on the dividend income would be only  $0.20 \times \$100 = \$20$ , a difference of \$15.<sup>3</sup>

### Capital Gains Income

Assets such as stocks, bonds, real estate, and property and equipment (e.g., land, buildings, X-ray machines) are defined as *capital assets*. If an individual buys a capital asset and later sells it at a profit—that is, if the individual sells it for more than the purchase price—the profit is called a *capital gain*. If the individual sells it for less than the purchase price, the loss is called a *capital loss*. An asset sold within one year of the time it was purchased produces a short-term capital gain or loss, whereas an asset held for more than one year produces a long-term capital gain or loss. For example, if you buy 100 shares of Tenet Healthcare for \$10 per share and sell the stock later for \$15 per share, you will realize a capital gain of  $100 \times (\$15 - \$10) = 100 \times \$5 = \$500$ . However, if you sell the stock for \$5 per share, you will incur a capital loss of \$500. If you hold the stock for one year or less, the gain or loss is short term; otherwise, it is a long-term gain or loss. Note that if you sell the stock for \$10 a share, you will realize neither a capital gain nor loss; you will simply get your \$1,000 back, and no taxes will be due on the transaction.

Short-term capital gains are taxed as ordinary income at the same rates as wages and interest. However, long-term capital gains are taxed at the same rates as dividends; these rates are lower than those on ordinary income. For an illustration of the effect of this tax benefit on long-term capital gains, consider an investor in the top 35 percent tax bracket who makes a \$500 long-term capital gain on the sale of Tenet Healthcare stock. If the \$500 were ordinary income, she would have to pay federal income taxes of  $0.35 \times \$500 = \$175$ . However, as a long-term capital gain, the tax would be only

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$0.20 \times \$500 = \$100$ , for a savings of \$75 in taxes. There are many nuances to capital gains taxes, especially regarding the effect of losses on taxes. Our purpose is merely to introduce the concept. The purpose of the reduced tax rate on dividends and long-term capital gains is to encourage individuals to invest in assets that contribute most to economic growth.

### Corporate Income Taxes

The corporate tax structure has a flat rate of 21 percent. For example, if Midwest Home Health Services, an investor-owned home health care business, had \$80,000 of taxable income, its federal income tax bill would be \$16,800:

$$\begin{aligned}\text{Corporate taxes} &= [0.21 \times \$80,000] \\ &= \$16,800.\end{aligned}$$

While the corporate tax rate is flat, there is variability based on the state in which the corporation operates. Exhibit 1.1 outlines the difference in tax rates by state. For the remainder of this book, calculations will assume that **corporations face a combined federal and state income tax of 30 percent.**

### Unrelated Business Income

Though tax-exempt holding companies can be created with both tax-exempt and taxable subsidiaries, tax-exempt corporations can have taxable income, which is usually referred to as *unrelated business income (UBI)*. UBI is created when a tax-exempt corporation has income from a trade or business that (1) is not substantially related to the charitable goal of the organization and

State	Tax Rate
NV, OH, SD, TX, WA, WY	0–1.99%
NC	2–3.99%
AZ, CO, FL, MS, NM, ND, SC, UT	4–5.99%
AL, GA, HI, ID, IN, KS, KY, MI, MO, MT, NE, NY, OK, OR, RI, TN, VA, WV, WI	6–7.99%
AK, AR, CA, CT, DE, IL, LA, ME, MD, MA, MN, NH, NJ, PA, VT, DC	8–9.99%
IA	10–12%

**EXHIBIT 1.1**  
2019 State Tax Rates

Source: Data from Tax-rates.org.

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(2) is carried on with the frequency and regularity of comparable for-profit commercial businesses.

As an example of UBI, consider Bayside Memorial Hospital's pharmacy sales. In addition to its services to the hospital's patients, the not-for-profit hospital's pharmacy has a second location, adjacent to the parking garage, which sells drugs and supplies to the general public. In general, the Internal Revenue Service (IRS) views the charitable purpose of a hospital as providing healthcare services to its patients, so the income from Bayside's sales of drugs and supplies to nonpatients is taxable. The fact that the profits from the sales are used for charitable purposes is immaterial. Note, however, that if the trade or business in which a not-for-profit entity is engaged (1) is run by volunteers, (2) is run for the convenience of its employees, or (3) involves the sale of merchandise contributed to the organization, the income generated remains tax exempt. Thus, the profits on Bayside's sales of drugs and supplies to its employees, as well as the profits on the sale of items in its gift shop run by volunteers, are exempt from taxation.

Not-for-profit organizations must file UBI tax returns with the IRS annually if their gross income from unrelated business activity exceeds \$1,000. Taxable income is determined by deducting expenses related to UBI income production from gross income. Then, taxes are calculated as if the income were earned by a taxable corporation.

### Interest and Dividend Income Received by an Investor-Owned Corporation

Interest income received by a taxable corporation is taxed as ordinary income at the regular federal tax rate of 21 percent, plus the applicable state tax rate. However, a portion of the dividends received by one corporation from another is excluded from taxable income. As we mention in our discussion of holding companies, the size of the dividend exclusion depends on degree of ownership. In general, we assume that corporations that receive dividends have only nominal ownership in the dividend-paying corporations, so 30 percent of the dividends received are taxable. The purpose of the dividend exclusion is to lessen the impact of triple taxation. Triple taxation occurs when the earnings of firm A are taxed; then dividends are paid to firm B, which must pay partial taxes on the income; and then firm B pays out dividends to individual C, who must pay personal taxes on the income.

To see the effect of the dividend exclusion, consider the following example. A corporation that earns \$500,000 and pays a 21 percent federal tax plus 9 percent state tax would have an *effective tax rate* of only  $0.30 \times 0.30 = 0.09 = 9.0\%$  on its dividend income. If this firm had \$10,000 in pretax dividend income, its after-tax dividend income would be \$9,100:



$$\begin{aligned}
\text{After-tax income} &= \text{Pretax income} - \text{Taxes} \\
&= \text{Pretax income} - (\text{Pretax income} \times \text{Effective tax rate}) \\
&= \text{Pretax income} \times (1 - \text{Effective tax rate}) \\
&= \$10,000 \times \{1 - [0.30 \times (0.21 + 0.09)]\} \\
&= \$10,000 \times (1 - 0.09) = \$10,000 \times 0.91 = \$9,100.
\end{aligned}$$

If a taxable corporation has surplus funds that can be temporarily invested in securities, the tax laws favor investment in stocks (which pay dividends) rather than in bonds (which pay interest). For example, suppose Midwest Home Health Services has \$100,000 to invest temporarily, and it can buy either bonds that pay interest of \$8,000 per year or preferred stock that pays dividends of \$7,000 per year. Because Midwest is taxed at 30 percent, its tax on the interest if it bought the bonds would be  $0.30 \times \$8,000 = \$2,400$ , and its after-tax income would be  $\$8,000 - \$2,400 = \$5,600$ . If it bought the preferred stock, its tax would be  $(0.21 + 0.09) \times (0.30 \times \$7,000) = \$630$ , and its after-tax income would be  $\$5,600$ . Other factors might lead Midwest to invest in the bonds or other securities, but the tax laws favor stock investments when the investor is a corporation.

### Interest and Dividend Income Received by a Not-for-Profit Corporation

Interest income and dividend income received from securities purchased by not-for-profit corporations with **temporary surplus** cash are not taxable. However, note that not-for-profit firms are prohibited from issuing tax-exempt bonds for the sole purpose of reinvesting the proceeds in other securities, although they can temporarily invest the proceeds from a tax-exempt issue in taxable securities while waiting for the planned expenditures to occur. If not-for-profit firms could engage in such tax arbitrage operations, they could also, in theory, generate an unlimited amount of income by issuing tax-exempt bonds for the sole purpose of investing in higher-yield securities that are taxable to most investors. For example, a not-for-profit firm might sell tax-exempt bonds with an interest rate of 5 percent and use the proceeds to invest in US Treasury bonds that yield 6 percent.

### Interest and Dividends Paid by an Investor-Owned Corporation

A firm's assets can be financed with either debt or equity capital. If it uses debt financing, it must pay interest on that debt, whereas if an investor-owned firm uses equity financing, normally it will pay dividends to its stockholders. The interest paid by a taxable corporation is deducted from the corporation's operating income to obtain its taxable income, but dividends are not deductible. Put another way, dividends are paid from after-tax income. Therefore, Midwest, which is taxed at 30 percent, needs only \$1 of pretax earnings to

pay \$1 of interest expense, but it needs \$1.43 of pretax earnings to pay \$1 in dividends:

$$\begin{aligned}\text{Dollars of pretax income required} &= \frac{\$1}{(1 - \text{Tax rate})} \\ &= \frac{\$1}{0.70} = \$1.43.\end{aligned}$$

The fact that interest is a tax-deductible expense, while dividends are not, has a profound impact on the way taxable businesses are financed. The US tax system favors debt financing over equity financing. This point is discussed in detail in chapter 10.

### Corporate Capital Gains

At one time, corporate long-term capital gains were taxed at lower rates than were ordinary income. However, under current law, corporate capital gains are taxed at the same rate as operating income.

### Corporate Loss Carryback and Carryforward

Corporate operating losses that occur in any year can be used to offset taxable income in other years. In general, such losses can be carried back to each of the preceding two years and forward for the next 20 years. For example, an operating loss by Midwest Home Health Services in 2019 would be applied first to 2017. If Midwest had taxable income in 2017 and hence paid taxes, the loss would be used to reduce 2017's taxable income, so the firm would receive a refund on taxes paid for that year. If the 2019 loss exceeded the taxable income for 2017, the remainder would be applied to reduce taxable income for 2018. If Midwest did not have to use the 2019 loss to offset 2018 or 2017 profits, the loss for 2019 would be carried forward to 2020, 2021, and so on—up to 2039. Note that losses that are carried back provide immediate tax benefits, but the tax benefits of losses that are carried forward are delayed until some time in the future. The tax benefits of losses that cannot be used to offset taxable income in 20 years or fewer are lost to the firm. The purpose of this provision in the tax laws is to avoid penalizing corporations whose incomes fluctuate substantially from year to year.

### Consolidated Tax Returns

As we mention later, if a corporation owns 80 percent or more of another corporation's stock, it can aggregate income and expenses and file a single consolidated tax return. Thus, the losses of one firm can be used to offset the profits of another. No business wants to incur losses (it can go broke losing \$1 to save 30 cents in taxes), but tax offsets do make it more feasible for

large multicompany businesses to undertake risky new ventures that might suffer start-up losses.

### SELF-TEST QUESTIONS

1. Briefly explain the individual (personal) and corporate income tax systems.
2. What is the difference in individual tax treatment between interest and dividend income?
3. What are capital gains and losses, and how are they differentiated from ordinary income?
4. What is unrelated business income?
5. How do federal income taxes treat dividends received by corporations compared to dividends received by individuals?
6. With regard to investor-owned businesses, do tax laws favor financing by debt or by equity? Explain your answer.

## Depreciation

A fundamental accounting concept is the *matching principle*, which requires expenses to be recognized in the same period as the related revenue is earned. Suppose Upside Family Practice buys an X-ray machine for \$100,000 and uses it for ten years, after which time the machine becomes obsolete. The cost of the services provided by the machine must include a charge for the cost of the machine; this charge is called *depreciation*. Depreciation reduces profit (net income) as calculated by accountants, so the higher a business's depreciation charge, the lower its reported profit. However, depreciation is a noncash charge—it is an allocation of previous cash expenditures—so higher depreciation expense does not reduce cash flow. In fact, higher depreciation increases cash flow for taxable businesses because the greater a business's depreciation expense in any year, the lower its tax bill.

To see more clearly how depreciation expense affects cash flow, consider exhibit 1.2. Here, we examine the impact of depreciation on two investor-owned hospitals that are alike in all regards except for the amount of depreciation expense each hospital has. Hospital A has \$100,000 of depreciation expense, holds \$200,000 of taxable income, pays \$80,000 in taxes, and has an after-tax income of \$120,000. Hospital B has \$200,000 of depreciation expense, holds \$100,000 of taxable income, pays \$40,000 in taxes, and has an after-tax income of \$60,000.

Depreciation is a noncash expense, whereas we assume that all other entries in exhibit 1.2 represent actual cash flows. To determine each hospital's

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**EXHIBIT 1.2**The Effect of  
Depreciation on  
Cash Flow

	<i>Hospital A</i>	<i>Hospital B</i>
Revenue	\$1,000,000	\$1,000,000
Costs except depreciation	700,000	700,000
Depreciation	<u>100,000</u>	<u>200,000</u>
Taxable income	\$ 200,000	\$ 100,000
Federal plus state taxes (assumed to be 30%)	<u>60,000</u>	<u>30,000</u>
After-tax income	<u>\$ 140,000</u>	<u>\$ 70,000</u>
Add back depreciation	<u>100,000</u>	<u>200,000</u>
Net cash flow	<u>\$ 240,000</u>	<u>\$ 270,000</u>

cash flow, depreciation must be added back to after-tax income. When this is done, hospital B, with the larger depreciation expense, has the larger cash flow. In fact, hospital B's cash flow is larger by  $\$270,000 - \$240,000 = \$30,000$ , which represents the tax savings, or *tax shield*, on its additional \$100,000 in depreciation expense:

$$\text{Tax shield} = \text{Tax rate} \times \text{Depreciation expense} = 0.30 \times \$100,000 = \$30,000.$$

Because a business's financial condition depends on the actual amount of cash it earns, as opposed to some arbitrarily determined accounting profit, owners and managers should be more concerned with cash flow than with reported profit. Note that if the hospitals in exhibit 1.2 were **not-for-profit hospitals**, taxes would be zero for both, and they would have \$300,000 in net cash flow. However, hospital A would report \$200,000 in earnings, while hospital B would report \$100,000 in earnings.

For-profit businesses generally calculate depreciation one way for tax returns and another way when reporting income on their financial statements. For *tax depreciation*, businesses must follow the depreciation guidelines laid down by tax laws, but for other purposes, businesses usually use *accounting*, or *book*, *depreciation guidelines*.

The most common method of determining **book depreciation** is the *straight-line method*. To apply the straight-line method, (1) start with the *capitalized cost* of the asset (generally, price plus shipping plus installation); (2) subtract the asset's *salvage value*, which, for book purposes, is the estimated value of the asset at the end of its useful life; and (3) divide the net amount by the asset's useful life. For example, consider Upside's X-ray

machine, which cost \$100,000 and has a ten-year useful life. Furthermore, assume that it cost \$10,000 to deliver and install the machine and that its estimated salvage value after ten years of use is \$5,000. In this case, the capitalized cost, or *basis*, of the machine is  $\$100,000 + \$10,000 = \$110,000$ , and the annual depreciation expense is  $(\$110,000 - \$5,000) \div 10 = \$10,500$ . Thus, the depreciation expense reported on Upside's income statement would include a \$10,500 charge for wear and tear on the X-ray machine. The name "straight line" comes from the fact that the annual depreciation under this method is constant. The *book value* of the asset, which is the cost minus the accumulated depreciation to date, declines evenly (follows a straight line) over time.

For **tax purposes**, depreciation is calculated according to the *Modified Accelerated Cost Recovery System (MACRS)*. MACRS spells out two procedures for calculating tax depreciation: (1) the *standard (accelerated) method*, which is faster than the straight-line method because it allows businesses to depreciate assets on an accelerated basis, and (2) an *alternative straight-line method*, which is optional for some assets but mandatory for others. Because taxable businesses want to gain the tax shields from depreciation as quickly as possible, they normally use the standard (accelerated) MACRS method when it is allowed.

The calculation of MACRS depreciation uses three components: (1) the depreciable basis of the asset, which is the total amount to be depreciated; (2) a recovery period that defines the length of time over which the asset is depreciated; and (3) a set of allowance percentages for each recovery period, which, when multiplied by the basis, gives each year's depreciation expense.

### **Depreciable Basis**

The *depreciable basis* is a critical element of the depreciation calculation because each year's recovery allowance depends on the asset's depreciable basis and its recovery period. The depreciable basis under MACRS generally is equal to the purchase price of the asset plus any transportation and installation costs. Unlike the calculation of book depreciation, the basis for MACRS depreciation is **not** adjusted for salvage value regardless of whether the standard accelerated method or alternative straight-line method is used.

### **Modified Accelerated Cost Recovery System Recovery Periods**

Exhibit 1.3 describes the general types of property that fit into each *recovery period*. Property in the 27.5- and 39-year classes (real estate) must be depreciated using the alternate straight-line method, but 3-, 5-, 7-, and 10-year property (personal property) can be depreciated by either the standard accelerated method or the alternative straight-line method.

**EXHIBIT 1.3**

MACRS Recovery Periods	Period	Type of Property
	3 years	Tractor units and certain equipment used in research
	5 years	Automobiles, trucks, computers, and certain special manufacturing tools
	7 years	Most equipment, office furniture, and fixtures
	10 years	Certain longer-lived types of equipment
	27.5 years	Residential rental property, such as apartment buildings
	39 years	All nonresidential property, such as commercial and industrial buildings

*Note:* Land cannot be depreciated.

### **Modified Accelerated Cost Recovery System Recovery Allowances**

Once the property is placed in the correct recovery period, the yearly recovery allowance, or depreciation expense, is determined by multiplying the asset's depreciable basis by the appropriate recovery percentage shown in exhibit 1.4. The calculation is discussed in the following sections.

Under MACRS, it is generally assumed that an asset is placed in service in the middle of the first year. Thus, for three-year recovery period property, depreciation begins in the middle of the year the asset is placed in service and ends three years later. The effect of the *half-year convention* is to extend the recovery period one more year, so three-year property is depreciated over four calendar years, five-year property is depreciated over six calendar years, and so on. This convention is incorporated in the values listed in exhibit 1.4.

### **Modified Accelerated Cost Recovery System Depreciation Illustration**

Assume that the \$100,000 X-ray machine is purchased by Upside Family Practice and placed in service in 2019. Furthermore, assume that Upside paid another \$10,000 to ship and install the machine and that the machine falls into the MACRS 5-year class. Because salvage value does not play a part in tax depreciation, and because delivery and installation charges are included (are capitalized) in the basis rather than expensed in the year incurred, the machine's depreciable basis is \$110,000.

Each year's recovery allowance (tax depreciation expense) is determined by multiplying the depreciable basis by the applicable recovery percentage. Thus, the depreciation expense for 2019 is  $0.20 \times \$110,000 = \$22,000$ , and for 2020 it is  $0.32 \times \$110,000 = \$35,200$ . Similarly, the

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**EXHIBIT 1.4**  
**MACRS**  
**Recovery**  
**Allowances**

Year	<i>Recovery Period</i>			
	<i>Three Years (%)</i>	<i>Five Years (%)</i>	<i>Seven Years (%)</i>	<i>Ten Years (%)</i>
1	33	20	14	10
2	45	32	25	18
3	15	19	17	14
4	7	12	13	12
5		11	9	9
6		6	9	7
7			9	7
8			4	7
9				7
10				6
11	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>

*Note:* The tax tables carry the recovery allowances to two decimal places, but for ease of illustration, we will use the rounded allowances shown in this table throughout this text.

depreciation expense is \$20,900 for 2021, \$13,200 for 2022, \$12,100 for 2023, and \$6,600 for 2024. The total depreciation expense over the six-year recovery period is \$110,000, which equals the depreciable basis of the X-ray machine. Note that the depreciation expense reported for tax purposes each year is different from the book depreciation reported on Upside's income statement, which we calculated earlier.

The *book value* of a depreciable asset at any point in time is its depreciable basis minus the depreciation accumulated to date. Thus, at the end of 2019, the X-ray machine's tax book value is  $\$110,000 - \$22,000 = \$88,000$ ; at the end of 2020, the machine's tax book value is  $\$110,000 - \$22,000 - \$35,200 = \$52,800$  (or  $\$88,000 - \$35,200 = \$52,800$ ); and so on. Again, note that the book value for accounting purposes is different from the book value for tax purposes.

According to the IRS, the value of a depreciable asset at any point in time is its tax book value. If a business sells an asset for more than its tax book value, the implication is that the firm took too much depreciation, and the IRS will want to recover the excess tax benefit. Conversely, if an asset is sold for less than its book value, the implication is that the firm did not take sufficient depreciation, and it can take additional depreciation on the sale of the asset. For example, suppose Upside sells the X-ray machine in early 2021 for \$60,000. Because the machine's tax book value is \$52,800 at the time,

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$\$60,000 - \$52,800 = \$7,200$  is added to Upside's operating income and taxed. Conversely, if Upside received only  $\$40,000$  for the machine, it would be able to deduct  $\$52,800 - \$40,000 = \$12,800$  from taxable income and hence reduce its taxes in 2021.

### SELF-TEST QUESTIONS

1. Briefly describe the MACRS tax depreciation system.
2. What is the effect of the sale of a depreciable asset on a firm's taxes?

## Health Reform and Financial Management

The *Patient Protection and Affordable Care Act (ACA)* of 2010 has been called the most significant healthcare legislation since Medicare and Medicaid in 1965. The new law was enacted on March 23, 2010, and was designed to provide all US citizens and legal residents with access to affordable health insurance, to reduce healthcare costs, and to improve care and quality. This legislation puts in place comprehensive health insurance changes to expand coverage, hold insurance companies accountable, lower costs, guarantee more choices, and enhance the quality of care—all of which are intended to transform and make the US healthcare system more sustainable.

The ACA has numerous major aims. However, the central goal is to expand healthcare coverage through shared responsibility between government, individuals, and employers. Employers are required to offer direct coverage to employees or indirect coverage through the provision of tax credits. Public programs such as Medicare and Medicaid have expanded eligibility requirements to cover qualified individuals and families with incomes less than 133 percent of the federal poverty level. These changes are intended to reduce the number of uninsured by half and provide coverage for about 94 percent of Americans. In addition, these reforms are intended to reduce healthcare expenditures by \$100 billion in the next ten years by controlling overspending, waste, fraud, and abuse.

Some of the benefits of the ACA include free preventive care, no preexisting-condition limitation, prescription discounts for seniors, protection against healthcare fraud, small-business tax credits, extended coverage for young adults, lifetime coverage on most benefits, prevention of coverage cancellation, transparency on increases in insurance premium rates, and patient selection of primary care doctors from network.



The 2016 election brought about the possibility of further change in health reform. This was indicated by the passage of the American Healthcare Act of 2017 (AHCA) in the House. The major impacts of this reform are intended to be as follows:

- Change the income tax credit to an age-based rate instead of an income-adjusted rate
- Enable states to seek waivers for essential health benefits and out-of-pocket limits
- Remove the mandate that employers provide health insurance
- Allow insurers to charge older adults more than under the ACA
- Make health savings accounts more lucrative
- Create a state-stabilization fund to allow states to help control the cost of insurance
- Change Medicaid funding to a block grant or per capita model beginning in 2020

The major implications of health reform for health insurance and provider payments are addressed in chapters 2 and 3, respectively. The major implications of health reform for the institutional setting and the delivery of health-care services are discussed in this section.

### **Accountable Care Organizations**

*Accountable care organizations (ACOs)*, one of the cornerstones of health reform, integrate local physicians with other member of the healthcare community and reward them for controlling costs and improving quality. While ACOs are not radically different from other attempts to improve the delivery of healthcare services, their uniqueness lies in the flexibility of their structures and payment methodologies and their ability to assume risk while meeting quality targets. Similar to some managed care organizations and integrated healthcare systems such as the Mayo Clinic, ACOs are responsible for the health outcomes of a specific population and are tasked with collaboratively improving care to reach cost and quality targets set by Medicare. To help achieve cost control and quality goals, ACOs can distribute bonuses when targets are met and impose penalties when targets are missed.

One feature of health reform is a shared savings program in which Medicare pays a fixed (global) payment to ACOs that covers the full cost of care of an entire population. In this program, cost and quality targets are established. Any cost savings (costs that are below target) are shared between Medicare and the ACO, as long as the ACO also meets its quality targets. If

an ACO is unable to save money, it could be liable for the costs of the investments made to improve care; it also may have to pay a penalty if it does not meet performance and savings benchmarks.

To be effective, an ACO should include, at a minimum, primary care physicians, specialists, and a hospital, although some ACOs are being established solely by physician groups. For example, 30 percent of the Medicare ACOs that exist today are run by physicians and do not include a hospital partner.

An ACO can take on many forms, such as the following:

- An integrated delivery system that has common ownership of hospitals and physician practices and has electronic medical records (EMRs), team-based care, and resources to support cost-effective care
- A multispecialty group practice that has strong affiliations with hospitals and contracts with multiple health plans
- A physician–hospital organization that is a subset of a hospital’s medical staff and that functions like a multispecialty group practice
- An independent practice association comprising individual physician practices that come together to contract with health plans
- A virtual physician organization that sometimes includes physicians in rural areas

ACOs should have managerial systems in place to administer payments, set benchmarks, measure performance, and distribute shared savings. A variety of federal, regional, state, and academic hospital initiatives are investigating how best to implement ACOs. Although the concept shows potential, many legal and managerial hurdles must be overcome for ACOs to live up to their initial promise.

### ***Sector Consolidation***

Health reform is driving the consolidation of healthcare organizations. The ACA has accelerated health systems’ acquisition of hospitals and hospitals’ acquisition of physician practices, and that is likely to continue over the next several years. With the greater focus on clinical integration, quality patient care, and changing reimbursement, healthcare organizations are seeking to restructure healthcare delivery to operate more efficiently and improve coordination between patients and providers. Healthcare organizations are looking to gain a competitive advantage from combining assets, staff, and resources. Consolidation not only provides organizations access to capital, economies of scale, negotiating power with payers, and market share but may also lead to improvement in patient care by making it easier to share patient

information, adhere to clinical practice guidelines (thus reducing variations in care), and access high-quality specialist physicians.

### ***Population Health***

Health reform is moving providers toward the population health management approach. The goal of population health management is to shift from focusing on treating illness to maintaining or improving health to prevent costly avoidable illness and unnecessary care. This approach is supported by new reimbursement models such as capitation, payment bundling, and shared savings. Instead of just providing preventive and chronic care when patients come in for acute problems, practices track and monitor the health status of the entire patient population, requiring greater use of health information technology (IT). The key to success in population health management will be greater awareness of the health status of the population and proactive intervention to reduce use of the health system and to achieve the best population outcomes.

### ***Clinical Integration***

A fundamental component to achieving the goals of health reform is clinical integration. Clinical integration aims to coordinate patient care across conditions, providers, settings, and time to achieve care that is safe, timely, effective, efficient, and patient focused. New payment models and advances in health information systems are used to facilitate the transition to the clinical integration model and to manage the continuum of care for patients. Provider payments are tied to results for quality, access, and efficiency with the objective of better coordination between hospitals and physicians. Health IT aims to capture patient information and make it accessible to authorized providers at the point of care. Complete patient information facilitates optimal treatment strategies and reduces the chance of medication errors and conflicting treatment plans. There will be requirements for new and more comprehensive policies and procedures that protect patient privacy and that guarantee secure data that are transferred between patients, caregivers, and organizations.

### ***Technology***

Technology has a major impact on the delivery and financial management of healthcare, as shown by the adoption of EMR systems starting in the 2000s; however, healthcare as a field is slow to adopt new technology because of privacy and safety concerns. A new technology, blockchain, has the potential to drastically change the way healthcare providers protect their data and communicate with each other. Blockchain is a system of securing data by linking

them together in chains and causing a change in one part of the chain to update the rest of the chain. While this technology has the potential to revolutionize how electronic health data are shared, there are still some concerns about ensuring the privacy of the chains.

While electronic health data are still hard to share between providers, increasing emphasis on collaboration between clinicians and on quality patient care are making it necessary for healthcare organizations to invest in integrated information systems technology to collect large quantities of patient and provider data (so-called *big data*). Data analytic systems are capable of analyzing large amounts of patient data to better understand clinical processes and to identify problems and opportunities for improvement in the provision of healthcare services. Complex new IT will facilitate analysis of care coordination, patient safety, and utilization.

### **Staffing Shortages**

Health reform has increased the number of patients who can access the healthcare system. Healthcare organizations have seen an influx of formerly uninsured patients now seeking care because they have insurance or better coverage. As a result, the demand for healthcare professionals—especially physicians, nurse practitioners, and physician assistants—will likely increase.

Health reform is also driving changes in hospital staffing by emphasizing prevention and value-based care, creating demand for primary care providers, emergency physicians, clinical pharmacists, social workers and care coordinators, and health IT and data specialists. Some professional and industry associations are predicting that current shortages of various healthcare staff will worsen in the face of this growing demand. Several strategies may increase the supply of health professionals (including primary care physicians); scholarships, flexible loan repayment programs, and debt forgiveness have been identified as ways to increase the number of providers. However, many healthcare organizations likely will face great competition for some healthcare staff.

### **SELF-TEST QUESTIONS**

1. Briefly describe the major changes under the ACA.
2. What are the major implications of health reform for the financial management of healthcare organizations?

## Chapter Key Concepts

This chapter presented some background information on business organization, ownership, goals, and taxes. Here are its key concepts:

- Financial management is a *decision science*, so the primary objective of this text is to provide students and practicing healthcare managers with the theory, concepts, and tools necessary to make effective decisions. The text is structured to support this goal.
- The *primary role of financial management* is to plan for, acquire, and use funds to maximize the efficiency and value of an enterprise.
- Financial management functions include (1) *evaluation and planning*, (2) *long-term investment decisions*, (3) *financing decisions*, (4) *working capital management*, (5) *contract management*, and (6) *financial risk management*.
- Although each form of organization has unique advantages and disadvantages, most large organizations and all not-for-profit entities are organized as *corporations*.
- From a financial management perspective, the goal of investor-owned firms is *shareholder wealth maximization*, which translates to stock price maximization. For not-for-profit firms, a reasonable goal for financial management is to *ensure the organization can fulfill its mission*, which translates to *maintaining the organization's financial viability*.
- The value of any income stream depends on the amount of *usable, or after-tax, income*. Thus, tax laws play an important role in financial management decisions.
- Separate tax laws apply to *personal* income and *corporate* income.
- For the remainder of this book, calculations will assume that corporations face a *combined federal and state income tax of 30 percent*.
- Fixed assets are *depreciated* over time to reflect the decline in their values. Depreciation is a deductible, but noncash, expense. Thus, for a taxable entity, the higher its depreciation, the lower its taxes and hence the higher its cash flow, with other things held constant.

(continued)

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(continued from previous page)

- Current laws specify that the *Modified Accelerated Cost Recovery System (MACRS)* be used to depreciate assets for tax purposes.
- The *Patient Protection and Affordable Care Act (ACA)* of 2010 aims to provide all US citizens and legal residents with access to affordable health insurance options and to transform the healthcare system to reduce costs.
- *Accountable care organizations (ACOs)* are one of the methods used to reduce healthcare costs. This type of organization integrates physicians and other healthcare providers with the goal of controlling costs and improving quality.

Although this chapter provides a great deal of background information relevant to healthcare financial management and the changes associated with health reform, it is necessary for healthcare management professionals to have a more thorough understanding of the reimbursement system. This important topic is covered in chapter 2.

## Chapter Models, Problems, and Minicases

This chapter does not have an accompanying spreadsheet model. However, the chapter has five problems in spreadsheet format that focus on tax issues.

The problem spreadsheets can be accessed on this book's companion website at [ache.org/HAP/PinkSong8e](http://ache.org/HAP/PinkSong8e).

## References

- American College of Healthcare Executives. 2019. "Survey: Healthcare Finance, Governmental Mandates, Personnel Shortages Cited by CEOs as Top Issues Confronting Hospitals in 2018." [www.ache.org/about-ache/news-and-awards/news-releases/top-issues-confronting-hospitals-in-2018](http://www.ache.org/about-ache/news-and-awards/news-releases/top-issues-confronting-hospitals-in-2018).
- Tax-Rates.org. 2019. "Corporate Income Tax by State." Accessed April 23. [www.tax-rates.org/taxtables/corporate-income-tax-by-state](http://www.tax-rates.org/taxtables/corporate-income-tax-by-state).

## Selected Bibliography

- Ackerman, K., W. E. Kibler Jr., G. D. Steele Jr., R. L. Van Horn, and K. Swartz. 2005. "Executive Compensation in Nonprofit Health Care Organizations." *Inquiry* 42 (2): 110–17.
- Arduino, K. 2018. "Healthcare Capital Markets Outlook: Short-Term Opportunities Versus Long-Term Uncertainty." *Healthcare Financial Management* 72 (5): 36–43.
- Bell, C. 2018. "Tax Reform Implications for Healthcare Organizations." *Healthcare Financial Management* 72 (3): 26–28.
- Fields, C. 2018. "Optimizing physician referrals a key to successful population health management." *Healthcare Financial Management* 72 (7): 38–43.
- Hush, T. 2018. "How Provider-Led ACOs Can Generate Long-Term Savings." *Healthcare Financial Management* 72 (5): 78–79.
- Lalangas, E., D. Kroll, and A. Carlson. 2018. "The Tax Cuts and Jobs Act Takeaways for Healthcare Finance Leaders." *Healthcare Financial Management* 72 (4): 28–31.
- Mayeda, E., and A. Gerland. 2018. "Using Analytics to Design Provider Networks for Value-Based Contracts." *Healthcare Financial Management* 72 (3): 36–43.
- Mosrie, N. C. 2018. "Healthcare Transformational Landscape." *Healthcare Financial Management* 72 (6): 30–33.

## Selected Websites

The following websites pertain to the content of this chapter:

- For more information on taxes, go to [www.taxfoundation.org](http://www.taxfoundation.org).
- Two of the largest integrated health systems in the United States are Kaiser Permanente and the Henry Ford Health System. To gain a better idea of what constitutes such systems, visit [www.kaiserpermanente.org](http://www.kaiserpermanente.org) or [www.henryfordhealth.org](http://www.henryfordhealth.org).
- For more information on the Affordable Care Act and accountable care organizations, go to <http://accountablecaredoctors.org/>.

## Notes

1. Not-for-profit organizations are also called *nonprofit* organizations, but the former designation is becoming dominant in the health services sector. Investor-owned businesses are sometimes called *proprietary*, or *for-profit*, businesses.

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2. There is a set of questions for each case in the online Instructor's Resources that accompany the casebook. Instructors who want to provide more guidance to students than that given in the case itself can distribute these questions to their students.
3. Tax rates are constantly changing, so it is important to ensure that the tax rates used for real-world financial decision making are current.