BRIGHAM HOUSTON

FUNDAMENTALS OF FINANCIAL MANAGEMENT

CONCISE
8TH EDITION

FREQUENTLY USED SYMBOLS/ABBREVIATIONS

ACP	Average collection period
ADR	American depository receipt
AFN	Additional funds needed
AMT	Alternative minimum tax
APR	Annual percentage rate
b	Beta coefficient, a measure of an asset's riskiness
b_L	Levered beta
b_U	Unlevered beta
BEP	Basic earning power
BVPS	Book value per share
CAPEX	Capital expenditures
CAPM	Capital Asset Pricing Model
CCC	Cash conversion cycle
CF	Cash flow; CF_t is the cash flow in Period t
CV	Coefficient of variation
D_p	Dividend of preferred stock
D_t	Dividend in Period t
DCF	Discounted cash flow
D/E	Debt-to-equity ratio
DEP	Depreciation
D_1/P_0	Expected dividend yield
DPS	Dividends per share
DRIP	Dividend reinvestment plan
DRP	Default risk premium
DSO	Days sales outstanding
EAA	Equivalent annual annuity
EAR	Effective annual rate, EFF%
EBIT	Earnings before interest and taxes; operating income
EBITDA	Earnings before interest, taxes, depreciation, and amortization
EPS	Earnings per share
EVA	Economic value added
F	(1) Fixed operating costs
	(2) Flotation cost
FCF	Free cash flow
FV_N	Future value for Year N
FVA_N	Future value of an annuity for N years
g	Growth rate in earnings, dividends, and stock prices
GAAP	U.S. Generally Accepted Accounting Standards
HV_N	Firm's horizon value at $t = N$
I	Interest rate; also referred to as r
IFRS	International Financial Reporting Standards
I_{PER}	Periodic interest rate
I/YR	Interest rate key on some calculators
INT	Interest payment in dollars
IP	Inflation premium
IPO	Initial public offering
IRR	Internal rate of return
LIBOR	London Interbank Offer Rate
LP	Liquidity premium
M	Maturity value of a bond
M/B	Market-to-book ratio
MIRR	Modified internal rate of return
MRP	Maturity risk premium
MVA	Market value added
N	Calculator key denoting number of periods
NOPAT	Net operating profit after taxes, EBIT(1 − T)
NOWC	Net operating working capital
NPV	Net present value
P	Sales price per unit of product sold
P_f	Price of good in foreign country
P_h	Price of good in home country
P_t	Price of a share of stock in Period t; P_0 = price of the stock today
P/E	Price-to-earnings ratio

PMT	Payment of an annuity
PPP	Purchasing power parity
PV	Present value
PVA_N	Present value of an annuity for N years
Q	Quantity produced or sold
Q_{BE}	Break-even quantity
r	(1) A percentage discount rate, or cost of capital; also referred to as I
	(2) Nominal risk-adjusted required rate of return
$\bar{r}$	"r bar," historic, or realized, rate of return
$\hat{r}$	"r hat," an expected rate of return
r^*	Real risk-free rate of return
r_d	Before-tax cost of debt
$r_d(1 - T)$	After-tax cost of debt
r_e	Cost of new common stock (external equity)
r_f	Interest rate in foreign country
r_h	Interest rate in home country
r_i	Required return for an individual firm or security
r_M	Return on "the market," or on an "average" stock
r_{NOM}	Nominal rate of interest; also referred to as I_{NOM}
r_p	(1) Cost of preferred stock
	(2) Portfolio's return
r_{RF}	Rate of return on a risk-free security, equal to $r^* + IP$
r_s	(1) Cost of retained earnings
	(2) Required return on common stock
ρ	Correlation coefficient; also denoted as R when using historical data
ROA	Return on assets
ROE	Return on equity
ROIC	Return on invested capital
RP	Risk premium
RP_M	Market risk premium
S	(1) Sales
	(2) Estimated standard deviation for sample data
SML	Security Market Line
Σ	Summation sign
σ	Standard deviation
t	Time period
T	Marginal income tax rate
TIE	Times interest earned
V	(1) Variable cost per unit
	(2) Current value of a call option
V_B	Bond value
V_p	Value of preferred stock
VC	Total variable costs
WACC	Weighted average cost of capital
w_c	Percentage of common stock in capital structure
w_d	Percentage of debt in capital structure
w_p	Percentage of preferred stock in capital structure
YTC	Yield to call
YTM	Yield to maturity

Fundamentals of Financial Management

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**Concise
Eighth Edition**

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PREFACE

When the first edition of *Fundamentals* was published 36 years ago, we wanted to provide an introductory text that students would find interesting and easy to understand. *Fundamentals* immediately became the leading undergraduate finance text, and it has maintained that position ever since. However, over the years as *Fundamentals* got larger and larger, we heard more and more often that it was difficult to cover the entire book in a single term. These concerns led us to create *Fundamentals of Financial Management Concise* 18 years ago. When designing *Concise,* we had in mind those instructors who wanted to retain *Fundamentals'* depth and level but eliminate some less essential topics. As is the case with *Fundamentals,* our continuing goal is to produce a book and ancillary package that sets a new standard for finance textbooks.

Finance is an exciting and continually changing field. Since the last edition, many important changes have occurred within the global financial environment. In the midst of this changing environment, it is certainly an interesting time to be a finance student. In this latest edition, we highlight and analyze the events leading to these changes from a financial perspective. While the financial environment is ever-changing, the tried-and-true principles that the book has emphasized over the past three decades are now more important than ever.

STRUCTURE OF THE BOOK

Our target audience is a student taking his or her first, and perhaps only, finance course. Some of these students will decide to major in finance and go on to take courses in investments, money and capital markets, and advanced corporate finance. Others will choose marketing, management, or some other nonfinance business major. Still others will major in areas other than business and take finance plus a few other business courses to gain information that will help them in law, real estate, or other fields.

Our challenge has been to provide a book that serves all of these audiences well. We concluded that we should focus on the core principles of finance, including the basic topics of time value of money, risk analysis, and valuation. Moreover, we concluded that we should address these topics from two points of view: (1) that of an investor who is seeking to make intelligent investment choices and (2) that of a business manager trying to maximize the value of his or her firm's stock. Both investors and managers need to understand the same set of principles, so the core topics are important to students regardless of what they choose to do after they finish the course.

In planning the book's structure, we first listed the core topics in finance that are important to virtually everyone. Included were an overview of financial markets, methods used to estimate the cash flows that determine asset values, the time value of money, the determinants of interest rates, the basics of risk analysis, and the basics of bond and stock valuation procedures. We cover these core topics in the first nine chapters. Next, because most students in the course will probably work for a business firm, we want to show them how the core ideas are implemented in practice. Therefore, we go on to discuss cost of capital, capital budgeting, capital structure, dividend policy, working capital management, financial forecasting, and international operations.

Nonfinance majors sometimes wonder why they need to learn finance. As we structured the book, it quickly becomes obvious to everyone why they need to understand time value, risk, markets, and valuation. Virtually all students enrolled in the basic course expect at some point to have money to invest, and they quickly realize that the knowledge gained from Chapters 1 through 9 will help them make better investment decisions. Moreover, students who plan to go into the business world soon realize that their own success requires that their firms be successful, and the topics covered in Chapters 10 through 17 will be helpful here. For example, good capital budgeting decisions require accurate forecasts from people in sales, marketing, production, and human resources, and non-financial people need to understand how their actions affect the firm's profits and future performance.

Organization of the Chapters: A Valuation Focus

As we discuss in Chapter 1, in an enterprise system such as that of the United States, the primary goal of financial management is to maximize their firms' values. At the same time, we stress that managers should not do "whatever it takes" to increase the firm's stock price. Managers have a responsibility to behave ethically, and when striving to maximize value, they must abide by constraints such as not polluting the environment, not engaging in unfair labor practices, not breaking the antitrust laws, and the like. In Chapter 1, we discuss the concept of valuation, explain how it depends on future cash flows and risk, and show why value maximization is good for society in general. This valuation theme runs throughout the text.

Stock and bond values are determined in the financial markets, so an understanding of those markets is essential to anyone involved with finance. Therefore, Chapter 2 covers the major types of financial markets, the rates of return that investors have historically earned on different types of securities, and the risks inherent in these securities. This information is important for anyone working in finance, and it is also important for anyone who has or hopes to own any financial assets. In this chapter, we also highlight how this environment has changed in the aftermath of the financial crisis.

Asset values depend in a fundamental way on earnings and cash flows as reported in the accounting statements. Therefore, we review those statements in Chapter 3 and then, in Chapter 4, show how accounting data can be analyzed and used to measure how well a company has operated in the past and how well it is likely to perform in the future.

Chapter 5 covers the time value of money (TVM), perhaps the most fundamental concept in finance. The basic valuation model, which ties together cash flows, risk, and interest rates, is based on TVM concepts, and these concepts are used throughout the remainder of the book. Therefore, students should allocate plenty of time to studying Chapter 5.

Chapter 6 deals with interest rates, a key determinant of asset values. We discuss how interest rates are affected by risk, inflation, liquidity, the supply of and demand for capital in the economy, and the actions of the Federal Reserve. The discussion of interest rates leads directly to the topics of bonds in Chapter 7 and stocks in Chapters 8 and 9, where we show how these securities (and all other financial assets) are valued using the basic TVM model.

The background material provided in Chapters 1 through 9 is essential to both investors and corporate managers. These are "Finance" topics, not "Business" or "Corporate Finance" topics as those terms are commonly used. Thus, Chapters 1 through 9 concentrate on the concepts and models used to establish values, whereas Chapters 10 through 17 focus on specific actions managers can take to maximize their firms' values.

Because most business students don't plan to specialize in finance, they might think the "business finance" chapters are not particularly relevant to them. This is most decidedly not true, and in the later chapters we show that all really important business decisions involve every one of a firm's departments—marketing, accounting, production, and so on. Thus, while a topic such as capital budgeting can be thought of as a financial issue, marketing people provide inputs on likely unit sales and sales prices, manufacturing people provide inputs on costs, and so on. Moreover, capital budgeting decisions influence the size of the firm, its products, its profits, and its stock price, and those factors affect all of the firm's employees, from the CEO to the mail room staff.

Innovations for the Eighth Edition

A great deal has happened in the financial markets and corporate America since the 7th edition was published. In this 8th edition, we have made several important changes to reflect this dynamic environment. Below, we provide a brief summary of the more significant changes.

1. Today's students are tomorrow's business and government leaders, and it is essential that they understand the key principles of finance, the important role that financial markets have on our economy, and the need to behave in an ethical fashion. With those concerns in mind, we changed the organization of Chapter 1 to emphasize the firm's main goal of creating value for shareholders and expanded the discussion of agency conflicts. We also reiterate that maximizing shareholder value does not mean "increase the stock price at all cost," and we discuss some recent events where companies have had to pay the price for actions that harmed society.
2. Since the last edition, a number of important events have significantly influenced the financial markets and finance in general. Over the last few years, we have witnessed continued weakness in the economy following the global financial crisis of 2008 and 2009, the European debt crisis, the escalating increase in the U.S. government's debt, the resulting downgrading of U.S. debt, U.S. budget woes, and sequestration. At the same time, the Federal Reserve's aggressive policy of quantitative easing has pushed interest rates to the lowest levels in years, which is partially responsible for the dramatic run-up in the U.S. stock market between August 2011 and August 2013. Throughout the 8th edition, we discuss these events and their implications for financial markets and corporate managers, and we use these examples to illustrate the importance of the key concepts covered in *Concise* for investors, businesses, and even government officials.
3. Instructors and students continually impress upon us the importance of having interesting and relevant real-world examples. Throughout the 8th edition we have added several new examples where recent events help illustrate the key concepts covered in the text. We have also expanded and updated the many tables where we present real-world data, and we have updated the Thomson One examples. Finally, as is always the case, we have also made significant changes to many of the opening vignettes that precede each chapter.
4. Behavioral finance theory continues to have an important influence on the academic literature and it has in many ways reshaped the way that many of us think about financial markets and corporate finance. As a reflection of its growing importance, in Chapter 2 we moved the discussion of behavioral finance and its impact on the efficient markets hypothesis from a separate box into its own section. In addition, we continue to highlight the importance of securitization, the role of derivatives, and the increasing importance of hedge funds, mutual funds, and private equity firms.
5. We updated the tax discussion in Chapter 3 to reflect 2013 tax rates and tax law changes. Impacts of these changes are discussed throughout the text especially in the capital structure and dividend chapters.

6. In Chapter 3, we also added a box about how excess cash holdings affect the calculation of net operating working capital.
7. In Chapter 4, we revised the definition of the debt ratio. We calculate it as interest-bearing debt divided by the sum of interest-bearing debt and equity. This revision is more consistent with our discussions in the capital budgeting, capital structure, and forecasting chapters.
8. We have added more "Quick Questions" that are designed to keep students actively involved and focused as they read the text. Here, in a separate box, we pose a question and then show students how to answer it. These "Quick Questions" go through examples to make the finance concepts more concrete, and in that sense they mimic what effective instructors often do in a classroom setting. Additional "Quick Questions" have been included in Chapters 3, 4, 6, 8, 13, and 17.
9. In Chapter 13, we changed the Bigbee illustration (that works through the calculations to determine the optimal capital structure) to reflect lower interest rates.

When revising the text, we always rely heavily on a team of reviewers who offer suggestions for making the text more readable and relevant to students. We give special thanks to these reviewers later in the preface; their comments and recommendations certainly helped us improve this 8th edition.

Digital Solutions for the Eighth Edition

Changing technology and new ideas have had an exciting and dramatic influence on the ways we teach finance. Innovative instructors are developing and utilizing different classroom strategies, and new technology has allowed us to present key material in a more interesting and interactive fashion. As textbook authors, we think these new developments are tremendously exciting, and we have worked closely with our publisher's top team of innovative content and media developers, who have created a whole new set of revolutionary products for the 8th edition including:

MindTap™

MindTap™, Cengage Learning's fully online, highly personalized learning experience combines readings, multimedia activities, and assessments into a singular Learning Path. MindTap™ guides students through their course with ease and engagement with a learning path that includes an Interactive Chapter Reading, Problem Demonstrations, Blueprint Problems, and the Online Homework Assignment. Instructors can personalize the Learning Path for their students by customizing the robust suite of the Concise Eighth Edition resources and adding their own content via apps that integrate into the MindTap™ framework seamlessly with Learning Management Systems.

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In addition to these changes, we have also significantly updated and improved our more traditional ancillary package, which includes the Instructor's Manual, Test Bank, Study Guide, Excel Chapter Models, Excel Chapter Integrated Case Models, Excel Spreadsheet Problem Models, and PowerPoints for Chapter Integrated Cases.

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Errors in the Textbook

At this point, most authors make a statement such as this: "We appreciate all the help we received from the people listed above; but any remaining errors are, of course, our own responsibility." And generally there are more than enough remaining errors! Having experienced difficulties with errors ourselves, both as students and instructors, we resolved to avoid this problem in *Concise.* As a result of our detection procedures, we are convinced that few errors remain, but primarily because we want to detect any errors that may have slipped by so that we can correct them in subsequent printings, we decided to offer a reward of $10 per error to the first person who reports it to us. For purpose of this reward, errors are defined as misspelled words, nonrounding numerical errors, incorrect statements, and any other error that inhibits comprehension. Typesetting problems such as irregular spacing and differences of opinion regarding grammatical or punctuation conventions do not qualify for this reward. Given the ever-changing nature of the World Wide Web, changes in web addresses also do not qualify as errors, although we would like to learn about them. Finally, any qualifying error that has follow-through effects is counted as two errors only. Please report any errors to Joel Houston through e-mail at **concise@joelhouston.com** or by regular mail at the address below.

Conclusion

Finance is, in a real sense, the cornerstone of the enterprise system—good financial management is vitally important to the economic health of all firms and hence to the nation and the world. Because of its importance, finance should be widely and thoroughly understood, but this is easier said than done. The field is complex, and it undergoes constant change due to shifts in economic conditions. All of this makes finance stimulating and exciting, but challenging and sometimes perplexing. We sincerely hope that this 8th Edition of *Concise* will meet its own challenge by contributing to a better understanding of our financial system.

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PART 1

Introduction to Financial Management

CHAPTER

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CHAPTER 1

An Overview of Financial Management

Striking the Right Balance

In 1776, Adam Smith described how an "invisible hand" guides companies as they strive for profits, and that hand leads them to decisions that benefit society. Smith's insights led him to conclude that profit maximization is the right goal for a business and that the free enterprise system is best for society. But the world has changed since 1776. Firms today are much larger, they operate globally, they have thousands of employees, and they are owned by millions of stockholders. This makes us wonder if the "invisible hand" still provides reliable guidance: Should companies still try to maximize profits, or should they take a broader view and more balanced actions designed to benefit customers, employees, suppliers, and society as a whole?

Many academics and finance professionals today subscribe to the following modified version of Adam Smith's theory:

- A firm's principal goal should be to maximize the wealth of its stockholders, which means maximizing the value of its stock.
- Free enterprise is still the best economic system for society as a whole. Under the free enterprise framework, companies develop products and services that people want and that benefit society.
- However, some constraints are needed—firms should not be allowed to pollute the air and water, to engage in unfair employment practices, or to create monopolies that exploit consumers.

These constraints take a number of different forms. The first set of constraints is the costs that are assessed on companies if they take actions that harm society. Another set of constraints arises through the political process, where society imposes a wide range of regulations that are designed to keep companies from engaging in practices that are harmful to society. Properly imposed, these costs fairly transfer value to suffering parties and help create incentives that help prevent similar events from occurring in the future.

The recent financial crisis dramatically illustrates these points. We witnessed many Wall Street firms engaging in extremely risky activities that pushed the financial system to the brink of collapse in 2007 and 2008. Saving the financial system required a bailout of the banks and other financial companies, and that bailout imposed huge costs on taxpayers and helped push the economy into a deep recession. Apart from the huge costs imposed on society, the financial firms also paid a heavy price—a number of leading financial institutions saw a huge drop in their stock price, some failed and went out of business, and many Wall Street executives lost their jobs.

Arguably, these costs are not enough to prevent another financial crisis from occurring. Many maintain that the events surrounding the financial crisis illustrate that markets don't always work the way they should, and that there is a need for stronger regulation of the financial sector. For example, in his recent books, Nobel Laureate Joseph Stiglitz makes a strong case for enhanced regulation. At the same time, others with a different political persuasion continue to express concerns about the costs of excessive regulation.

Beyond the financial crisis, there is a broader question of whether laws and regulations are enough to compel firms to act in society's interest. An increasing number of companies continue to recognize the need to maximize shareholder value, but they also see their mission as more than just making money for shareholders. Google's well-known corporate motto is "Don't Be Evil." Consistent with this mission, the company has its own in-house foundation that has made large investments in a wide range of philanthropic ventures worldwide.

Looking at another industry, Whole Foods Markets' CEO John Mackey is an ardent defender of capitalism, and the company clearly states on its website, "We are stewards of our shareholders' investments and we take that responsibility very seriously. We are committed to increasing long term shareholder value." At the same time, Mackey has created a business model for Whole Foods that he refers to as "conscious capitalism." This model incorporates a broad set of core values. These values include:

- Selling the highest quality natural and organic products available
- Satisfying and delighting our customers
- Supporting team member excellence and happiness
- Creating wealth through profits and growth
- Caring about our communities and our environment
- Creating ongoing win-win partnerships with our suppliers
- Promoting the health of our stakeholders through healthy eating education.

Mackey makes a strong case that these core values work together and that the company's shareholders benefit from efforts to improve the welfare of its customers, employees, and surrounding communities. Realistically, however, there will still be cases where companies face conflicts between their various constituencies—for example, a company may enhance shareholder value by laying off some workers, or a change in policy may improve the environment but reduce shareholder value. In these instances, managers have to balance these competing interests and different managers will clearly make different choices. At the end of the day, all companies struggle to find the right balance. Enlightened managers recognize that there is more to life than money, but it often takes money to do good things.

Sources: Marc Gunther, "Money and Morals at GE," *Fortune*, November 15, 2004, pp. 176–182; Kevin J. Delaney, "Google: From 'Don't Be Evil' to How to Do Good," *The Wall Street Journal*, January 18, 2008, pp. B1–B2; Joseph E. Stiglitz, *Freefall: America, Free Markets, and the Sinking of the World Economy* (New York: W.W. Norton & Company, 2010); Joseph E. Stiglitz, *The Price of Inequality* (New York: W.W. Norton & Company, 2012); and http://wholefoodsmarket.com/mission-values/core-values.

PUTTING THINGS IN PERSPECTIVE

This chapter will give you an idea of what financial management is all about. We begin the chapter by describing how finance is related to the overall business environment, by pointing out that finance prepares students for jobs in different fields of business, and by discussing the different forms of business organization. For corporations, management's goal should be to maximize shareholder wealth, which means maximizing the value of the stock. When we say "maximizing the value of the stock,"

we mean the "true, long-run value," which may be different from the current stock price. In the chapter we discuss how firms must provide the right incentives for managers to focus on long-run value maximization. Good managers understand the importance of ethics, and they recognize that maximizing long-run value is consistent with being socially responsible.

When you finish this chapter, you should be able to:

- **Explain the role of finance and the different types of jobs in finance.**
- **Identify the advantages and disadvantages of different forms of business organization.**
- **Explain the links between stock price, intrinsic value, and executive compensation.**
- **Identify the potential conflicts that arise within the firm between stockholders and managers and between stockholders and bondholders, and discuss the techniques that firms can use to mitigate these potential conflicts.**
- **Discuss the importance of business ethics and the consequences of unethical behavior.**

1-1 What Is Finance?

Finance is defined by *Webster's Dictionary* as "the system that includes the circulation of money, the granting of credit, the making of investments, and the provision of banking facilities." Finance has many facets, which makes it difficult to provide one concise definition. The discussion in this section will give you an idea of what finance professionals do and what you might do if you enter the finance field after you graduate.

1-1a Areas of Finance

Finance as taught in universities is generally divided into three areas: (1) financial management, (2) capital markets, and (3) investments.

Financial management, also called corporate finance, focuses on decisions relating to how much and what types of assets to acquire, how to raise the capital needed to purchase assets, and how to run the firm so as to maximize its value. The same principles apply to both for-profit and not-for-profit organizations; and as the title suggests, much of this book is concerned with financial management.

Capital markets relate to the markets where interest rates, along with stock and bond prices, are determined. Also studied here are the financial institutions that supply capital to businesses. Banks, investment banks, stockbrokers, mutual funds, insurance companies, and the like bring together "savers" who have money to invest and businesses, individuals, and other entities that need capital for various purposes. Governmental organizations such as the Federal Reserve System, which regulates banks and controls the supply of money, and the Securities and Exchange Commission (SEC), which regulates the trading of stocks and bonds in public markets, are also studied as part of capital markets.

Investments relate to decisions concerning stocks and bonds and include a number of activities: (1) *Security analysis* deals with finding the proper values of individual securities (i.e., stocks and bonds). (2) *Portfolio theory* deals with the best way to structure portfolios, or "baskets," of stocks and bonds. Rational investors want to hold diversified portfolios in order to limit risks, so choosing a properly balanced portfolio is an important issue for any investor. (3) *Market analysis* deals with the issue of whether stock and bond markets at any given time are "too high," "too low," or "about right." Included in market analysis is *behavioral finance,* where investor psychology is examined in an effort to determine if stock prices have been bid up to unreasonable heights in a speculative bubble or driven down to unreasonable lows in a fit of irrational pessimism.

Although we separate these three areas, they are closely interconnected. Banking is studied under capital markets, but a bank lending officer evaluating a business' loan request must understand corporate finance to make a sound decision. Similarly, a corporate treasurer negotiating with a banker must understand banking if the treasurer is to borrow on "reasonable" terms. Moreover, a security analyst trying to determine a stock's true value must understand corporate finance and capital markets to do his or her job. In addition, financial decisions of all types depend on the level of interest rates; so all people in corporate finance, investments, and banking must know something about interest rates and the way they are determined. Because of these interdependencies, we cover all three areas in this book.

1-1b Finance Within an Organization

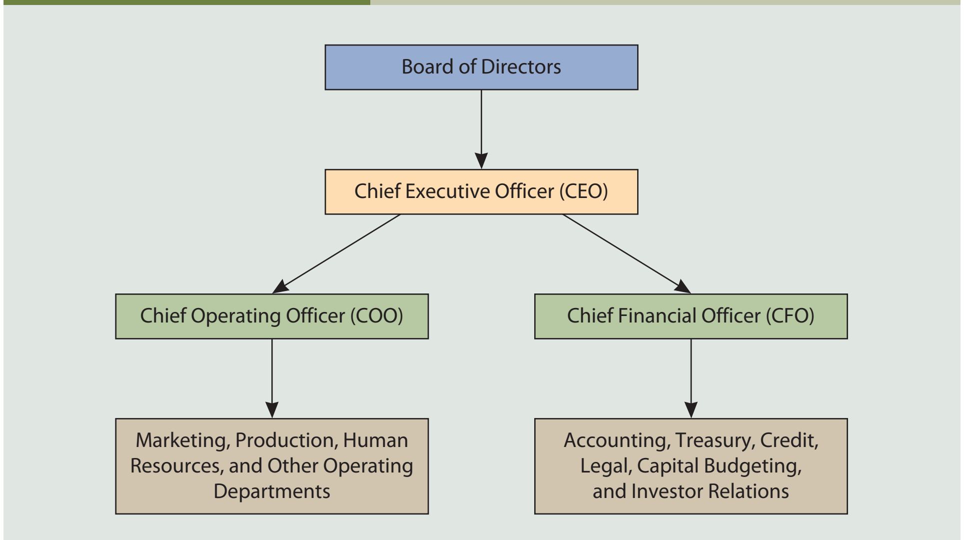
Most businesses and not-for-profit organizations have an organization chart similar to the one shown in Figure 1.1. The board of directors is the top governing body, and the chairperson of the board is generally the highest-ranking individual. The CEO comes next, but note that the chairperson of the board often also serves as the CEO. Below the CEO comes the chief operating officer (COO), who is often also designated as a firm's president. The COO directs the firm's operations, which include marketing, manufacturing, sales, and other operating departments. The chief financial officer (CFO), who is generally a senior vice president and the third-ranking officer, is in charge of accounting, finance, credit policy, decisions regarding asset acquisitions, and investor relations, which involves communications with stockholders and the press.

The duties of the CFO have broadened over the years. CFO magazine's online service, ***cfo.com****, is an excellent source of timely finance articles intended to help the CFO manage those new responsibilities.*

If the firm is publicly owned, the CEO and the CFO must both certify to the SEC that reports released to stockholders, and especially the annual report, are accurate. If inaccuracies later emerge, the CEO and the CFO could be fined or even jailed. This requirement was instituted in 2002 as a part of the **Sarbanes–Oxley Act**. The Act was passed by Congress in the wake of a series of corporate scandals involving now-defunct companies such as Enron and WorldCom, where investors, workers, and suppliers lost billions of dollars due to false information released by those companies.

Sarbanes–Oxley Act
A law passed by Congress that requires the CEO and CFO to certify that their firm's financial statements are accurate.

FIGURE 1.1 Finance Within the Organization



1-1c Finance Versus Economics and Accounting

Finance, as we know it today, grew out of economics and accounting. Economists developed the notion that an asset's value is based on the future cash flows the asset will provide, and accountants provided information regarding the likely size of those cash flows. People who work in finance need knowledge of both economics and accounting. Figure 1.1 illustrates that in the modern corporation, the accounting department typically falls under the control of the CFO. This further illustrates the link among finance, economics, and accounting.

SELF TEST

What three areas of finance does this book cover? Are these areas independent of one another, or are they interrelated in the sense that someone working in one area should know something about each of the other areas? Explain.

Who is the CFO, where does this individual fit into the corporate hierarchy? What are some of his or her responsibilities?

Does it make sense for not-for-profit organizations such as hospitals and universities to have CFOs? Why or why not?

What is the relationship among economics, finance, and accounting?

1-2 Jobs in Finance

To find information about different finance careers, go to ***careers-in-finance.com****. This website provides information about different finance areas and recommends different books about jobs in finance.*

Fins.com/Finance *provides finance career news and advice including information on who's hiring in finance and accounting fields.*

Finance prepares students for jobs in banking, investments, insurance, corporations, and government. Accounting students need to know marketing, management, and human resources; they also need to understand finance, for it affects decisions in all those areas. For example, marketing people propose advertising programs, but those programs are examined by finance people to judge the effects of the advertising on the firm's profitability. So to be effective in marketing, one needs to have a basic knowledge of finance. The same holds for management—indeed, most important management decisions are evaluated in terms of their effects on the firm's value.

It is also worth noting that finance is important to individuals regardless of their jobs. Some years ago most employees received pensions from their employers upon retirement, so managing one's personal investments was not critically important. That's no longer true. Most firms today provide "defined contribution" pension plans, where each year the company puts a specified amount of money into an account that belongs to the employee. The employee must decide how those funds are to be invested—how much should be divided among stocks, bonds, or money funds—and how much risk they're willing to take with their stock and bond investments. These decisions have a major effect on people's lives, and the concepts covered in this book can improve decision-making skills.

1-3 Forms of Business Organization

The basics of financial management are the same for all businesses, large or small, regardless of how they are organized. Still, a firm's legal structure affects its operations and thus should be recognized. There are four main forms of business organizations: (1) proprietorships, (2) partnerships, (3) corporations, and (4) limited liability companies (LLCs) and limited liability partnerships (LLPs). In terms