



Contemporary Financial Management

Moyer

McGuigan

Rao

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Contemporary Financial Management

THIRTEENTH EDITION

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IRM Investments

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To Sally, Craig, and Laura
RCM

To the memory of my mother and father
JRM

To Uma, Anil, and Nikhil
RPR



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Preface

The financial management field continues to experience exciting change and growth. Financial practitioners are increasingly employing new financial management techniques, sophisticated computer resources, and mega databases to aid in their decision making. “Financial engineers” have created new derivative financial instruments and transactions, including options, financial futures contracts, options on futures contracts, foreign currency swaps, and interest rate swaps, to help managers deal with risk and enhance shareholder wealth. Many industries have been restructured because of the pressures of global competition. Leveraged buyout transactions from sophisticated investors have forced managers to make more careful use of their firms’ resources. The growing private equity market has added another dimension to the focus on sound management of a firm’s resources. Corporate reformers have focused attention on the structure of corporate governance relationships and the impact of alternative managerial compensation packages on firm performance. Bankruptcy filings increased dramatically at the end of the 1980s and remained at high levels through 2013. The Internet has transformed the way securities are bought and sold and the way companies access new capital. At the same time, financial researchers have made important advances in the areas of valuation, cost of capital, capital structure theory and practice, option valuation (including “real” options associated with capital investments), risk management, and dividend policy. Access to and content of the Internet have greatly expanded, making timely financial information increasingly available to customers, investors, and financial managers.

The financial crisis and recession that began in late 2007 and continued into 2010 had a major impact on the financial marketplace and the practice of financial management. This crisis in the financial markets identified structural weaknesses in many financial institutions, including commercial banks, quasi-governmental financial entities, regulatory practices, and various aspects of risk management. The lessons from this experience will have long lasting impacts on financial markets and the strategies employed by financial managers and investors. This 13th Edition revision of *Contemporary Financial Management* addresses the cause of this crisis and its impacts on the practice of finance.

The future promises to be a more exciting time for finance professionals. Financial managers have refocused their attention on the core objective of maximizing shareholder wealth. Managers who act contrary to the interests of shareholders face the prospect of an unfriendly takeover, a corporate restructuring, pressure from domestic and foreign competitors, pressure from private equity investors, or pressures from shareholder groups and institutional investors. Firms increasingly must find operating savings necessary to remain competitive, as managers continue to struggle to find the optimal capital structure for their firm. The central importance of cash flows in the financial management of a firm has never been more apparent. The European economic and monetary unification and the near collapse of that union in the wake of the financial crisis of 2008–2010, the rise of capitalism in China, and the growing business resources in India all require contemporary financial managers to possess greater knowledge of doing business in an international marketplace. In addition, the standards of ethical behavior adopted by managers of business enterprises become even more important. Finally, the impact of the Internet on all areas of business practice continues to revolutionize the financial arena as the result of the lifting of barriers to timely information access and the increase of competitive pressures on business managers.

Contemporary Financial Management, 13th Edition, incorporates these changes—the increased focus on shareholder wealth maximization and cash flow management, an emphasis on the international aspects of financial management, a concern for the ethical behavior of managers, the role of private equity investors, and the lessons learned in the financial crisis that impacted all aspects of risk management—into a text designed primarily for an introductory course in financial management. The book is also suitable for management development programs and as a reference aid to practicing finance professionals.

We recognize that students enter this course with a wide variety of backgrounds in mathematics, economics, accounting, and statistics. The only presumption we make regarding prior preparation is that all student users have had one course in financial accounting.

Organization of the Text

This text provides an introduction to both analytical tools and descriptive materials that are useful in financial management. Because this is an introductory-level text, however, it does *not* attempt to make the reader an expert in every aspect of financial decision making. Instead, it is intended to do the following:

- ▲ Acquaint the reader with the types of decisions faced by financial managers
- ▲ Develop a framework for analyzing these decisions in a systematic manner
- ▲ Provide the reader with the background necessary to pursue more advanced readings and courses in financial management

Although the subject matter in this text is divided into distinct parts, in reality and practice, the various types of financial decisions are interrelated and should not be considered in isolation from one another.

Each chapter begins with a summary preview of the key concepts from the chapter. This is followed by a financial challenge faced by a real firm(s) and related to the material in the chapter. Next, Learning Objectives are identified for each chapter. At the end of each chapter is a point-by-point summary of the chapter and extensive sets of discussion questions and problems, including “Self-Test Problems” with detailed solutions, which you can use to test your understanding of the text material. A glossary of key terms is provided at the end of the book. Some chapters also have more complex, integrative case problems. Where appropriate, special international financial management issues and entrepreneurial finance issues are discussed. The book also has a large number of “Ethical Issues” sections integrated throughout. “Check” answers to selected problems appear at the end of the book. You will find an overview of the CFM Excel templates that are available for solving many of the complex chapter problems and cases at the book’s Web site (www.cengagebrain.com).

Parts of the Text

Part One, Introduction. Chapter 1 discusses the role and objectives of financial management, introduces the various forms of business organization, discusses the importance of ethical business practices, and reviews the structure of the financial management function. Chapter 2 reviews the major elements of the U.S. and international financial marketplace. It includes a discussion of the structure of the U.S. financial system and the role of stock exchanges. Also included are introductions to various types of derivative securities and international financial management. Chapter 2 also contains an extensive discussion of the causes and impacts of the financial crisis beginning in late 2007. Chapter 3 considers the financial statements and ratios that can be used to evaluate the financial performance of a firm. Chapter 4 presents various techniques for analyzing cash flows and forecasting future financial performance.

Part Two, Determinants of Valuation. Valuation is a central theme of the book. Chapter 5 develops the concept of the time value of money. This concept is used in the valuation of securities and the evaluation of investment projects expected to provide benefits over a number of years. The present value rule is also introduced. Chapter 6 applies the basic valuation model to fixed income securities, such as bonds and preferred stock. Chapter 7 deals with the valuation of common stock and the role of investment bankers. Chapter 8 provides a comprehensive introduction to the concept of risk in finance and the relationship between risk, required return, and the shareholder wealth maximization goal of the firm.

Part Three, The Capital Investment Decision. This portion of the text focuses on capital expenditures—that is, investments in long-term assets. Chapters 9 and 10 present the fundamentals of capital budgeting, namely, the process of investing in long-term assets. Chapter 9 deals with the measurement of the cash flows (benefits and costs) associated with long-term investment projects. Chapter 10 considers various decision-making criteria that can be used when choosing projects that will maximize the value of the firm. Chapter 11 extends the concepts developed in Chapter 10 by considering some of the decision-making techniques that attempt to deal with the problem of the risk associated with a specific project's cash flows.

Part Four, The Cost of Capital, Capital Structure, and Dividend Policy. Chapter 12 illustrates the principles of measuring a firm's cost of capital. The cost of funds to a firm is an important input in the capital budgeting process. Chapters 13 and 14 address the relationship of the cost of capital to the firm's capital structure. Chapter 15 discusses the factors that influence the choice of a dividend policy and the impact of various dividend policies on the value of a firm.

Part Five, Working Capital Management. Chapters 16 through 18 examine the management of a firm's current asset and liability accounts—that is, net working capital. Chapter 16 provides an overview of working capital management, with emphasis on the risk-return trade-offs involved in working capital decision making. Chapter 16 also covers the management of secured and unsecured short-term credit. Chapter 17 deals with the management of cash and marketable securities, and Chapter 18 focuses on the management of accounts receivable and inventories.

Part Six, Additional Topics in Contemporary Financial Management. Chapter 19 deals with lease financing and intermediate-term credit. Chapter 20 focuses on option-related funding alternatives, i.e., derivative securities, including convertible securities, and warrants. Chapter 21 examines various techniques for managing risk, including the use of derivative securities. Chapter 22 discusses the factors that affect exchange rates and foreign exchange risk. Chapter 23 examines corporate restructuring decisions, including mergers and acquisitions, the role of private equity investors, bankruptcy, and reorganization.

Distinctive Features

Many financial management texts are well written and provide adequate coverage of the basic topics in financial management. In preparing this thirteenth edition, we continue our commitment to provide a comprehensive, correct, and well-written introduction to the field of financial management. The current edition reflects the many refinements that have been made over the years in previous editions. In addition, we have created a text package that fully reflects contemporary financial management developments in the book's pedagogical aids, organizational design, and ancillary materials.

Pedagogical Features

CFM has been carefully designed to assist the student in learning and to stimulate student interest.

Distinctive pedagogical features include:

1. **Financial Challenges.** Each chapter begins with an illustration of a financial management problem faced by a firm or individual. These exciting lead-ins come from real-firm situations, including Lehman Brothers, General Motors, MFGlobal, Apple Inc, Ford Motor, GE, Facebook, Boeing, Airbus, Novo Nordisk, Source Gas Distribution, Microsoft, Oracle, International Lease Financing Corporation, Berkshire Hathaway, and J.P.Morgan Chase. These examples focus on financial problems in the topic area of the chapter and highlight the importance of learning sound financial management principles. The “Financial Challenges” have been extensively revised and updated from the twelfth edition, including numerous totally new examples.
2. **Foundation Concepts.** These concepts are introduced early in the text. Their central importance in the study of finance is highlighted by specially designated icons indicating that these are “Foundation Concepts” and hence worthy of extra attention by the student. Important foundation concepts are identified throughout the book, including the determinants of the return on equity, the valuation of assets, the valuation of common stock, cash flow estimation principles, capital budgeting decision models, business risk, financial risk, and the weighted cost of capital.
3. **International Issues.** To emphasize and reinforce the global nature of financial decision making, we have included “International Issues” sections throughout the book to illustrate the global issues associated with making financial decisions. By covering international finance in two chapters—and throughout, with the “International Issues” features—we ensure that all students will be exposed to important international dimensions of financial management decisions, and we provide an opportunity for in-depth coverage of some of the more important international finance topics.
4. **Ethical Issues.** “Ethical Issues” sections are integrated throughout to present some of the ethical dilemmas facing financial managers. These sections raise sensitivities to ethical issues and usually conclude with questions and issues for further classroom discussion.
5. **Entrepreneurial Issues.** In recognition of the important and growing role of small and medium-sized firms in the American business environment, we have included “Entrepreneurial Issues” sections that appear in appropriate places throughout the book and emphasize unique finance-related problems and concerns of entrepreneurs.
6. **Extensive and Fully Integrated Examples of the Financial Policies and Problems That Face Real Firms.** Throughout the book, we have illustrated financial management concepts by using problems facing real firms. By minimizing the number of hypothetical firm situations and using data and situations facing actual firms that students will recognize and relate to, CFM has further enhanced the realism and excitement of the field of finance.
7. **Calculator Application Illustrations.** Many chapters have easy-to-follow, step-by-step calculator keystrokes to solve many of the time value of money examples developed in the text. These “Calculator Applications” sections are set up in a generic calculator format and can be used with virtually any financial calculator.
8. **Spreadsheet Strategies.** Many chapters have illustrative examples of how spreadsheet software (Microsoft Excel) can be used to solve finance problems, including time value of money problems, stock and bond valuation, and capital budgeting.

9. **Intuitive Use of Notation.** Notation in the text is simplified and intuitive to aid student learning. Inside the back cover, we have provided a handy summary of the key notation used throughout the book.
10. **Internet Applications.** This edition provides numerous references to interesting Internet applications. The applications provide students with handy references that can be used to explore the Internet for additional information and data dealing with chapter topics.
11. **Extensive Problem Sets.** Many of the end-of-chapter problems contain a surfeit of information, forcing students to identify the relevant material needed to solve the problem. The problem sets provide students and instructors with a greater breadth of problem coverage than in many other texts. In addition, the problems have been identified with a difficulty rating ranging from basic to intermediate to challenging. In several finance textbooks, problems are labeled to indicate the type of problem to be solved. We have specifically chosen not to include this information because we believe that recognition of the problem type is an important part of the learning process. However, we understand the differing needs and goals of instructors, and thus have provided these categories in Appendix A of the Instructors' Resource Manual, so that it can be easily shared with students if desired. Selected check answers to some of the end-of chapter problems appear at the end of the text.
12. **Self-Test Problems.** Each chapter includes end-of-chapter "Self-Test Problems," with detailed solutions at the end of the text that students can use for further practice and enhanced understanding of the concepts developed in the chapter.
13. **Integrative Cases.** At the end of appropriate chapters, an expanded set of comprehensive "Integrative Cases" are provided. Many of these cases can be used in conjunction with the Excel models, available on the Moyer Student Companion Web site, to demonstrate the power of computers in performing sensitivity analysis.
14. **Excel™ Problems.** Throughout the text, problems that can be solved using Excel are highlighted with an Excel icon. To help solve these problems, more than 20 user-friendly, flexible, downloadable Excel models are available at www.cengagebrain.com and require no prior knowledge of Excel.
15. **Extensive coverage of the impact of the financial crisis that began in 2007.** The 12th Edition of CFM provides extensive coverage of the impact of the financial crisis (that began in 2007 and has continued well into 2010) on the practice of financial management. In addition to an in-depth and intuitive presentation in Chapter 2, it is also referenced many times in the following chapters.

Organizational Design

Contemporary Financial Management is organized around the objective of maximizing the value of the firm for its shareholders. This objective is introduced early in the book, and each major financial decision is linked to the impact it has on the value of the firm. The distinctive content features are designed to complement this objective:

1. **Emphasis on the fundamental concepts of cash flow, net present value, risk-return relationships, and market efficiency.** There are four concepts that are central to a complete understanding of most financial management decisions:
 - a. The importance of cash flows as the relevant source of value to a firm
 - b. The significance of the net present value rule for valuing cash flows
 - c. The relationship between risk and return in the valuation process
 - d. The efficiency of the capital markets

- 2. Unique treatment of problems of international financial management.** In a business world that is increasingly global, it is important that finance students be aware of the most important dimensions of international finance. Some texts provide a single chapter dealing with a potpourri of international issues, but due to time constraints, many instructors have difficulty in covering this material. Other texts use a series of short international topic sections scattered throughout the book, but this approach does not provide the in-depth coverage needed for some international finance topics, such as hedging exchange rate risk. In the thirteenth edition of CFM, important international finance relationships, including the operation of foreign currency markets, exchange rate determination, and the role of multinational firms in the global economy, are covered in Chapter 2 (“The Domestic and International Financial Marketplace”). More advanced international topics, such as international parity relationships and the management of foreign exchange risk, are introduced in Chapter 22, “International Financial Management.” In addition, international viewpoints are covered in other chapters where appropriate.
- 3. Comprehensive and integrated coverage of ethical issues facing financial managers.** Financial managers seeking to maximize shareholder wealth must also confront difficult ethical dilemmas. “Ethical Issues” sections are integrated throughout and present some of the ethical dilemmas facing financial managers. This treatment of the ethical dimensions of financial management is consistent with the AACSB’s recommendations for coverage of these issues.
- 4. Early coverage of institutional characteristics and valuation models for financial instruments.** We have provided separate chapters (Chapters 6 and 7) dealing with the valuation of fixed income securities and common stock. These chapters also define all of the important characteristics of each of these security types and cover the institutional aspects of the markets for these securities, including the reading and understanding of security transaction information from sources like *The Wall Street Journal*. This structure provides students with both an institutional understanding of bonds, preferred stock, and common stock and an understanding of the valuation process for securities in the financial marketplace.
- 5. Early coverage of time value of money concepts.** Time value of money concepts are covered in depth in Chapter 5. This treatment provides students with the exposure needed to fully understand the valuation process that is central to the goal of shareholder wealth maximization. In addition, this coverage of the time value of money involves students in useful practical applications early on in the course, setting an early tone of relevance for the course.
- 6. The importance of cash flow analysis is introduced early and reemphasized throughout the text.** Chapter 1 introduces students to the importance of the cash flow concept. This concept is then applied extensively in the context of financial planning and forecasting (Chapter 4), valuation (Chapters 6 and 7), capital budgeting (Chapters 9, 10, and 11), dividend policy (Chapter 15), working capital management (Chapter 16), and corporate restructuring (Chapter 23).
- 7. Attention to unique problems of financial management in entrepreneurial finance.** In recognition of the important and growing role of small and medium-sized firms in the American business environment, we have included “Entrepreneurial Issues” sections, which appear in appropriate places throughout the book and emphasize unique finance-related problems and concerns of entrepreneurs (small businesses).
- 8. Extensive development of the cash flow estimation process in capital budgeting.** Perhaps the most important step in the capital budgeting process is the estimation of cash flows for potential projects. CFM devotes an entire chapter (Chapter 9) to this topic, with a chapter appendix detailing alternative depreciation methods and their tax consequences.

9. **A detailed discussion of real options that are embedded in many capital investment projects.** Finance scholars and practitioners have increasingly focused attention on “embedded options” in capital investment projects, such as the option to abandon, the option to expand, and the option to defer investments. These options add value to an investment project above that normally identified in a net present value calculation. Chapter 10 includes an extensive intuitive discussion of real options in capital budgeting.
10. **Coverage of modern financial analysis and performance appraisal concepts.** The increased attention given to the objective of shareholder wealth maximization has brought about the development of new performance appraisal models that can be used to judge a firm’s performance and motivate managers to create value. The “Market Value Added” and “Economic Value Added” concepts, developed by Stern-Stewart, are covered in Chapter 3 (“Evaluation of Financial Performance”).
11. **Broad, integrated treatment of working capital management.** For many small and medium-sized companies, the management of working capital can present more challenges than any other area of financial management. A thorough and up-to-date 3-chapter section on working capital management is included.
12. **Introduction to new financial instruments and strategies.** Financial futures contracts, options, interest rate swaps, corporate restructuring, and leveraged buyouts (LBOs), to name but a few, have become increasingly important to contemporary financial managers. These topics are introduced to the student in an applied context that illustrates their value to financial managers.
13. **Frequent coverage of the impact of agency relationships in financial management.** The impact of principal–agent relationships on decisions in the areas of goal setting, valuation, capital structure, dividend policy, and corporate restructuring are presented throughout the book.
14. **Extensive coverage of the impact of the financial crisis that began in late 2007.** The thirteenth edition of CFM provides extensive coverage of the impact of the financial crisis (that began in 2007–2008 and continued into 2010) on the practice of financial management. In addition to an in-depth and intuitive presentation in Chapter 2, it is also referenced many times in the following chapters.

Major Changes in the Thirteenth Edition

The twelfth edition of CFM was very well received by our many adopters. In the thirteenth edition we retain the core features of that edition. We are appreciative of the many users and adopters who continue to offer suggestions for content additions and enhancements. As in the past, we have incorporated many of these suggestions into this edition. In addition, we have added numerous contemporary examples and references. Significant changes include the following:

- ▲ In Chapter 2, the discussion of the financial crisis that began in late 2007 is updated to reflect the results of many of the policies that were put in the place to deal with that crisis. We have added specific content to discuss the challenges to the euro currency.
- ▲ In Chapter 3 a new financial ratio, EBITDA multiple, has been added.
- ▲ Chapter 4 includes an updated discussion of bankruptcy prediction models.
- ▲ Chapter 12 adds a new international issues section that includes new evidence on the global equity risk premium.
- ▲ Chapter 13 has a more streamlined discussion of Modigliani-Miller capital structure theory. There is a new example dealing with the acquisition of Heinz by Berkshire-Hathaway and a private equity group that illustrates the agency problem of debt.

- ▲ Chapter 14 has updated information on bond rating standards.
- ▲ Chapter 15 has been updated to reflect the effects of the American Taxpayer Rights Act of 2012 on dividend policy decisions. The chapter contains more detailed coverage of agency costs of dividends and includes the Apple Inc example.
- ▲ Chapter 16 contains a new “ethical issues” section dealing with LIBOR rate manipulations.
- ▲ Chapter 18 includes a discussion of Japan’s tsunami on supply chains around the world.
- ▲ Chapter 21 has been revised to make hedging examples more contemporary.
- ▲ Changes in Chapter 23 include a new table showing merger volume (deals and dollars) between 1980 and 2012; new and updated discussion of mergers disallowed under antitrust laws; enhanced discussion of vertical mergers; and the addition of material on poison pills.
- ▲ Nearly all of the Financial Challenges are new or have been extensively updated.

Materials for the Student

Go to www.cengagebrain.com to access the Web site that supports *Contemporary Financial Management*, Thirteenth Edition. The site provides a link to Thomson ONE—Business School Edition, Internet application links, links to relevant finance sites, Key Terms, and the following features:

- ▲ Excel™ Models are designed to solve a wide variety of financial management problems. Problems in the text that can be solved using these models are indicated with an Excel logo next to the problem. The models require absolutely no prior knowledge of Excel. All of the models are designed so they can be used to solve actual business financial analysis problems, not just simplified textbook examples.
- ▲ e-Lectures. Difficult concepts from each chapter are explained and illustrated via streaming video and animated tutorials. These video clips and tutorials can be extremely helpful review and clarification tools if a student has trouble understanding an in-class lecture or is a visual learner who has difficulty grasping concepts as presented in the text.
- ▲ Ask-the-Author Video. In the ask-the-author video segments, the text author, R. Charles Moyer, discusses the most difficult concept for the students to grasp from the chapter. Because the author is the best person to explain his book, these video clips are invaluable to students who need just a little extra help without extra class time.
- ▲ Thomson ONE—Business School Edition (tobsefin.swlearning.com). This tool gives students the opportunity to use a business school version of the Internet-based database that analysts and brokers around the world use every day to conduct research and analysis. End-of-chapter material in several chapters includes problems specifically created for use with Thomson ONE—BSE. Thomson ONE—BSE includes 10-year financial statements downloadable to Excel; one-click Peer Set analysis; indices that can be manipulated or compared, both international as well as domestic companies, and more. Thomson ONE—BSE is included FREE with each new text.

Materials for the Instructor

A complete set of ancillary materials is available to instructors to supplement the text, many at the text Web site at www.cengagebrain.com. These include the Instructor’s Resource Manual, the Test Bank, and PowerPoint slides.

- ▲ An Instructor’s Resource Manual (IRM), revised by the text authors, is available to instructors. It contains detailed solutions to the end-of-chapter questions and problems, and documentation for the Excel templates included in the back of the manual. The solutions to text questions and problems have been thoroughly checked to assure their accuracy. In addition, topical categories of the end-of-chapter questions and problems are listed in an appendix. The IRM is available to instructors in electronic format only, on the text Web site.

- ▲ An extensive Test Bank, revised by Mary Fox Luquette of the University of Louisiana, offers over 1,800 multiple-choice questions and problems. This unique test bank is designed with the instructor in mind, and includes AACSB designations for each question and problem. Approximately 60 percent of the questions are “fact” questions, taken directly from the discussion in the text. Approximately 20 percent of the questions are “elementary problem” questions that closely parallel problem examples developed in the chapter and easier problems at the end of the chapter. Approximately 20 percent of the questions are “challenging problems” that require the student to apply concepts developed in the chapter to new problem situations.
- ▲ Cengage Learning Testing Powered by Cognero is a flexible, online system that allows you to:
 - ▲ author, edit, and manage test bank content from multiple Cengage Learning solutions
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- ▲ A set of PowerPoint Presentation Slides, revised by William T. Chittenden of Texas State University, provide the text’s graphs and tables along with lecture notes and is available at the text Web site. These can be printed for use as transparency masters or acetates.
- ▲ Aplia™ for Finance! The best-selling homework solution in education today, Aplia is trusted by more than 500,000 students at more than 650 institutions worldwide. Aplia for Finance offers an online homework system that improves learning by increasing student effort and engagement—without requiring more work from the instructor. Aplia’s original, autograded finance assignments ensure that students grasp the skills and concepts presented in the text through interactive problem sets, news analyses, tutorials in math, accounting, statistics, economics, and financial calculators. Visit www.aplia.com for a full Aplia for Finance demonstration online.

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Introduction

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CHAPTER 1

The Role and Objective of Financial Management

CHAPTER 2

The Domestic and International Financial Marketplace

CHAPTER 3

Evaluation of Financial Performance

CHAPTER 4

Financial Planning and Forecasting

Part One provides an overview of the field of financial management. Chapter 1 considers the goal of the firm, discusses the role of financial management in the firm, and illustrates the alternative forms of business organizations. The determinants of value are also introduced. The chapter also considers the organization of the financial management function, the relationship between finance and other business disciplines, and various careers that are available in finance. Chapter 2 presents key elements of the U.S. financial marketplace, including the structure of the U.S. financial system and the role of stock exchanges. Also included is an introduction to the various types of financial derivative securities. The causes and consequences of the financial market and economic crisis of 2008–2009 are discussed. The last part of the chapter contains an introduction to international financial management, including multinational enterprises and the foreign currency markets and exchange rates. Chapter 3 deals with the use of financial ratios to evaluate a firm's financial performance. Chapter 4 examines various financial planning and forecasting techniques, including percentage of sales forecasting methods and cash budgets.

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The Role and Objective of Financial Management

KEY CHAPTER CONCEPTS

1. *Shareholder wealth* is defined as the present value of the expected future returns to the owners of the firm. It is measured by the market value of the shareholders' common stock holdings.
2. The primary normative goal of the firm is to make the most efficient use of the firm's resources and thereby to maximize shareholder wealth.
3. Achievement of the shareholder wealth maximization goal is constrained by social responsibility concerns and problems arising out of agency relationships.
4. The market value of a firm's stock is determined by the magnitude, timing, and risk of the cash flows the firm is expected to generate. Managers can take a variety of actions to influence the magnitude, timing, and risk of the firm's cash flows. These actions are often classified as investment, financing, and dividend decisions.
5. Ethical standards of performance are an increasingly important dimension of the decision-making process of managers.
6. The most important forms of business organization are the
 - a. Sole proprietorship
 - b. Partnership—both limited and general
 - c. Corporation
7. Corporations have the advantages of limited liability for owners, potentially perpetual life, and the ability to raise large amounts of capital. Even though they account for only 20 percent of U.S. firms, corporations account for 84 percent of U.S. business revenues.
8. The finance function is usually headed by a chief financial officer.
 - a. Financial management responsibilities are often divided between the controller and treasurer.
 - b. The controller normally has responsibility for all activities related to accounting.
 - c. The treasurer is normally concerned with the acquisition, custody, and expenditure of funds.

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FINANCIAL CHALLENGE

Issues Confronting Financial Managers

- ▲ In 1850, Henry, Emanuel, and Mayer Lehman established the firm Lehman Brothers. Although they started out as a dry goods store in Montgomery, Alabama, they quickly moved into the business of trading cotton. They established an office in New York City in 1858. The firm continued to grow and prosper, providing investment banking services to many of America's icon companies, including May Department Stores, Gimbel Brothers, B.F. Goodrich, Studebaker Corporation, Digital Equipment, Halliburton, and Kerr-McGee. In 1984 the company merged with American Express. In 1994, American Express spun off Lehman Brothers in an initial public offering. Its assets under management grew to over \$275 billion in 2008. The firm's net revenues grew from \$2.7 billion in 1994 to over \$19 billion, and the number of employees grew from 8,500 to over 28,000 prior to its bankruptcy declaration on September 15, 2008. How did such a venerable Wall Street investment banking firm collapse almost overnight? The answer lies in the subprime mortgage markets that came to play a huge role in their business and profits in the years prior to bankruptcy. In this course you will learn about risk, risk management, and the relationship between risk and return. These topics are central to understanding the financial market collapse of 2008–2009.
- ▲ International markets were also impacted by the financial collapse of 2008–2009. Iceland, a beautiful island country of just over 300,000 inhabitants, had long been known for its rich fishing and farming heritage. Icelanders have a reputation as confident, risk-taking adventurers. The country's abundance of geothermal power sources supported the economy and provided a base for a growing aluminum industry. In the 1990s a new generation of Icelandic bankers set the goal of transforming Iceland into a global financial powerhouse. One of the major players was Kaupthing Bank, a commercial bank, a hedge fund, an investment bank, and a private equity firm. Kaupthing and the other leading Icelandic banks rapidly built a financial empire worth more than the country's entire gross domestic product—a financial empire heavily dependent on debt provided by the international wholesale credit markets. As its economy grew and expanded, retail investors were attracted to the high rates of return offered by Icelandic banks and hedge funds, as well as by the appreciating Icelandic currency (the krona). In October 2008, just after the collapse of Lehman Brothers, the Icelandic financial system collapsed. Each of the major banks went into receivership, local companies declared bankruptcy, and the country's currency declined from 63 krona to the dollar to 130 krona to the dollar. The government was forced to seek a \$6 billion bailout package from the International Monetary Fund. Retail depositors in Icelandic banks, mostly from Great Britain and Holland, demanded their money back. The Dutch and British governments covered the losses but sought reimbursement of over \$5 billion from Iceland, an amount equaling about \$63,000 per Icelandic household.¹ The story of Iceland is another tale of uncontrolled risk, over-optimistic return expectations, and hubris. In this course you will learn about important elements of the international financial system.²

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- ▲ For many years, the strong performance of General Motors (GM) was a given source of strength in the U.S. economy. Its diversified product line, its strong international presence, its domination of the U.S. market, its consistent and generous dividends to

¹In February, 2013 the court of the European Free Trade Association ruled that Iceland did not have an obligation to return deposits to Dutch and UK investors whose money was in Iceland's failed banks (www.neurope.eu: "Iceland wins court ruling over U.K., Dutch bank repayments," February 3, 2013).

²For a detailed account of the Iceland dilemma, see Asgeir Jonsson, *Why Iceland?* (New York: McGraw-Hill, 2009).

FINANCIAL CHALLENGE — CONTINUED

shareholders, its strong balance sheet, and its high bond rating were hallmarks of the company. After years of slumping performance, GM was forced in December 2008 to request and take more than \$13 billion of government loans from the Troubled Asset Relief Program (TARP). By May 2009, GM had borrowed over \$19 billion from the government to stay afloat. On June 1, the company filed for bankruptcy and sought another \$30 billion of government funds to help it restructure and come out of bankruptcy. On July 10, 2009, the company emerged from bankruptcy, after shedding 1,200 dealers and dropping its Saturn, Pontiac, and Hummer brands. By the end of 2012, the restructured GM had returned to solid profitability, supported by a small lineup of redesigned vehicles and a drastically reduced cost structure. Loans to the U.S. government had largely been repaid. Bankruptcy and reorganization had saved GM. Mature companies face continual challenges from newer competitors, challenges of capital renewal, challenges of cost control, and, for large firms like GM, challenges of management control. Many of the issues that led to the downfall of GM are covered throughout this course.

- ▲ Ever since Apple Inc. released its popular iPhone, iPad, and numerous innovative new PCs, its profits and stock market price have soared. For example, in May 2005, Apple stock traded in price range of approximately \$37 per share. By September 2012 that price had hit \$705 per share. In early 2012, Apple announced that it would begin paying its first significant cash dividends. In spite of the initiation of dividends and plans for substantial share buybacks from investors, cash continues to accumulate at Apple, hitting over \$137 billion in December 2012. In early 2013, David Einhorn, manager of the Greenlight Hedge Fund and a significant holder of Apple's stock, challenged the company to be much more aggressive in distributing cash to shareholder. Apple's management and board face a significant strategic challenge regarding the use of its substantial cash reserves. In late April 2013, Apple completed a \$17 billion public debt offering, the largest ever for a public company. The proceeds are to be used to provide cash for future dividends and share repurchases.³

Each of these situations has implications for financial managers. Financial management decisions made within enterprises—small or large, international or local, profit-seeking or not-for-profit—help to determine the kinds of products and services we consume and their prices, availability, and quality. Financial decisions can also affect the risk of a firm and the success of that firm in maximizing shareholder wealth. In short, financial decision making has effects that are felt daily throughout the entire economy.

The situations described here pose important questions for financial managers. The financial concepts and tools needed to deal with problems such as these and to make you a more effective decision maker are the subject matter of this book.



CHAPTER OBJECTIVES

Upon completion of this chapter, you should have a clear understanding of the following topics:

1. The primary goal of the firm
2. The determinants of the value of a firm
3. The meaning and implication of agency problems in a corporation
4. The importance of ethics in running a business organization
5. The major types of business organizations and their distinguishing features
6. The role and function of the financial manager
7. The relationship between finance and other business disciplines

³Telis Demos, "Einhorn Squeezes Apple for its Cash," *The Wall Street Journal* (February 12, 2013) p. B1; Katy Burne and Mike Cherney, "Apple's Record Plunge Into Debt



HTTP:

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1-1 Introduction

Financial managers have the primary responsibility for acquiring funds (cash) needed by a firm and for directing those funds into projects that will maximize the value of the firm. The field of financial management⁴ is an exciting and challenging one, with a wide range of rewarding career opportunities in the fields of corporate financial management, investment banking, investment analysis and management, portfolio management, commercial banking, real estate, insurance, wealth management, and the public sector.

Articles appear regularly in the major business periodicals, such as *The Wall Street Journal*, *Bloomberg BusinessWeek*, *Fortune*, *Forbes*, and *The Financial Times* describing financial managers' involvement in important and challenging tasks. Consider, for example, the options facing Ford Motor's management in 2009 when it was deciding whether to accept U.S. government loan assistance. Think about the challenges facing airline executives in the aftermath of the September 11, 2001, terrorist attacks on New York and Washington. In the face of falling passenger load factors, should an airline cut service—as Delta, US Airways, United, American, and most other major airlines did—or should the airline view this as an opportunity to expand and gain market share—as the financially stronger Southwest Airlines did?

Imagine being a portfolio manager who invested \$10 million, on behalf of her clients, in Apple Computer in July, 2006. At that time Apple's stock was trading at \$57/share. By September 2012, Apple's stock was trading as high as \$705/share. That initial \$10 million investment had grown to more than \$123 million. Was this the time to take profits for her clients, or was it the time to hold on to the stock, or perhaps even expand holdings of the stock? By early February 2013, Apples' stock was trading at about \$446 per share. What factors explain this rapid price decline from its peak? Could these factors have been foreseen in 2012?

Any business has important financial concerns, and its success or failure depends in a large part on the quality of its financial decisions. Every key decision made by a firm's managers has important financial implications. Managers daily face questions like the following:

- ▲ Will a particular investment be successful?
- ▲ Where will the funds come from to finance the investment?
- ▲ Does the firm have adequate cash or access to cash—through bank borrowing agreements, for example—to meet its daily operating needs?
- ▲ Which customers should be offered credit, and how much should they be offered?
- ▲ How much inventory should be held?
- ▲ Is a merger or acquisition advisable?
- ▲ How should cash flows be used or distributed? That is, what is the optimal dividend policy?
- ▲ In trying to arrive at the best financial management decisions, how should risk and return be balanced?
- ▲ Are there "intangible" benefits (for example, real option aspects) from an investment project that the firm is considering that will affect the accept/reject decision emerging from traditional quantitative analysis procedures?

This text presents an introduction to the theory, institutional background, and analytical tools essential for proper decision making in these and related areas. As a prospective manager, you will be introduced to the financial management process of typical firms. By learning how the financial management process works, you will establish one of the key building blocks for a successful management career.

⁴The terms *financial management*, *managerial finance*, *corporate finance*, and *business finance* are virtually synonymous and are used interchangeably. Most financial managers, however, seem to prefer either *financial management* or *managerial finance*.

1-2 The Goal of Shareholder Wealth Maximization



Foundation Concept

shareholder wealth

Effective financial decision making requires an understanding of the goal(s) of the firm. What objective(s) *should* guide business decision making—that is, what should management try to achieve for the owners of the firm? The most widely accepted objective of the firm is to make the most efficient use of the firm’s resources and thereby maximize the value of the firm for its owners, that is, to *maximize shareholder wealth*. **Shareholder wealth** is represented by the market price of a firm’s common stock.

Warren Buffett, CEO of Berkshire Hathaway, an outspoken advocate of the shareholder wealth maximization objective and a premier “value investor,” says it this way:

Our long-term economic goal . . . is to maximize the average annual rate of gain in intrinsic business value on a per-share basis. We do not measure the economic significance or performance of Berkshire by its size; we measure by per-share progress.⁵

present value

discount rate

risk

market value

The shareholder wealth maximization goal states that management should seek to maximize the present value of the expected future returns to the owners (that is, shareholders) of the firm. These returns can take the form of periodic dividend payments or proceeds from the sale of the common stock. **Present value** is defined as the value today of some future payment or stream of payments, evaluated at an appropriate discount rate. The **discount rate** takes into account the returns that are available from alternative investment opportunities during a specific (future) time period. As we shall see in Chapter 5, the longer it takes to receive a benefit, such as a cash dividend or price appreciation of the firm’s stock, the lower the value investors place on that benefit. In addition, the greater the **risk** associated with receiving a future benefit, the lower the value investors place on that benefit. Stock prices, the measure of shareholder wealth, reflect the *magnitude, timing, and risk* associated with future benefits expected to be received by stockholders.

Shareholder wealth is measured by the market value of the shareholders’ common stock holdings. **Market value** is defined as the price at which the stock trades in the marketplace, such as on the New York Stock Exchange. Thus, total shareholder wealth equals the number of shares outstanding times the market price per share.

$$(1.1) \quad \text{Shareholder wealth} = \text{Number of shares outstanding} \times \text{Market price per share}$$

The objective of shareholder wealth maximization has a number of distinct advantages. First, this objective explicitly considers the timing and the risk of the benefits expected to be received from stock ownership. Similarly, managers must consider the elements of timing and risk as they make important financial decisions, such as capital expenditures. In this way, managers can make decisions that will contribute to increasing shareholder wealth.

Second, it is conceptually possible to determine whether a particular financial decision is consistent with this objective. Stock prices provide a direct measure of the success of decisions made by a firm’s managers.

Third, shareholder wealth maximization is an impersonal objective. Stockholders who object to a firm’s policies are free to sell their shares *under more favorable terms* (that is, at a higher price) *than are available under any other strategy* and invest their funds

⁵Berkshire Hathaway, Inc., *Annual Report* (2001). More recently (*Annual Report*, 2010), Buffett adds that their goal is to increase the intrinsic value at a rate of growth in excess of the *Standard & Poor’s 500 Stock Price Index* (S&P 500), thus providing an objective standard against which success can be measured. (See Chapter 2 for more information on the S&P stock index.)

elsewhere. If an investor has a consumption pattern or risk preference that is not accommodated by the investment, financing, and dividend decisions of that firm, the investor will be able to sell his or her shares in that firm at the best price, and purchase shares in companies that more closely meet the investor's needs.

For these reasons, the shareholder wealth maximization is the key performance metric in financial management. However, concerns for the social responsibilities of business, the existence of other objectives pursued by some managers, and problems that arise from agency relationships may cause some departures from pure wealth-maximizing behavior by owners and managers. (These problems are discussed later.) Nevertheless, the shareholder wealth maximization goal provides the standard against which actual decisions can be judged and, as such, is the objective assumed in financial management analysis.

1-2a Stakeholder Concerns

stakeholders

Most firms recognize the importance of the interests of all their constituent groups, or **stakeholders**—customers, employees, suppliers, and the communities in which they operate—and not just the interests of stockholders. For example, firms normally recognize responsibilities to various constituencies, such as:

- ▲ To sustain an optimum return on investment for *stockholders*
- ▲ To be perceived by *customers* as a provider of quality service
- ▲ To demonstrate that *employees* are our most valuable resource
- ▲ To provide corporate leadership to the *community*
- ▲ To operate compatibly with environmental standards and initiate programs that are sensitive to environmental issues [*community*]

A diversity of opinion exists regarding what stakeholder concerns should be addressed by private companies. The concept is somewhat subjective and is neither perceived nor applied uniformly by all firms. In most instances, a manager who takes an appropriate long-term perspective in decision making, rather than focusing only on short-term accounting profits, will recognize responsibility to all of a firm's constituencies and will help lead the company to the maximization of value for shareholders, while balancing concerns of other stakeholders. In essence, concern for the interests of stakeholders can be viewed as the *means* to the *end* of maximizing long-term shareholder wealth.

1-2b Divergent Objectives

The goal of shareholder wealth maximization specifies how financial decisions should be made. In practice, however, not all management decisions are consistent with this objective. For example, Joel Stern and Bennett Stewart have developed an index of managerial performance that measures the success of managers in achieving a goal of shareholder wealth maximization.⁶ Their performance measure, called *Economic Value Added*, is the difference between a firm's annual after-tax operating profit and its total annual cost of capital. Many highly regarded major corporations, including Coca-Cola, AT&T, Quaker Oats, Briggs & Stratton, and CSX, have used the concept. The poor performances of other firms may be due, in part, to a lack of attention to stockholder interests and the pursuit of goals more in the interests of managers.

In other words, there often may be a divergence between the shareholder wealth maximization goal and the *actual* goals pursued by management. The primary reason for this divergence has been attributed to *separation of ownership and control* (management) in corporations.

⁶J. M. Stern, J. S. Shiely, and I. Ross, *The EVA Challenge* (New York: Wiley, 2001). This performance measure is discussed more fully in Chapter 3.

Separation of ownership and control has permitted managers to pursue goals more consistent with their own self-interests as long as they satisfy shareholders sufficiently to maintain control of the corporation. Instead of seeking to maximize some objective (such as shareholder wealth), managers “satisfice,” or seek acceptable levels of performance, while maximizing their own welfare.

Maximization of their own personal welfare (or utility) may lead managers to be concerned with long-run survival (job security). The concern for long-run survival may lead managers to minimize (or limit) the amount of risk incurred by the firm, since unfavorable outcomes can lead to their dismissal or possible bankruptcy for the firm. Likewise, the desire for job security is cited as one reason why management often opposes takeover offers (mergers) by other companies. Giving senior managers “golden parachute” contracts to compensate them if they lose their positions as the result of a merger is one approach designed to ensure that they will act in the interests of shareholders in merger decisions, rather than in their own interests.

Other firms expect top managers and directors to have a significant ownership stake in the firm. When they do, it is more likely that they will be thinking about ways to increase that stock price every day they go to work.

1-2c Agency Problems

The existence of divergent objectives between owners and managers is one example of a class of problems arising from agency relationships. **Agency relationships** occur when one or more individuals (the **principals**) hire another individual (the **agent**) to perform a service on behalf of the principals.⁷ In an agency relationship, principals often delegate decision-making authority to the agent. In the context of finance, two of the most important agency relationships are the relationship between stockholders and creditors and the relationship between stockholders (owners) and managers.

Stockholders and Creditors A potential agency conflict arises from the relationship between a company’s owners and its creditors. Creditors have a fixed financial claim on the company’s resources in the form of long-term debt, bank loans, commercial paper, leases, accounts payable, wages payable, taxes payable, and so on. Because the returns offered to creditors are fixed whereas the returns to stockholders are variable, conflicts may arise between creditors and owners. For example, owners may attempt to increase the riskiness of the company’s investments in hopes of receiving greater returns. When this occurs, bondholders suffer because they do not have an opportunity to share in these higher returns. For example, when RJR Nabisco (RJR) was acquired by KKR, the debt of RJR increased from 38 percent of total capital to nearly 90 percent of total capital. This unexpected increase in financial risk caused the value of RJR’s bonds to decline by nearly 20 percent. In response to this loss of value, Metropolitan Life Insurance Company and other large bondholders sued RJR for violating the bondholders’ rights and protections under the bond covenants. RJR and Metropolitan ultimately settled the suit to the benefit of Metropolitan. Similar concerns arose in several large financial firms, including Wachovia, AIG, Merrill Lynch, and Lehman Brothers, during the economic crisis of 2008–2009. The issue of bondholder rights remains controversial, however.

In order to protect their interests, creditors often insist on certain protective covenants in a company’s bond indentures.⁸ These covenants take many forms, such as limitations on dividend payments, limitations on the type of investments (and divestitures)

⁷See Amir Barnea, R. Haugen, and L. Senbet, *Agency Problems and Financial Contracting* (Englewood Cliffs, NJ: Prentice Hall, 1985) for an overview of the agency problem issue. See also Jean-Jacques Laffont and David Martimort, *The Theory of Incentives: The Principal-Agent Model* (Princeton University Press, 2001).

⁸Protective covenants are discussed in more detail in Chapters 6 and 19.

agency relationships
principals
agent

the company can undertake, poison puts,⁹ and limitations on the issuance of new debt. The constraints on the owner-managers may reduce the potential market value of the firm. In addition to these constraints, bondholders may also demand a higher fixed return to compensate for risks not adequately covered by bond indenture restrictions.

Stockholders and Managers Inefficiencies that arise because of agency relationships have been called *agency problems*. These problems occur because each party to a transaction is assumed to act in a manner consistent with maximizing his or her own utility (welfare). The example cited earlier—the concern by management for long-run survival (job security) rather than shareholder wealth maximization—is an agency problem. Another example is the consumption of on-the-job perquisites (such as the use of company airplanes, limousines, and luxurious offices) by managers who have no (or only a partial) ownership interest in the firm. Shirking by managers is also an agency-related problem.

In May 2012, JPMorgan Chase called a surprise news conference call to announce a loss of at least \$2 billion because of trading in risky credit default swaps that were made in the office of the chief investment officer, Ina Drew. The trades that led to the massive losses were managed by a trader in the firm's London offices. These trades occurred because of a conflict of incentives between the traders and the risk-management profile desired by JPMorgan's CEO, Jamie Dimon. Seven employees lost their jobs, the market value of JPMorgan's stock declined by nearly \$39 billion in the 2 months following the announcement of the trading losses, and the reputations of JPMorgan and its CEO were severely damaged.

agency costs

These agency problems give rise to a number of **agency costs**, which are incurred by shareholders to minimize agency problems. Examples of agency costs include

1. Expenditures to structure the organization in such a way as to minimize the incentives for management to take actions contrary to shareholder interests
2. Expenditures to monitor management's actions, such as paying for audits of managerial performance and internal audits of the firm's expenditures
3. Bonding expenditures to protect the owners from managerial dishonesty
4. The opportunity cost of lost profits arising from complex organizational structures that prevent management from making timely responses to opportunities

A number of different mechanisms are available to reduce the agency conflicts between shareholders and managers. These include corporate governance, managerial compensation, and the threat of takeovers.

Corporate Governance As a result of accounting scandals and the increased perception of excessive executive compensation (relative to company performance), the Securities and Exchange Commission (SEC), the securities exchanges (NYSE, AMEX, NASDAQ), The Conference Board (a business research organization), and other experts have made various proposals concerning how best to deal with the issues of corporate governance.

First, the board of directors of a corporation should have a majority of independent directors. Independent directors are individuals who are not current or former employees of the company and who have no significant business ties to the company. Additionally, the committee responsible for nominating members of the board of directors must be composed only of independent directors. Furthermore, the post of chairman of the board of directors should be split from the CEO position or, alternatively, an independent lead, or presiding, director should chair board meetings. Also, all members of the audit and

⁹A "poison put" is an option contained in a bond indenture that permits the bondholder to sell the bond back to the issuing company at face value under certain circumstances, such as a leveraged buyout that raises the risk for existing debt holders.