Preface

This book is about corporate finance. It focuses on how companies invest in real assets and how they raise the money to pay for these investments. It also provides a broad introduction to the financial landscape, discussing, for example, the major players in financial markets, the role of financial institutions in the economy, and how securities are traded and valued by investors. The book offers a framework for systematically thinking about most of the important financial problems that both firms and individuals are likely to confront.

Financial management is important, interesting, and challenging. It is *important* because today's capital investment decisions may determine the businesses that the firm is in 10, 20, or more years ahead. Also, a firm's success or failure depends in large part on its ability to find the capital that it needs.

Finance is *interesting* for several reasons. Financial decisions often involve huge sums of money. Large investment projects or acquisitions may involve billions of dollars. Also, the financial community is international and fast-moving, with colorful heroes and a sprinkling of unpleasant villains.

Finance is *challenging*. Financial decisions are rarely cut and dried, and the financial markets in which companies operate are changing rapidly. Good managers can cope with routine problems, but only the best managers can respond to change. To handle new problems, you need more than rules of thumb; you need to understand why companies and financial markets behave as they do and when common practice may not be best practice. Once you have a consistent framework for making financial decisions, complex problems become more manageable.

This book provides that framework. It is not an encyclopedia of finance. It focuses instead on setting out the basic *principles* of financial management and applying them to the main decisions faced by the financial manager. It explains why the firm's owners would like the manager to increase firm value and shows how managers choose between investments that may pay off at different points of time or have different degrees of risk. It also describes the main features of financial markets and discusses why companies may prefer a particular source of finance.

Some texts shy away from modern finance, sticking instead with more traditional, procedural, or institutional approaches. These are supposed to be easier or more practical. We disagree emphatically. The concepts of modern finance, properly explained, make the subject simpler, not more difficult. They are also more practical. The tools of financial management are easier to grasp and use effectively when presented in a consistent conceptual framework. Modern finance provides that framework.

Modern financial management is not "rocket science." It is a set of ideas that can be made clear by words, graphs, and numerical examples. The ideas provide the "why" behind the tools that good financial managers use to make investment and financing decisions.

We wrote this book to make financial management clear, useful, interesting, and fun for the beginning student. We set out to show that modern finance and good financial practice go together, even for the financial novice.

Fundamentals and Principles of Corporate Finance

This book is derived in part from its sister text *Principles of Corporate Finance.* The spirit of the two books is similar. Both apply modern finance to give students a working ability to make financial decisions. However, there are also substantial differences between the two books.

First, we provide much more detailed discussion of the principles and mechanics of the time value of money. This material underlies almost all of this text, and we spend a lengthy chapter providing extensive practice with this key concept.

Second, we use numerical examples in this text to a greater degree than in *Principles.* Each chapter presents several detailed numerical examples to help the reader become familiar and comfortable with the material.

Third, we have streamlined the treatment of most topics. Whereas *Principles* has 35 chapters, *Fundamentals* has only 25. The relative brevity of *Fundamentals* necessitates a broader-brush coverage of some topics, but we feel that this is an advantage for a beginning audience.

Fourth, we assume little in the way of background knowledge. While most users will have had an introductory accounting course, we review the concepts of accounting that are important to the financial manager in Chapter 3.

Principles is known for its relaxed and informal writing style, and we continue this tradition in *Fundamentals.* In addition, we use as little mathematical notation as possible. Even when we present an equation, we usually write it in words rather than symbols. This approach has two advantages. It is less intimidating, and it focuses attention on the underlying concept rather than the formula.

Organizational Design

Fundamentals is organized in eight parts.

Part 1 (Introduction) provides essential background material. In the first chapter we discuss how businesses are organized, the role of the financial manager, and the financial markets in which the manager operates. We explain how shareholders want managers to take actions that increase the value of their investment, and we describe some of the mechanisms that help to align the interests of managers and shareholders. Of course, the task of increasing shareholder value does not justify corrupt and unscrupulous behavior. We therefore discuss some of the ethical issues that confront managers.

Chapter 2 surveys and sets out the functions of financial markets and institutions. It shows how financial managers use these markets and institutions, and it explains how markets provide useful signals to managers concerning the viability of potential investment projects.

A large corporation is a team effort, and so the firm produces financial statements to help the players monitor its progress. Chapter 3 provides a brief overview of these financial statements and introduces two key distinctions—between market and book values and between cash flows and profits. This chapter also discusses some of the shortcomings in accounting practice that became apparent in the scandals of 2001–2002. The chapter concludes with a summary of federal taxes.

Chapter 4 provides an overview of financial statement analysis. In contrast to most introductions to this topic, our discussion is motivated by considerations of valuation and the insight that financial ratios can provide about how management has added to the firm's value.

Part 2 (Value) is concerned with valuation. In Chapter 5 we introduce the concept of the time value of money, and, since most readers will be more familiar with their own financial affairs than with the big leagues of finance, we motivate our discussion by looking first at some personal financial decisions. We show how to value long-lived streams of cash flows and work through the valuation of perpetuities and annuities. Chapter 5 also contains a short concluding section on inflation and the distinction between real and nominal returns.

Chapters 6 and 7 introduce the basic features of bonds and stocks and give students a chance to apply the ideas of Chapter 5 to the valuation of these securities. We show how to find the value of a bond given its yield, and we show how prices of bonds fluctuate as interest rates change. We look at what determines stock prices and how stock valuation formulas can be used to infer the return that investors expect. Finally, we see how investment opportunities are reflected in the stock price and why analysts focus on the price-earnings multiple. Chapter 7 also introduces the concept of market efficiency. This concept is crucial to interpreting a stock's valuation; it also provides a framework for the later treatment of the issues that arise when firms issue securities or make decisions concerning dividends or capital structure.

The remaining chapters of Part 2 are concerned with the company's investment decision. In Chapter 8 we introduce the concept of net present value and show how to calculate the NPV of a simple investment project. We also look at other measures of an investment's attractiveness—its internal rate of return, payback period, and profitability index. We then turn to more complex investment proposals, including choices between alternative projects, machine replacement decisions, and decisions of when to invest. Finally, we show how the profitability index can be used to choose between investment projects when capital is scarce.

The first step in any NPV calculation is to decide what to discount. Therefore, in Chapter 9 we work through a realistic example of a capital budgeting analysis, showing how the manager needs to recognize the investment in working capital and how taxes and depreciation affect cash flows.

We start Chapter 10 by looking at how companies organize the investment process and ensure everyone works toward a common goal. We then go on to look at various techniques to help managers identify the key assumptions in their estimates, such as sensitivity analysis, scenario analysis, and break-even analysis. We also show how managers can assess projects using NPV rather than accounting break-even analysis. We conclude the chapter by describing how managers try to build future flexibility into projects so that they can capitalize on good luck and mitigate the consequences of bad luck.

Part 3 (Risk) is concerned with the cost of capital. Chapter 11 starts with a historical survey of returns on bonds and stocks and goes on to distinguish between the unique risk and market risk of individual stocks. Chapter 12 shows how to measure market risk and discusses the relationship between risk and expected return. Chapter 13 introduces the weighted-average cost of capital and provides a practical illustration of how to estimate it.

Part 4 (Financing) begins our discussion of the financing decision. Chapter 14 provides an overview of the securities that firms issue and their relative importance as sources of finance. In Chapter 15 we look at how firms issue securities, and we follow a firm from its first need for venture capital, through its initial public offering, to its continuing need to raise debt or equity.

Part 5 (Debt and Payout Policy) focuses on the two classic long-term financing decisions. In Chapter 16 we ask how much the firm should borrow and we summarize bankruptcy procedures that occur when firms can't pay their debts. In Chapter 17 we study how firms should set dividend and payout policy. In each case we start with Modigliani and Miller's (MM's) observation that in well-functioning markets the decision should not matter, but we use this observation to help the reader understand why financial managers in practice *do* pay attention to these decisions.

Part 6 (Financial Analysis and Planning) starts with long-term financial planning in Chapter 18, where we look at how the financial manager considers the combined effects of investment and financing decisions on the firm as a whole. We also show how measures of internal and sustainable growth help managers check that the firm's planned growth is consistent with its financing plans. Chapter 19 is an introduction to short-term financial planning. It shows how managers ensure that the firm will have enough cash to pay its bills over the coming year, and describes the principal sources of short-term borrowing. Chapter 20 addresses working capital management. It describes the basic steps of credit management, the principles of inventory management, and how firms handle payments efficiently and put cash to work as quickly as possible.

Part 7 (Special Topics) covers several important but somewhat more advanced topics—mergers (Chapter 21), international financial management (Chapter 22), options (Chapter 23), and risk management (Chapter 24). Some of these topics are touched on in earlier chapters. For example, we introduce the idea of options in Chapter 10, when we show how companies build flexibility into capital projects. However, Chapter 23 generalizes this material, explains at an elementary level how options are valued, and provides some examples of why the financial manager needs to be concerned about options. International finance is also not confined to Chapter 22. As one might expect from a book that is written by an international group of authors, examples from different countries and financial systems are scattered throughout the book. However, Chapter 22 tackles the specific problems that arise when a corporation is confronted by different currencies.

Part 8 (Conclusion) contains a concluding chapter (Chapter 25), in which we review the most important ideas covered in the text. We also introduce some interesting questions that either were unanswered in the text or are still puzzles to the finance profession. Thus the last chapter is an introduction to future finance courses as well as a conclusion to this one.

Routes through the Book

There are about as many effective ways to organize a course in corporate finance as there are teachers. For this reason, we have ensured that the text is modular, so that topics can be introduced in different sequences.

We like to discuss the principles of valuation before plunging into financial planning. Nevertheless, we recognize that many instructors will prefer to move directly from Chapter 4 (Measuring Corporate Performance) to Chapter 18 (Long-Term Financial Planning) in order to provide a gentler transition from the typical prerequisite accounting course. We have made sure that Part 6 (Financial Analysis and Planning) can easily follow Part 1.

Similarly, we like to discuss working capital after the student is familiar with the basic principles of valuation and financing, but we recognize that here also many instructors prefer to reverse our order. There should be no difficulty in taking Chapter 20 out of order.

When we discuss project valuation in Part 2, we stress that the opportunity cost of capital depends on project risk. But we do not discuss how to measure risk or how return and risk are linked until Part 3. This ordering can easily be modified. For example, the chapters on risk and return can be introduced before, after, or midway through the material on project valuation.

Changes in the Sixth Edition

The most obvious changes in this new edition of *Fundamentals* are the continuing enhancement and use of pedagogical tools such as Internet resources, Excel spreadsheets, and end-of-chapter integrative cases. We have updated and expanded our Internet Insider boxes, which provide students with opportunities to explore the resources available on the Web. We also provide links to suggested Web sites online at **www.mhhe.com/bmm6e** so addresses may be kept up to date. In addition, we provide many end-of-chapter student exercises using the Web-based educational version of Standard & Poor's Market Insight. This resource provides a wide variety of financial statement data, stock market return history, and analyst coverage of hundreds of stocks, making it well suited for extended student projects on company and industry analysis.

We have also integrated more spreadsheets into the chapter material. These spreadsheets require only a basic knowledge of Excel, but they illustrate the powerful ways in which spreadsheet modeling can facilitate financial analysis. Every spreadsheet in the text is now available on the text Web site at **www.mhhe.com/bmm6e.** Where appropriate, each chapter includes a comprehensive problem that is designed to be solved using a spreadsheet.

Some of the changes in coverage reflect topics that have been highlighted by recent events. For example, the scandals of 2001–2002 and the subsequent options-backdating scandal increased interest in the issues of governance and control, while the dot-com boom and bust focused attention on behavioral finance and governance. So you will find more emphasis in this edition on governance and behavioral finance.

In fact, we introduce governance issues right up front in Chapters 1 and 2. Other topics that have received increasing emphasis in recent editions include company valuation, real options, and the role of financial institutions and markets.

In revising each chapter we have sought to improve readability and update coverage. Chapters 1 and 2 have been largely rewritten to improve interest and provide a better overview of the financial landscape. We use case histories of real firms such as Federal Express and Apple to show how financial markets help infant firms grow into healthy adults. Along the way, we take a fresh look at agency and reputation issues in the context of recent scandals, and we present a nontechnical introduction to the idea of the opportunity cost of capital that provides context for the later discussion of present value.

The survey of financial institutions in Chapter 2 has been expanded to reflect the increasing importance of hedge funds and exchange traded funds.

Chapter 3 (Accounting and Finance) includes updated discussions of reporting issues informed by the accounting failures and reforms of the last few years.

Chapter 4 (Measuring Corporate Performance) was previously Chapter 17 of the text. In response to user comments, we have moved this chapter to Part 1 to accompany the previous chapter on accounting and finance. We also have extensively rewritten Chapter 4 with a sharper focus on how financial data can be used to measure contributions to firm value.

Chapters 5 to 7 have been updated and rearranged to improve logical flow. Chapter 7 (Valuing Stocks) now starts with a review of stock markets and trading procedures and motivates the following treatment of stock valuation with a small case study of an investor considering whether to purchase a particular stock, FedEx. We begin this discussion with valuation by comparables and the distinction between price and intrinsic value.

The discussion of project analysis in Chapters 8 to 10 has been streamlined and reorganized. The discussion of project cash flow has been reworked to more carefully show how each of its components can be estimated.

The overview of financing methods in Part 4 includes material on developments in the IPO market.

Part 5 on debt and payout policy also has been updated. The discussion of stock repurchases and dividend policy in particular have been rewritten to reflect recent trends and research.

Material on financial planning in Part 6 has been reorganized and updated. As noted, financial statement analysis has been moved to Part 1. In Chapter 19 (Short-Term Financial Planning), we have rewritten and updated the section on bank lending. In Chapter 20 (Working Capital Management), we have expanded the discussion of inventory management and updated the treatment of credit scoring as well as of cash management, which has changed considerably as the technology of cash transfers has advanced. We also discuss briefly the credit crunch and the value of liquidity.

Finally, Part 7, on special topics, also has been revised. For example, Chapter 21 (Mergers) has been fully reorganized, and now begins with an overview of why mergers and other forms of reorganization may make sense. Only then do we progress to the market for corporate control. The other chapters in Part 7 have been updated with new examples and data.

Assurance of Learning

Many educational institutions today are focused on the notion of assurance of learning, an important element of some accreditation standards. *Fundamentals of Corporate Finance* is designed to support your assurance-of-learning initiatives with a simple, yet powerful, solution.

In this edition we have numbered the Learning Objectives (LOs) and refer to them in the chapter summaries and end-of-chapter problems to help you see where the presented material ties into the stated objectives.

Each test bank question for *Fundamentals of Corporate Finance* maps to a specific chapter learning goal listed in the text. You can use the test bank software to easily query for learning goals that directly relate to the learning objectives for your course. You can then use the reporting features of the software to aggregate student results in similar fashion, making the collection and presentation of assurance-of-learning data simple and easy.