
SECOND EDITION

CORPORATE
FINANCIAL
MANAGEMENT



DOUGLAS R. EMERY
JOHN D. FINNERTY
JOHN D. STOWE

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SECOND EDITION

CORPORATE FINANCIAL MANAGEMENT

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*To our families with love and appreciation
Cindy, Ryan, Lacey, and Logan Louise and Will
Adette, Doug, David, Jason, and Laura*

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THE PRINCIPLES OF FINANCE

THE COMPETITIVE ECONOMIC ENVIRONMENT

Principle of Self-Interested Behavior

People act in their own financial self-interest.

Principle of Two-Sided Transactions

Each financial transaction has at least two sides.

Signaling Principle

Actions convey information.

Behavioral Principle

When all else fails, look at what others are doing for guidance.

VALUE

Principle of Valuable Ideas

Extraordinary returns are achievable with new ideas.

Principle of Comparative Advantage

Expertise can create value.

Options Principle

Options are valuable.

Principle of Incremental Benefits

Financial decisions are based on incremental benefits.

FINANCIAL TRANSACTIONS

Principle of Risk-Return Trade-Off

There is a trade-off between risk and return.

Principle of Diversification

Diversification is beneficial.

Principle of Capital Market Efficiency

The capital markets reflect all information quickly.

Time-Value-of-Money Principle

Money has a time value.

P R E F A C E

The field of finance has evolved over the past 50 years from basic descriptions of observed practice. Today, it is a sound body of concepts and theory that helps us understand finance. The world of finance continues to evolve at a dizzying pace. Changes in the economic environment and in the practice of finance occur daily. Consider stock price movements over the last several years and scandals at Enron, ImClone, Tyco, and WorldCom. How can you prepare for such a rapidly changing field? This text offers a set of fundamental tenets designed to help you develop intuition about decision making that will hold true through future evolutions in the financial world. Our *principles* of finance provide an integrated view of the theory of finance so that financial decision making can be treated as an application of this basic understanding.

Corporate Financial Management shows how to apply this ‘ready intuition’ to the world of financial management. For example, the first principle, the Principle of Self-Interested Behavior, is the most basic. Without this principle, we cannot explain financial behavior. Regrettably, some people misapply this principle. In your career, you are likely to face illegal “opportunities” to make literally millions of dollars by, for example, insider trading. Our Principle of Self-Interested Behavior explicitly excludes such behavior: individuals should obey the rules and regulations to ensure legal—and ethically sound—behavior. There is nothing wrong with pursuing self-interested behavior—provided you play by the rules. Recent scandals demonstrate the importance of corporate governance, and highlight the relevance of our chapter on agency theory, which is based on the Principle of Self-Interested Behavior.

The applications in this text come from the real business world—many pulled from today’s headlines—and are designed to illustrate how financial principles are useful and immediately applicable. We tell you about executive stock options at McDonalds, financing decisions by firms such as PepsiCo, American Airlines, and CBS, and investment decisions made by firms such as Boeing and Disney.

Whether it is a corporate treasurer deciding what type of security to issue, an investment banker determining the structure of a new security, a bond trader deciding which bonds to buy, or a stock portfolio manager deciding which stocks to sell, it is their grasp of financial theory and their ability to apply it in *any* situation that distinguishes the successful people.

INTENDED AUDIENCE

Corporate Financial Management was written for use in corporate finance and financial management courses in MBA and undergraduate programs. There is an abundance of material, so the book can be used in the introductory course, and/or as a text for advanced classes as well as being a reference for other work in the business school curriculum.

We assume throughout the book a familiarity with the standard prerequisites in business/management programs: college-level algebra, financial accounting, microeconomics, and statistics. Although we assume students have this background, we provide reminders of basic definitions and concepts that were covered in prerequisite courses. Also, although an understanding of mathematics is necessary, we facilitate the learning process by providing simple examples and analogies. By providing both verbal/logical and mathematical descriptions, we hope to enlist each student’s “learning strength,” as well as have the descriptions reinforce one another.

Finally, this book has been written with the intent that it will become a useful future reference tool for students as they move through their business careers. The explanations, information, applications, minicases, and problem sets provide a valuable reference source for material not covered in class; and the chapter summaries provide an easily accessed summary of the important dimensions and concepts connected with particular topics.

IMPORTANT CHANGES AND IMPROVEMENTS IN THE SECOND EDITION

This edition reflects feedback from users and changes within the corporate world and the issues students encounter today.

- **REAL OPTIONS.** We use the term option in its broadest sense: any right without an obligation attached to it. This definition allows us to apply the important insights of option theory to a wide variety of topics and provides a natural introduction into real options. For example, we use option concepts in agency theory, capital budgeting, and capital structure, among many others. Options analysis is one of the most valuable technologies available in finance.
- **AGENCY THEORY.** We include a separate chapter on agency theory and principal-agent problems. Throughout the book, we explicitly show how the important insights from this material can be used to solve many practical problems throughout the rest of the book.
- **CORPORATE GOVERNANCE.** Corporate governance issues are examined in the context of agency theory. For example, we describe some of the manager-stockholder conflicts that contributed to the downfall of Enron.
- **CAPITAL BUDGETING.** In response to users and reviews, capital budgeting is covered earlier in this edition.
- **MINICASES.** A Minicase has been added to the end of almost every chapter as a direct application of the material in that chapter.
- **BULLETED SUMMARIES.** The chapter summaries are given in bulleted, rather than narrative, format to facilitate student review.
- **PROBLEM SETS.** Problems are organized into three different levels of difficulty, from basic to advanced, to help faculty and students determine appropriate material to review more efficiently. Level A problems are basic. They review the chapter material and can be answered by direct reference to the text material. Level B problems also relate fairly closely to the material in the chapter but are somewhat more complex. Level C problems are advanced extensions of material presented in the chapter. The level C problems are designed to challenge the students with complex situations, puzzles, or the examination of more subtle implications of the material in the chapter. Occasionally, problems are drawn from material in earlier chapters to reinforce the retention of important concepts. Selected solutions are included at the end of the text.
- **QUESTIONS.** These are in addition to the problem sets. The questions are intended to be answered verbally, without calculations. The questions are divided by level of difficulty into two groups. The first group of questions should be answerable by direct reference to the chapter. Questions in the second group may require a little more thought because they are more complex, more subtle, or, occasionally, sneaky.
- **CURRENCY.** All of the examples, tables, and figures have been updated to include the current laws, regulations, and data.

- **FOCUS ON PRINCIPLES.** These boxes set the stage in the beginning of each chapter by highlighting how particular finance principles apply to the chapter material. They highlight such things as looking for capital budgeting projects that offer a valuable new idea or use a firm's comparative advantage, and seeing the value of real options in a capital budgeting project. The *Focus on Principles* boxes also help students develop and apply financial intuition.

OTHER FEATURES

- **KEY TERMS.** Important words and phrases are bolded the first time they appear and included in the glossary.
- **PRINCIPLES OF FINANCE.** In Chapter 2, we describe the 12 principles of finance that provide the foundation for learning finance.
- **EXAMPLES.** Numerous examples are included in each chapter. They illustrate the concepts as well as the computational details needed to apply the concepts. Good numerical examples are a fundamental learning device for many business students.
- **NUMBERED EQUATIONS.** Important equations are numbered when they appear in the text.
- **EQUATION SUMMARIES.** Following each chapter is an equation summary that reprints all of the numbered equations in the chapter. Students can use these to study, and many professors expressed the importance of these summaries for their classroom instruction. We have provided the equation summaries on the website for this second edition.
- **INTERNATIONALIZATION.** It is imperative that today's companies incorporate into their decision making the specific constraints and additional market imperfections introduced by operating in an international economy. The principles of finance do not stop at the border. Therefore, the concepts and principles developed in this book are readily applicable to international transactions. With this in mind, we treat the international aspects of finance throughout the book as both a point of view and a particular market environment in which to operate.
- **A PRACTITIONER'S PERSPECTIVE.** John Finnerty has worked almost 30 years in the world of finance and, thus, brings a unique perspective to this book. Based on this first-hand experience, John brings the real world of business into the classroom.

THIS BOOK'S OVERRIDING GOAL

We wrote *Corporate Financial Management* with an overriding goal of modernizing the teaching of finance. In particular, we believe the revolution in financial research involving asymmetric information, options, and agency theory should be brought into the classroom. Since the first edition was written, the Nobel prize in economics has offered substantial validation for our view: two of the latest six prizes have been awarded for work in the area of asymmetric information, and one has been awarded for work in options. This book can enrich the teaching of finance by weaving these important research advances into the very fabric of the traditional financial management course.

Certainly these research advances are very important—but they are *also* fascinating. They are immediately applicable and relevant to the real world, as we have witnessed with scandals at Enron, ImClone, Tyco, and WorldCom. This edition offers the excitement of this profoundly important material directly to the student. These concepts, integrated throughout, can and should be understood within the context of finance.

The other business/management disciplines have enthusiastically embraced the idea of a corporation as a set of stakeholders. Beyond accounting, areas such as organizational behavior,

strategic management, business law, marketing, and production are currently working to incorporate the implications of agency theory, options, and asymmetric information into their views of the organizational world. This makes the principal-agent framework a natural way for integrating the business/management areas. Therefore, this book offers the chance for the core finance class to play a central role in the curriculum.

This book lends itself very comfortably to the new environment in which many of us find ourselves. This new environment sometimes forces us to rethink, and change, how we teach finance. With change comes opportunity. We believe this new environment provides an excellent opportunity for the finance discipline to provide a leadership role.

SUPPLEMENTARY MATERIALS

- **INSTRUCTOR'S RESOURCE CD-ROM.** The instructor's resource CD-ROM contains the following resources for instructors: solutions to questions and problem sets; minicases and solutions to minicases; PowerPoint presentations; test bank; TestGen-EQ; Excel solutions; complete set of tables and figures from the text; equation summaries. Other instructor resources include teaching notes and alternative class syllabi with suggested problem assignments for alternative course lengths and coverage.
- **POWERPOINT NOTES.** The PowerPoint notes on the instructor's resource CD-ROM provide a complete set of color slide presentations for lecturing on the material and a second set of reduced notes for teaching the core MBA class.
- **TEST BANK.** The test bank provides a wide variety of problems like those at the back of the chapters as well as multiple-choice and essay questions, designed to test student comprehension. The test bank is available in both Word form and as a computerized test bank.
- **TESTGEN-EQ.** The test bank is designed for use with the TestGen-EQ test generating software. This computerized package allows instructors to custom design, save, and generate classroom tests. The test program permits instructors to edit, add, or delete questions from the test banks; edit existing graphics and create new graphics; analyze test results; and organize a database of tests and student results. This new software allows for greater flexibility and ease of use. It provides many options for organizing and displaying tests, along with a search-and-sort feature.
- **FINCOACH,** version 2.0, written by Puneet Handa, is an easy-to-install and user-friendly Windows product that covers topics including: single cash flows, infinite cash flows, bond valuation, stock valuation, portfolio diversification, CAPM, cost of capital, project and firm valuation, and financial statement analysis. This algorithmic software program provides a large number of problems with randomly generated inputs so that an almost infinite number of problems are available to the student.

Companion Website (<http://www.prenhall.com/emery>)

- **Online Study Guide.** This content-rich, interactive website is a great starting point for teaching and learning resources, including: an interactive study guide featuring multiple-choice, short answer/problem solving, and essay questions.
- **Links to Web Exercises.** These web exercises are keyed to each chapter and direct the student to an updated, economics-related website to gather data on and analyze a specific financial problem.
- **Syllabus Manager** allows instructors to enhance their lectures with all the resources available with this text. Instructors can post their own syllabus and link to any of the material on the site. A faculty lounge area includes teaching resources and faculty chat rooms.

- **Interactive Financial Calculators.** With this edition, we have included access to web-based financial calculators that bring the material alive in a way that today's student can easily relate to. Many of these calculators include interactive slider controls, allowing you to instantly see the impact of a change in one of the variables.
- **Downloadable Supplements** allow instructors to access the book's solutions to questions and problem sets; minicases and solutions to minicases; PowerPoint presentations; and test bank. Please contact your Prentice Hall sales representative for password information.

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The first edition was perhaps the most error-free first edition of a corporate finance textbook. Nevertheless, readers have provided assistance in detecting and reporting the little errors that plague published work. Our goal is to offer the best corporate financial management textbook available, and we want to ensure that all future editions are error free. Therefore, we are offering a reward of \$10 per arithmetic error to the first individual reporting it. Any arithmetic error resulting in follow-on errors will be counted double. All errors of any sort should be reported on the form provide on our website www.prenhall.com/emery.

In this book, we say a great deal about the 12 principles of finance that are explained in Chapter 2. In writing this book, we regularly encountered a 13th principle—the unlucky one that is the bane of all authors. We call it the Underestimation Principle. Its circularity highlights its inevitability: Writing a book always takes longer than you think—even when you take into account the Underestimation Principle! So, we sincerely thank our spouses and families for their tremendous forbearance during the long and arduous process that culminated in this book.

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