Contemporary Financial Management

Moyer · McGuigan · Kretlow

Third Edition

Contemporary Financial Management

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R. Charles Moyer
Texas Tech University

James R. McGuigan
JRM Investments

William J. Kretlow
University of Houston

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Complete Teaching Package to Accompany
***Contemporary Financial Management*, Third Edition**
Moyer/McGuigan/Kretlow

Authors	INSTRUCTOR'S/SOLUTIONS MANUAL
Authors	TEST BANK
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MICROTEST and WESTEST	MICROTEST and WESTEST *Computerized testing for microcomputers and mainframes. Available to qualified adopters.*
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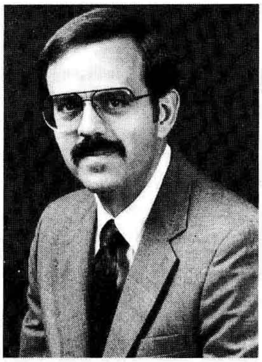
To Laura, Craig, and Sally RCM
To the memory of my mother and father JRM
To Cindy, John, and Jim WJK

About the Authors



R. Charles Moyer is a Professor of Finance and Chairman of the Department of Finance at Texas Tech University, where he has taught finance since 1980. Professor Moyer previously taught at the University of Houston, Lehigh University and the University of New Mexico. Born in Reading, Pennsylvania, he earned his B.A. in economics (*cum laude*) from Howard University, where he was elected to Phi Beta Kappa. He received his M.B.A. and Ph.D. in Business from the University of Pittsburgh. In addition to his teaching career, Professor Moyer has spent a year at the Federal Reserve Bank of Cleveland and a year as a Sears-AACSB Federal Faculty Fellow at the Maritime Administration, U.S. Department of Commerce, serving as a financial and economic analyst. Professor Moyer has taught extensively in executive education programs, including the Stonier Graduate School of Banking. He also is frequently called upon to provide expert testimony in public utility rate cases across the nation.

Professor Moyer has been a productive scholar. In addition to co-authoring *Contemporary Financial Management,* 3rd edition, he has also co-authored *Managerial Economics,* 4th edition (West, 1986), and *Financial Management with Lotus 1-2-3-* (West, 1986). Professor Moyer has published extensively in leading finance and economic journals including *Financial Management, Journal of Financial and Quantitative Analysis, Journal of Finance, Financial Review, Journal of Financial Research, International Journal of Forecasting, Journal of Economics and Business, Journal of Industrial Organization,* and many others. In total he has published over 60 articles. Professor Moyer serves as a member of the Program Committee of the Financial Management Association, Ombudsman for the Financial Management Association and he has served as a director of the Financial Management Association. He is an active reviewer for many finance and economic journals.

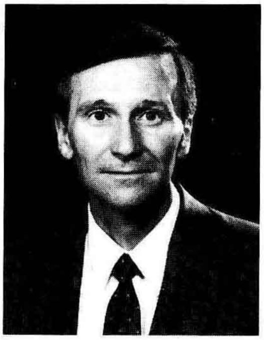
Professor Moyer serves as vice-chairman of a local hospital foundation. He enjoys athletics and is particularly active as a runner, golfer, and basketball player.

James R. McGuigan currently owns and operates his own numismatic investment firm. Prior to this activity, he was Associate Professor of Finance and Business Economics in the School of Business Administration at Wayne State University, where he taught in the undergraduate and masters programs for ten years. He has also taught at the University of Pittsburgh and Point Park College.

Dr. McGuigan received his undergraduate degree from Carnegie-Mellon University. His graduate degrees are from the Graduate Schools of Business at the University of Chicago (M.B.A.) and the University of Pittsburgh (Ph.D.).

He has published articles dealing with his research on options in the *Journal of Financial and Quantitative Analysis.* In addition to his interests in financial management, Dr. McGuigan has coauthored books in managerial economics, including *Managerial Economics,* 4th edition (West, 1986), coauthored with R. Charles Moyer.

Dr. McGuigan's other interests include running and traveling.



William J. Kretlow is an Associate Professor of Finance at the University of Houston–University Park. Born and raised in Chicago, he earned his B.S. from the University of Michigan. He received his M.B.A. from the University of Houston and his Ph.D. from Purdue University, where he was a David Ross Fellow. In addition to teaching at UH, he has been a part-time Associate Professor of Economics at Rice University. At UH, he has taught financial management and investments at all levels. He has taught large introductory sections of managerial finance at both Houston and Rice. He currently teaches in both the UH Executive M.B.A. and the Executive Development Programs. In addition, he also teaches at the Stonier Graduate School of Banking of the American Bankers Association. Professor Kretlow has chaired the UH Finance Department.

Professor Kretlow has received several teaching awards, including the University of Houston Teaching Excellence Award and the College of Business Administration Excellence in Teaching Award. He also is a recipient of Rice University's *Magna Cum Laude* Teaching Excellence Award.

In the area of academic research, Professor Kretlow has published approximately fifteen articles and given several papers at professional society meetings. His research has dealt with the capital asset pricing model, dividend policy, bond ratings and financial planning models.

Professor Kretlow's business experience includes a total of five years with Tenneco and Monsanto, and he has advised various small and medium-sized companies on a variety of financial matters. He also has served as an expert witness in a number of financial cases. He is experienced in the valuation of closely held businesses.

REFERENCE MATERIALS R-1

TABLES

Preface

The financial management field has witnessed a number of significant changes during the 1970s and 1980s. Widely fluctuating rates of inflation have caused the firm's cost of funds (capital) to vary substantially. This, in turn, has forced firms to be more careful in the allocation of their resources. Also, corporate and other financial practioners are increasingly employing newer financial management techniques and sophisticated computer resources to aid in their decision making. New financial instruments have been developed to help cope with this environment of uncertainty. At the same time, financial researchers have been making important theoretical strides. *Contemporary Financial Management,* 3rd edition, incorporates these changes into a text designed primarily for an introductory course in financial management. The book also will be useful for management development programs and as a reference aid to practicing finance professionals.

Although we recognize that students will 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 students will have had at least one course in accounting.

Distinctive Features

Many financial management texts are well written and provide adequate coverage of the important topics in financial management. In writing this text, we, too, were concerned with providing a complete and well-written introduction to the field of financial management. In addition, we have created a text that is a unique improvement over current texts in three areas: organizational design, pedagogical aids to learning, and ancillary materials.

Organizational Design

Contemporary Financial Management (*CFM*) 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.

CFM also emphasizes the importance of risk-return tradeoffs, which must be made as a part of most financial decisions. The analysis of risk-return relationships is developed early in the book (Chapter 5) and is illustrated and emphasized throughout the text.

Other distinctive content features include the following:

1. **Extensive 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 five-chapter section on working capital management is included.
2. **Emphasis on the impact of inflation** During the 1970s and 1980s, finance practitioners were forced to learn how to operate in an inflationary environment. Therefore, this text contains frequent discussions on the impact of inflation.

3. **Introductory coverage of investment topics** Whether they take a separate investments course or not, students are interested in and need to have an understanding of investment topics. Therefore, sections on understanding the financial pages, the operation of security markets, financial futures, and options are included.
4. **Attention to problems of international financial management** In an economy that is increasingly affected by international trade, it is important that finance students be aware of the most important dimensions of international finance. The inclusion of this material (primarily in Chapter 25) is consistent with the emphasis of the business school accrediting group (AACSB) on internationalizing the business school curriculum.
5. **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 to this area, with a detailed discussion of the impact of recent tax law changes that affect the capital budgeting decision.
6. **Introduction to new financial instruments** Financial futures contracts, options, and options on futures contracts have become increasingly important to the contemporary financial manager. These topics are introduced to the student in an applied context which illustrates their value to the financial manager.

Pedagogical Aids

CFM has been carefully designed to assist the student in learning and to stimulate student interests. Distinctive pedagogical features include:

1. **Financial Dilemmas** 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 Gulf Oil, J. David & Company, Eastern Airlines, Apple Computer, E. F. Hutton, Lockheed, Coors, Digital Equipment, Braniff International, and Navistar. These examples tend to focus on financial problems in the topic area of the chapter and highlight the importance of learning sound financial management principles. The Financial Dilemmas have been extensively revised and updated from the second edition, including the addition of many new examples.
2. **Focus On Corporate Practice examples** Throughout the text we have included sections detailing how specific firms approach particular financial management problems. Many of these have been written by senior financial executives. In Chapter 1, for example, T. Boone Pickens of Mesa Petroleum discusses the conflict of goals between managers and shareholders. Other equally exciting examples are included throughout the book. These examples are designed to bridge the gap between textbook theory and actual practice. They show the book's readers that the issues, tools, and techniques discussed in *CFM* are actively being discussed and used in day-to-day financial decision making. This edition updates many of the Focus on Corporate Practice examples from the second edition and adds six new examples.
3. **Integrative Case Problems** Integrative minicases are included throughout the book. These cases illustrate and apply the most important concepts of the preceding chapters. These minicases have been pretested and found to be an extremely useful tool to help the reader assimilate the material in the chapters. They have been revised from the second edition to retain their classroom integrity with some new cases added to replace older ones.
4. **Key Chapter Concepts** Each chapter opens with a detailed outline of the major points contained in the chapter. These Key Chapter Concepts outlines

greatly enhance student learning by providing a summary overview of the chapter contents before the student heads into the detailed discussion in the chapter. This is a new feature in the third edition of CFM.

5. **Chapter Glossaries** Each chapter contains a glossary of important new terms that are discussed in the chapter. The placement of the glossary at the beginning of each chapter insures that students will not be frustrated by encountering concepts before they have been defined. When studying and reviewing a chapter, a student has ready access to the definitions of important terms from the chapter. An index to the glossary is provided at the end of the text.
6. **Extensive use of examples** A large number of examples to illustrate important concepts and techniques is contained in each chapter. The majority of the examples come from actual firm situations. All examples have been revised and updated for this new edition, and will help students see how financial principles are used in everyday business practice.
7. **Part Openers** Each major section of the book opens with a brief discussion of the material contained in the following chapters. The tie of this material to the objective of shareholder wealth maximization is illustrated in a schematic diagram appearing on each part opener.
8. **Problems and Discussion Questions** Each chapter includes a complete set of problems and questions keyed to the most important issues and techniques in that chapter. Because we feel that end-of-chapter problems are an extremely important teaching and learning device, this text has one of the largest and varied end-of-chapter problem sets available. Most concepts are illustrated with more than one problem. Answers to selected end-of-chapter problems are provided at the end of the book. The end-of-chapter questions and problems have been increased in number from the second edition and many old problems have been modified in order to retain their classroom integrity.
9. **End-of-Chapter References** A list of selected references that cover major pieces of theoretical and applications-oriented literature in the area is included in each chapter. These references form a basis for extended reading or research by students. They have been updated to include the results of much recent financial research.
10. A laminated card containing abbreviated interest tables is included in each book for test purposes.
11. **Ancillary Materials** A complete set of ancillary materials is available to adopters to supplement the text, including the following:
    - An Instructor's Manual containing solutions to the end-of-chapter questions and problems and tips for teaching with the Lotus 1-2-3 templates (see below).
    - A Test Bank containing over 1,000 multiple choice questions and additional problems.
    - MicroTest diskette of the Test Bank is available in order to simplify the preparation of quizzes and exams.
    - A set of 84 Transparency Acetates of the most important tables and graphs.
    - A set of 124 Demonstration Problem Acetates. The problems parallel the major examples developed in the text.
    - Lotus 1-2-3 Templates designed to solve a wide variety of financial management problems. Problems in the text which can be solved using these

templates are indicated with a small diskette logo next to the problem. These templates are based on the most popular spreadsheet program used in business and academic institutions—Lotus 1-2-3. The templates require *absolutely no prior knowledge of Lotus 1-2-3.* All input and instructions are menu driven in a clear, concise, command menu created by the authors. All of the templates are designed so that they can be used to solve actual business financial analysis problems, not just simplified textbook examples. For example, the capital budgeting template uses the powerful macro features of Lotus 1-2-3 to "build" the correct-sized worksheet to solve any capital budgeting problem. The Study Guide contains the documentation to accompany these templates.

In addition, a Study Guide written by Professor John D. Stowe of the University of Missouri–Columbia, is available for all students. The Study Guide contains detailed chapter outlines, solved true-false questions, and a large number of solved numerical problems. Documentation to accompany the Lotus 1-2-3 templates is also included in the Study Guide.

Major Changes in this Edition

This edition has been extensively updated and revised along the lines suggested by second edition users and reviewers. The major changes in this edition are listed below.

1. Key Chapter Concepts, summary outlines of the major points covered in each chapter, have been added after the opening Financial Dilemma of every chapter.
2. A series of Lotus 1-2-3 templates which are useful for solving many financial management problems are available to adopters for use with the book.
3. The "goals of the firm" discussion in Chapter 1 has been expanded and now includes a discussion of agency problems which arise when ownership and control is separated in a firm.
4. The material dealing with the organization of the financial management function in a firm has been developed more fully to highlight the roles played by various financial management specialists in a firm.
5. A new appendix (1A) has been added which discusses 25 different career opportunities in finance.
6. The material in Chapter 2 dealing with financial intermediaries now includes a more complete discussion of the role of thrift institutions, investment companies, pension funds, insurance companies and finance companies. The impact financial deregulation has had on the practice of financial management is also discussed.
7. Appendix 2A has been updated to reflect the latest tax law changes. In addition, an appendix has been added at the end of the book summarizing the major 1986 income tax reform provisions.
8. The material dealing with annuity due calculations has been integrated with the ordinary annuity discussion in Chapter 3. A new section dealing with the valuation of perpetuities is now part of Chapter 3. Also new to Chapter 3 is a section dealing with effective rate calculations, a section dealing with the present value of deferred annuities, and a section which discusses the relative value of calculators and microcomputers as problem solving tools in finance.
9. New Appendix 3A provides a complete discussion of continuous compounding and discounting.

10. The yield-to-maturity calculations presented in Chapter 4 have been expanded and now include a discussion of deep discount and zero-coupon bonds. New graphics have been added to aid understanding of above-normal growth dividend valuation models.
11. New graphics and examples have been added to Chapter 5 to develop more fully the concept of risk in a portfolio context.
12. The financial analysis material in Chapter 6 now includes a discussion of the price-to-earnings ratio and the market-to-book ratio. An extensive new section dealing with an analysis of earnings quality and balance sheet quality has been added to this chapter.
13. Chapter 7 now includes sections dealing with risk assessment in the context of breakeven analysis and financial leverage analysis.
14. The material on financial planning in Chapter 8 has been extensively revised to place greater emphasis on pro-forma analysis and financial forecasting tools.
15. Chapter 9 has been reorganized and modified to highlight the distinction between asset replacement investments and asset expansion investments. Opportunity cost concepts and sunk cost concepts have been developed in the revised chapter.
16. Chapters 11 and 12 have been updated to reflect the results of recent research relating to project post-audits.
17. Chapter 12 contains a new section dealing with issues in implementing dividend valuation models to determine a firm's cost of equity capital. Recent research dealing with earnings growth rate forecasting is cited.
18. Chapter 13 has been reorganized to develop more clearly the concept of an optimal capital structure. Contributions in the bankruptcy cost literature and agency cost literature are recognized as having a major impact on the determination of a firm's capital structure.
19. A discussion of dividend reinvestment plans has been added to Chapter 14.
20. The section dealing with the determination of lease payments from the perspective of the lessor has been developed on an after-tax basis. The lease-buy analysis of Chapter 15 now uses a "net advantage to leasing model" which reflects the capital structure differences between the two financing alternatives.
21. Put bonds, floating rate bonds, deep discount bonds, adjustable rate preferred stock, shelf registrations, share repurchases, and interest rate swaps are now discussed in Chapter 16.
22. The determinants of the value of a financial option are discussed in a complete yet accessible manner in Chapter 17, prior to a consideration of warrants and convertible securities.
23. The use of Eurodollar deposits, money market preferred stocks, and electronic depository transfer checks are now covered in Chapter 19.
24. "ABC inventory classification and management models" and "just-in-time inventory models" have been added to Chapter 21.
25. An exchange ratio model of analyzing a potential merger has been added to Chapter 23. Leveraged buyouts are considered in detail in this chapter.
26. Recent trends in the failure and reorganization of large firms have been included in Chapter 24.

27. The concept of "interest rate parity" is now included in Chapter 25. Chapter 25 also considers the effects of exchange rate levels on business conditions and practices. A discussion of Eurobond financing has been added to this chapter.

Many of these changes, and the hundreds of other small changes and updating of material from the second edition, were based on the excellent suggestions of second edition users. We welcome comments and suggestions from users of this third edition.

Organization and Intended Use

CFM is organized into eight major parts. Part 1 defines the finance function and discusses the institutional environment facing financial decision makers. Part 2 develops the theory of valuation, risk-return analysis, and the tools of financial mathematics. Part 3 consists of three chapters that deal with financial analysis. Part 4 presents the capital investment decision, emphasizing both the theoretical and the practical aspects of capital budgeting. Part 5 deals with the determinants of an optimal capital structure, the cost of capital, and the firm's dividend policy. Part 6 describes the sources of intermediate- and long-term funds. Part 7 consists of a five-chapter sequence covering the important area of working capital management. Finally, Part 8 includes chapters dealing with mergers, bankruptcy, and international financial management.

Those instructors who wish to cover topics in an order other than that provided in the text will find it quite easy to make adjustments. For example, many instructors prefer to cover working capital management early in the course. They should find no difficulty in moving all or a portion of Chapters 18 through 22 to a position following Chapters 3, 4, or 5. Similarly, some instructors may prefer to cover the area of financial analysis later in the course. Accordingly, Chapters 6 through 8 can be moved easily to another location that is more consistent with the instructor's teaching style and objectives.

This book is designed for use in a typical 3-semester hour (or the equivalent in the quarter system) course in financial management. Typically, within the constraints of this time limit, it is often not possible to fully cover the material in Chapters 23 through 25. This material may be left for a second financial management course—often with a case orientation. Also, some instructors may wish to defer the dividend policy chapter (Chapter 14), the capital structure chapter (Chapter 13), and/or the leasing material in Chapter 15 until a later course. Finally, some schools cover inventory policy in a production (or similar) course. In these cases, Chapter 21 either can be omitted or covered only briefly.

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