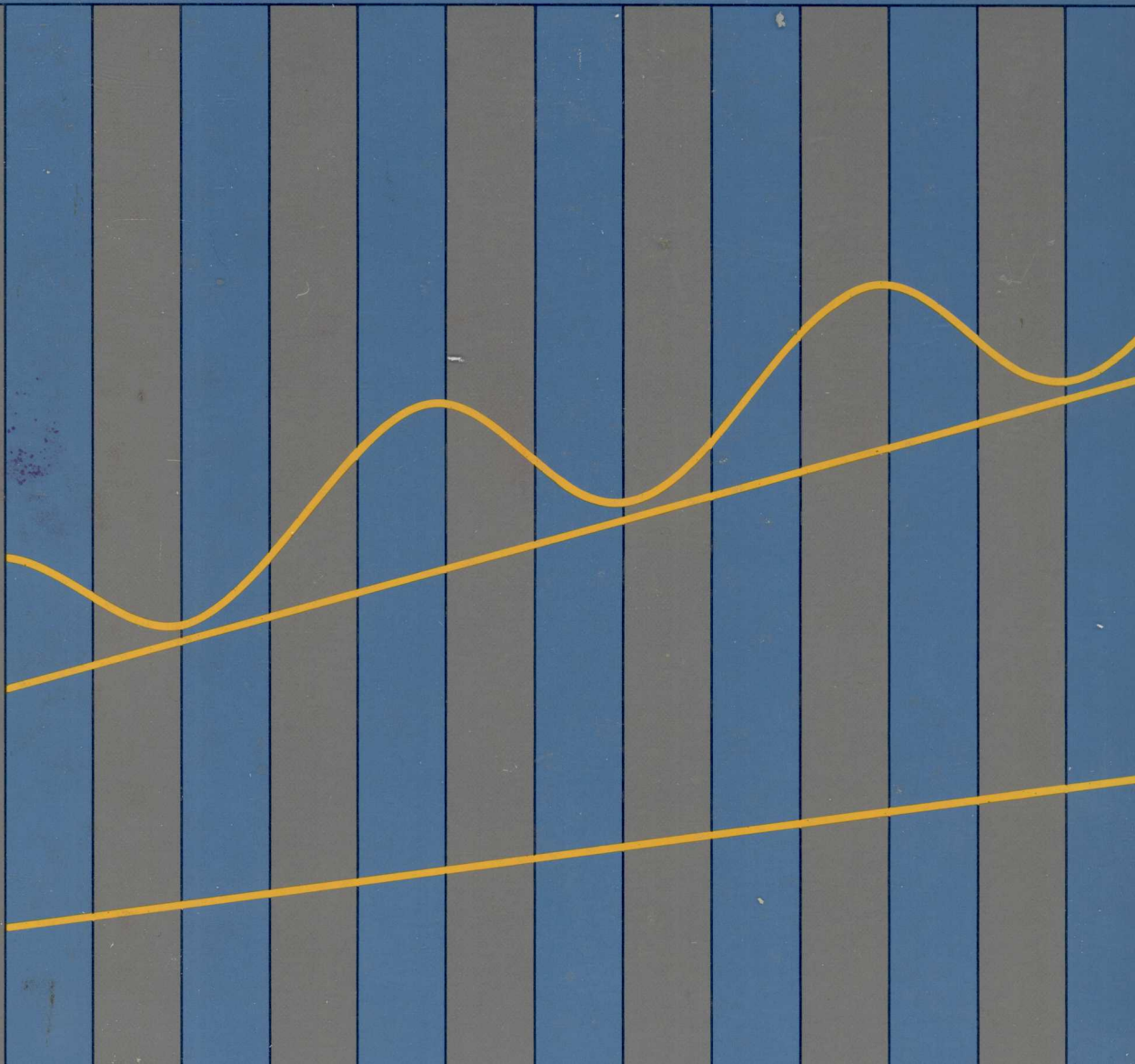


Financial Management Theory and Practice

Fourth Edition

Eugene F. Brigham



Financial Management Theory and Practice

Fourth Edition

Eugene F. Brigham

University of Florida

in collaboration with

Louis C. Gapenski

University of Florida

The Dryden Press

Chicago New York Philadelphia San Francisco
Montreal Toronto London Sydney
Tokyo Mexico City Rio de Janeiro Madrid

Acquisitions Editor Elizabeth Widdicombe
Developmental Editor Judy Sarwark
Project Editor Cate Rzasa
Managing Editor Jane Perkins
Design Director Alan Wendt
Production Manager Mary Jarvis

Copy Editor Lorraine Wolf
Compositor The Clarinda Company
Text Type 10/12 Palatino

Library of Congress Cataloging in Publication Data

Brigham, Eugene F , 1930–
Financial management

Includes bibliographies and index
1 Corporations—Finance I Title
HG4026 B669 1985 658 1'5 84-21060
ISBN 0-03-071693-4

Printed in the United States of America
567-032-987654321

Copyright 1985, 1982 CBS College Publishing
Copyright 1979, 1977 The Dryden Press
All rights reserved

Address orders
383 Madison Avenue
New York, NY 10017

Address editorial correspondence
One Salt Creek Lane
Hinsdale, IL 60521

CBS COLLEGE PUBLISHING
The Dryden Press
Holt, Rinehart and Winston
Saunders College Publishing

The Dryden Press Series in Finance

Brigham
Financial Management: Theory and Practice,
Fourth Edition

Brigham
**Fundamentals of Financial
Management, Third Edition**

Brigham and Crum
Cases in Managerial Finance, Fifth Edition

Brigham and Gapenski
Intermediate Financial Management

Brigham and Johnson
Issues in Managerial Finance, Second Edition

Campsey and Brigham
Introduction to Financial Management

Clayton and Spivey
The Time Value of Money

Fama and Miller
The Theory of Finance

Gitman
Personal Finance, Third Edition

Greer and Farrell
Contemporary Real Estate: Theory and Practice

Greer and Farrell
Investment Analysis for Real Estate Decisions

Harrington
Case Studies in Financial Decision Making

Johnson and Johnson
Commercial Bank Management

Kidwell and Peterson
Financial Institutions, Markets, and Money,
Second Edition

Lorie and Brealey
Modern Developments in Investment Management,
Second Edition

Mayo
Investments: An Introduction

Mayo
Finance

Myers
Modern Developments in Financial Management

Pettijohn
PROFIT

Reilly
Investment Analysis and Portfolio Management,
Second Edition

Reilly
Investments

Tallman and Neal
Financial Analysis and Planning Package

Weston and Brigham
Essentials of Managerial Finance, Seventh Edition

Weston and Copeland
Managerial Finance, Eighth Edition

Preface

Financial management has changed greatly in recent years. Strong inflationary pressures have pushed interest rates to unprecedented heights, and the resulting high and volatile cost of capital has led to profound changes in corporate financial policies and practices. Academic researchers have made a number of significant theoretical advances. At the same time, business practitioners are making increasing use of financial theory, and feedback from the “real world” has led to modifications and improvements in academic financial theory. Finally, computers, especially personal computers, are being used increasingly and effectively to analyze financial decisions. This usage has made it more important than ever that financial problems be set up in a form suitable for quantitative analysis. To a large extent, these trends have dictated the revisions made in the fourth edition of *Financial Management: Theory and Practice*.

The book begins with basic concepts, focusing on security markets and the valuation process, and then goes on to show how the principles of financial management can be used to help maximize the value of a firm. This organization has three important advantages:

1. Explaining early in the book how financial markets operate, and how security prices are determined within these markets, gives students a basic appreciation of how financial management can affect the value of the firm. Also, this organization gives students an early familiarity with the time value of money, valuation, and risk analysis, which in turn permits us to use and reinforce these key concepts throughout the book.
2. Structuring the book around market and valuation concepts provides a unifying theme that is missing in many texts. Some finance texts develop a series of topics in modular form, then attempt to integrate them in later chapters. The organization used in *Financial Management* gives students a better and more comprehensive understanding of how the topics interact.

3. Students—even those who do not plan to major in finance—generally find the study of investments interesting. They enjoy working with stock and bond values, rates of return, and the like. Because people's ability to learn a subject is a function of their interest and motivation, and because *Financial Management* begins with a discussion of security prices and markets, the book's organization is good from a pedagogic standpoint.

Intended Market and Use

Financial Management is designed primarily for use as an introductory MBA text, although it can be used as an undergraduate introductory text either with exceptionally good students or where the introductory course is taught over two terms. In the past, the book has also been used in the second undergraduate corporate finance course, following the use of an easier book in the first course. *Financial Management* can still be used in this manner, but our new book, *Intermediate Financial Management*, is preferable for the second undergraduate course.

There is too much material in the text to cover everything thoroughly in one term, and it is certainly not possible to go over everything in class. However, we have tried to write the book in a manner that permits students, especially MBAs, to read on their own and understand those parts that are not covered in class. In our introductory MBA course, we have taken two somewhat different approaches. At times, we have covered only the material in Chapters 1–15, plus Chapters 18–23, or 21 chapters in total. At other times, we have covered the entire text. Obviously, the depth of coverage is less when we cover more material, but in both situations, we expect students to learn most of the assigned materials by reading the book, and we concentrate on the more difficult materials in class.

We have also made a special effort to make the text useful as a reference book. It is important that students have materials available that they can use in subsequent case courses and apply in on-the-job situations after graduation. Based on a study of the leading casebooks, plus our own experience in consulting assignments, in work with executive development programs, and in discussions with numerous financial executives, we have tried to put into the book what students need to know to deal with most real-world financial decisions.

Major Changes in the Fourth Edition

Updates. We updated the entire book to reflect recent changes in tax laws, interest rates, bankruptcy proceedings, takeovers, and the like. The biggest update, by far, is in the tax area, especially depreciation allowances. We changed most examples and end-of-chapter problems to reflect ACRS depreciation schedules.

Introductory Examples. A real-world example that highlights the key issues in each chapter is presented at the beginning of the chapter. These examples both motivate students to read the chapters and help them see, as they go through each of the chapters, where we are headed.

End-of-Chapter Problems. Most end-of-chapter problems have been revised and extended. Also, the first question at the end of each chapter now lists the key terms in the chapter. This serves both as a quick self-test for students and as a speedy summary/review of the chapter's basic coverage. Further, a set of fairly difficult self-test problems, with detailed solutions, is given at the end of the more quantitative chapters. These problems serve (1) to test students' ability to set up problems for solution and (2) to explain the solution setup for those who need help.

Level. Both the breadth and depth of coverage have been extended. Therefore, the fourth edition of *Financial Management* (FM) is a somewhat "higher level" book than the third edition. However, because of our efforts to clarify our explanations of the more difficult concepts, the fourth edition is not necessarily more difficult than the previous one.

If you felt that the last edition of FM was challenging enough for your students and are concerned that this new, more rigorous edition may be too difficult, we urge you to consider using the third edition of *Fundamentals of Financial Management* (1983, Dryden Press). *Fundamentals* is close in level to the basic chapters in the third edition of FM, but quite a bit easier than the fourth edition. One of the reasons for FM's revision was to differentiate it further from *Fundamentals*, so that they present clear alternatives

Organization. We made some significant changes in the organization of the book to improve its flow. Here is the new structure:

- I. **Introduction.** The introduction, which was expanded from two to three chapters, now includes a discussion of agency theory, as well as more material on types of securities, capital markets, and the economic environment. The new materials on securities and security price changes over time in Chapters 2 and 3 provide a better lead-in to the valuation and risk chapters that follow.
- II. **Valuation and the Cost of Capital.** This section contains four chapters which progress from time value, to valuation models, to risk/return relationships, to the cost of capital. The major change here is the shift in the cost of capital chapter from Chapter 15 to Chapter 7.
- III. **Capital Budgeting.** This important subject is expanded from two to three chapters. Also, having covered cost of capital earlier in the book, we now discuss the effects of capital budgeting on the

cost of capital in the capital budgeting section. Note also that microcomputer models are introduced in an appendix in this section

- IV. **Capital Structure and Dividend Policy.** Here we discuss strategic policy decisions regarding how the firm is to be financed. We stress how the target capital structure and the target dividend payout ratio are established.
- V. **Types of Long-Term Capital.** Part V moves on from strategic long-term financing policies to implementation. Investment banking, common and preferred stock, long-term debt, leasing, and options-related securities, including a discussion of the Black-Scholes model, are presented in this section. Because these chapters now follow cost of capital and capital structure, their level has been raised somewhat.
- VI. **Working Capital Management.** This material has been moved from Chapters 8–10 to Chapters 18–21. The new placement greatly improves the flow of the book by permitting us to complete our strategic, long-run analysis before moving into tactical, operational decision analysis, which is what working capital management is all about. Note also that this section has been expanded from three to four chapters, and greater emphasis is now given to overall working capital policy
- VII. **Financial Analysis and Planning.** In the last edition, this material was presented in Chapters 6 and 7. However, such early placement made it difficult for students to appreciate why ratios were targeted at specific levels, and to understand the intricacies of financial planning. With the topics' new placement, following all the asset and liability management chapters, students can better understand the logic of ratio analysis and grasp the forecasting/planning models. Also, by placing planning and analysis later in the book, we can use it to tie together earlier parts of the course.
- VIII. **Special Topics.** Mergers, bankruptcy/reorganizations, multinational finance, and pension fund management are presented in this section. Executive reviewers of the third edition of *Financial Management* suggested that the most glaring omission was a chapter on pension fund management, which today has become one of the most critical areas of financial management. We rectified that and also greatly strengthened the other chapters in this section.

Financial Calculators and Microcomputers. In the third edition, we offered only the traditional approach to time value of money. In this edition, we have expanded that discussion to show how financial calculators can be used to solve most compound interest problems. Also, rapid advances in computer hardware and software are revolutionizing financial management. Powerful personal computers are now available to

any business that can afford to hire a business student, and new software programs make it easy to do things that were not feasible a few years ago. Today, a business that does not use microcomputers in its financial planning process is about as competitive as a student who tries to take a finance exam without a financial calculator. Therefore, wherever possible, we have included examples of how computers can be used to help make better financial decisions. This orients students toward the kind of business environment they will face upon graduation; moreover, students can often understand the underlying financial theory better after working through a computer model of the problem than they could using the older methods.

Obviously, everyone does not have access to a personal computer or a mainframe terminal; therefore, (1) the text is written so that it requires no computer orientation whatever, and (2) it does not include any problems that require computer solutions. However, we do provide an appendix which introduces electronic spreadsheets (*VisiCalc* and *Lotus 1-2-3*). Additionally, we include both spreadsheet and *IFPS* models in the Instructor's Manual, along with diskettes, on the following subjects: (1) capital budgeting, (2) capital structure, (3) debt refunding, (4) leasing, (5) cash budgeting, and (6) financial forecasting/analysis.

The package of ancillary materials which accompanies *Financial Management* is the most complete one available with any finance text. The additional items available to aid both students and instructors include the following:

Ancillary Materials

1. Study Guide. This supplement outlines the key sections of the text, gives some self-test questions for each chapter, and provides a set of solved problems similar to those in the text. The Study Guide for the third edition was designed for use with both *FM* and *Fundamentals*. The new one is designed specifically for *FM*.

2. Casebooks. A revised edition of *Cases in Managerial Finance*, fifth edition (1983, Dryden Press), by Eugene F. Brigham and Roy L. Crum, is well suited for use with this text. In addition, a new collection of Harvard-type cases by Diana Harrington, *Case Studies in Financial Decision Making*, also coordinated with this text, is available from The Dryden Press.

3. Readings Books. A number of readings books, including *Issues in Managerial Finance*, second edition (1980, Dryden Press), edited by Eugene F. Brigham and Ramon E. Johnson, can be used as supplements to *FM*.

4. Test Bank. A Test Bank with more than 600 class-tested questions/problems in objective format is now available both in book form and on computer diskettes (Apple II and IBM PC). The Computerized Test Bank is also available on magnetic tape. The Test Bank questions are, in gen-

eral, more challenging than those in most test banks, and they are well suited for exams. (Most other test banks are more suitable for quizzes than for midterm and final exams.)

5. Transparencies. A comprehensive set of acetate transparencies, designed to highlight key materials in each chapter and keyed to extensive lecture notes in the Instructor's Manual, is available from The Dryden Press to instructors who adopt the text.

6. Instructor's Manual. A complete, 300-page manual is available to instructors who adopt the book. The manual contains (1) answers to all text questions, (2) solutions to all text problems, (3) extensive lecture notes that focus on more difficult topics and are keyed to the transparency acetates, and (4) several write-ups of personal computer solutions (or "template models") to key financial problems in a form suitable for reproduction.

7. Diskette with Models. A diskette with actual programs for computer solutions is available to instructors. These models work with *VisiCalc*, *Lotus 1-2-3*, and *IFPS/Personal*, and they correspond to the text examples and appendices provided in the Instructor's Manual.

8. Financial Management with Lotus 1-2-3 (CBS College Publishing). The *Lotus 1-2-3* spreadsheet program is currently the best-selling financial analysis package available for use with personal computers. Paul D. Cretien, Susan E. Ball, and Eugene F. Brigham are writing a supplemental book that explains how many commonly encountered problems in financial management can be analyzed with electronic spreadsheets. The supplement will also provide a series of "template models" that address most types of decision areas in finance.

Acknowledgments

We would like to thank the 14 professors who reviewed the third edition of *FM* and who provided us with detailed comments and suggestions for this revision: Keith Boles, Severin Carlson, William Damon, Sankar De, Samuel Hadaway, Joseph Kiernan, Joan Lamm, Edward Lawrence, D. J. Masson, John Settle, Stephen Smith, Sue Visscher, Jonathan Welch, and Dennis Zocco. In addition, we appreciate the marketing feedback on the draft manuscript provided by Roger Miller, William Nelson, and Jaye Smith. A great many people helped with the book during its first three editions, and we would like to thank them here:

Michael Adler
Ed Altman
Robert Angell
Vincent Apilado
Bob Aubey
Guilford Babcock

Peter Bacon
Thomas Bankston
Charles Barngrover
William Beedles
Moshe Ben-Horim
Bill Beranek

Roger Bey
John Bildersee
Russ Boisjoly
Kenneth Boudreaux
Donald Boyd
Patricia Boyer

Mary Broske	Ramon Johnson	R. Potter
Bill Brueggeman	Ray Jones	R. Powell
B. J. Campsey	Gus Kalogeras	Chris Prestopino
Bob Carleson	Michael Keenan	Howard Puckett
Stephen Celec	Don Knight	Herbert Quigley
Donald Chance	Jaroslav Komarynsky	George Racette
S. K. Choudhury	Harold Krogh	Bob Radcliffe
Lal Chugh	Charles Kroncke	Bill Rentz
Phil Cooley	Larry Lang	Charles Rini
David Crary	P. Lange	John Ritchie
Brent Dalrymple	Howard Lanser	Dexter Rowell
Fred Dellva	Wayne Lee	James Sachlis
Mark Dorfman	John Lewis	Mary Jane Scheuer
David Durst	Charles Linke	Carl Schweser
Edward Dyl	Jim Longstreet	Sol Shalit
A. Edwards	Bob Magee	Ron Shrieves
John Ezzell	Phil Malone	Joe Sinkey
Mike Ferri	Terry Martell	Don Sorenson
John Finnerty	Andy McCollough	Kenneth Stanley
Dan French	Larry Merville	Don Stevens
James Garvin	James Millar	Glen Strasburg
Adam Gehr	Carol Moerdyk	Al Sweetser
Walt Goulet	Bob Moore	Philip Swensen
Edwin Grossnickle	Frederic Morrissey	Ernest Swift
John Groth	Tim Nantell	Gary Tallman
Manak Gupta	Bill Nelson	Craig Tapley
Donald Hakala	Bob Nelson	Russ Taussig
Robert Haugen	Tom O'Brien	George Trivoli
Robert Hehre	Dennis O'Connor	Mel Tysseland
George Hettenhouse	Jim Pappas	Howard Van Auken
Haws Heymann	Jim Pettijohn	Pretorius Van den Dool
Kendall Hill	Rich Pettit	Pieter Vanderburg
Pearson Hunt	Dick Pettway	Paul Vanderheiden
Kose John	Hugo Phillips	Jim Verbrugge
Craig Johnson	John Pinkerton	Tony Winger
Keith Johnson	Gerald Pogue	Don Woods

In addition, all or major parts of the book were reviewed by the following executives: James Dunn, Financial Vice President, GT&E; Larry Hastie, former Treasurer, Bendix Corporation; Victor Leavengood, Treasurer, General Telephone of Florida; Archie Long, former Comptroller, General Motors; and James Taggart, Financial Vice President, Tampa Electric Company.

Special thanks are due to Roy Crum, who coauthored the chapter on multinational finance; to Russ Fogler, who coauthored the chapter on pension funds; to Art Herrmann, who coauthored the bankruptcy chap-

ter; to Dilip Shome, who coauthored the capital structure chapter; and to Susan Ball and Paul Cretien, who worked on the computer programs discussed in both the text and the Instructor's Manual

Several of our students at the University of Florida worked through all or major parts of the book and ancillaries to help us remove errors and confusing sections; included are Susan Ball and Debbie Kriebel Melissa Davis, Bob Karp, Sue Shiels, Terry Sicherman, and Eric Smith typed and helped proof the various manuscripts. The Dryden Press staff, especially Mary Jarvis, Jane Perkins, Cate Rzasa, Judy Sarwark, Bill Schoof, Alan Wendt, Liz Widdicombe, and Lorraine Wolf, helped greatly with all phases of the revision.

Last, but certainly not least, we owe a special debt to Fred Weston, both for teaching us much of what we know about finance and for permitting us to draw from our coauthored texts.

Errors in the Text

At this point in the preface, authors of most books say something like this: "We appreciate all the help we received from the people listed above, but any remaining errors are, of course, our own responsibility." And in many books there are plenty of remaining errors. Having experienced difficulties with errors ourselves, both as students and as instructors, we resolved to avoid this problem in *Financial Management*. As a result of the error detection procedures used, we are convinced that it is virtually free of mistakes.

Some of our colleagues suggested that if we are so confident about the book's accuracy, we should offer a reward to people who find errors. With this in mind, but primarily because we want to detect any remaining errors in order to correct them in subsequent printings, we hereby offer a reward of \$5 per error (misspelled word, arithmetic mistake, and the like) to the first person who reports it to us (Any error that has follow-through effects is counted as two errors only.) Two accounting students have set up a foolproof audit system to make sure we pay off. Accounting students tend to be skeptics!

Conclusion

Finance is, in a real sense, the cornerstone of the enterprise system, so good financial management is vitally important to the economic health of business firms, and hence to the nation and the world. Because of its importance, finance should be widely and thoroughly understood, but this is easier said than done. The field is relatively complex, and it is undergoing constant change in response to shifts in economic conditions. All of this makes finance stimulating and exciting, but also challenging and sometimes perplexing. We sincerely hope that *Financial*

Management will meet its own challenge by contributing to a better understanding of the financial system.

Eugene F. Brigham
Louis C. Gapenski

*Graduate School of Business Administration
University of Florida
Gainesville, Florida 32611*

November 1984

Contents

Part I Introduction 1

1 An Overview of Financial Management 3

Increasing Importance of Financial Management 5 The Place of Finance in a Business Organization 7 The Goals of the Firm 8 The Agency Problem 11 Managerial Actions to Maximize Shareholder Wealth 17 The Economic Environment 18 Organization of the Book 19 Summary 20

2 Business Organizations, Financial Statements, and Taxes 25

Alternative Forms of Business Organization 26 Business Securities 28 The Federal Income Tax System 31 Tax Implications of Capital Investment 39 Summary 44

3 Financial Markets, Institutions, and Interest Rates 49

The Financial Markets 50 Financial Institutions 52 The Stock Market 55 Interest Rates 61 Interest Rate Levels 62 The Determinants of Nominal Interest Rates 66 The Term Structure of Interest Rates 69 Term Structure Theories 71 Other Factors which Influence Interest Rate Levels 77 Interest Rate Levels and Stock Prices 78 Interest Rates and Business Decisions 79 Summary 80

Part II Valuation and the Cost of Capital 87

4 Time Value of Money 89

Future Value 90 Present Value 94 Future Value versus Present Value 96 Future Value of an Annuity 97

	Present Value of an Annuity	99	Perpetuities	102
	Present Value of an Uneven Series of Payments	102		
	Determining Interest Rates	105	Semiannual and Other	
	Compounding Periods	106	Amortized Loans	109
	Summary	110	Appendix 4A Continuous Compounding and Discounting	121
			Appendix 4B Derivation of Equations	125
5	Bond and Stock Valuation Models	129		
	Bond Values	130	Bond Values with Semiannual Compounding	140
	Common Stock Valuation	142	Summary	160
	Appendix 5A Effects of Personal Taxes	171	Appendix 5B Derivation of the Constant Growth Model	175
	Appendix 5C A Quarterly Stock Valuation Model	176		
6	Risk and Rates of Return	179		
	Defining and Measuring Risk	180	Expected Rate of Return	182
	Portfolio Risk and the Capital Asset Pricing Model	189	The Relationship between Risk and Rates of Return	201
	Security Market Equilibrium	207	Physical Assets' Risk versus Securities' Risk	211
	A Word of Caution	212	Summary	212
	Appendix 6A Calculating Beta Coefficients	220	Appendix 6B Risk Aversion, Portfolio Theory, and the Capital Asset Pricing Model	224
	Appendix 6C Arbitrage Pricing Theory	245		
7	The Cost of Capital	249		
	The Logic of the Weighted Average Cost of Capital	250	Basic Definitions	250
	Cost of Debt	251	Cost of Preferred Stock	252
	Cost of Retained Earnings, k_s	253	Cost of Newly Issued Common Stock, or External Equity, k_e	256
	The Weighted Average Cost of Capital, WACC = k_a	258	The Marginal Cost of Capital	259
	Other Issues in the Cost of Capital	266	Summary	271
	Appendix 7A Estimating the Cost of Equity in Practice	279	Appendix 7B The MCC Schedule	296
	Appendix 7C The Cost of Deferred Taxes	304		

Part III Capital Budgeting 307

8	The Basics of Capital Budgeting	309
	Project Proposals and Classifications	310
	Similarities between Capital Budgeting and Security Valuation	312
	Capital Budgeting Decision Rules	312
	Evaluation of the Decision Rules	322
	Comparison of the NPV and IRR Methods	323
	Comparison of the NPV and PI Methods	331
	The Post-Audit	332
	Summary	333
	Appendix 8A Nonnormal Capital Projects Multiple Internal Rates of Return	341

9 Cash Flow Estimation and Other Topics in Capital Budgeting 347

Cash Flow Estimation 348 Identifying the Relevant Cash Flows 349 Tax Effects 352 Changes in Net Working Capital 352 Cash Flow Analysis Example 353 Replacement Analysis 358 Evaluating Projects with Unequal Lives 362 Adjusting for Inflation 365 Summary 368 **Appendix 9A Optimal Project Life 376**
Appendix 9B Sequential Decisions 380

10 Risk Analysis and the Optimal Capital Budget 383

Risk Analysis 384 Corporate Risk versus Beta Risk 384 Techniques for Measuring Corporate Risk 386 Beta Risk 395 Relationship between Firm Betas, Asset Betas, and Capital Structure 397 Techniques for Measuring Beta Risk 398 Portfolio Effects within the Firm 401 Project Risk Conclusions 401 Divisional Costs of Capital 402 Risky Cash Outflows 403 The Optimal Capital Budget 406 The Investment Opportunity Schedule (IOS) 406 The Marginal Cost of Capital (MCC) Schedule 406 Combining the MCC and IOS Schedules 410 Establishing the Capital Budget in Practice 414 Summary 415 **Appendix 10A The Use of Computers in the Capital Budgeting Process 427**
Appendix 10B Capital Rationing 431 **Appendix 10C Certainty Equivalents 436**

Part IV Capital Structure and Dividend Policy 445

11 Capital Structure Theory 447

Key Terms and Equations 448 Early Theories of Capital Structure 450 The Modigliani-Miller Models 453 Bankruptcy, Agency, and Related Costs 462 The Miller Model 468 The Current View of Financial Leverage 470 Empirical Tests of Capital Structure Theories 472 Summary 472 **Appendix 11A Proof of the MM Propositions with Corporate Taxes 480**

12 Capital Structure Policy 483

Business and Financial Risk 484 Determining the Optimal Capital Structure 494 Other Considerations in the Capital Structure Decision 511 Variations in Capital Structures among Firms 516 Book Weights versus Market Weights, Revisited 518 Summary 520 **Appendix 12A Degrees of Operating, Financial, and Total Leverage 529**
Appendix 12B Business and Financial Risk Premiums 534

13 Dividend Policy 537

Dividend Policy Theories 538 Tests of Dividend Theories 543 Other Dividend Policy Issues 546 Dividend Policy in Practice 548 Summary of Factors that

Influence Dividend Policy 557 Stock Dividends and Stock
 Splits 559 Establishing a Dividend Policy Some
 Illustrations 563 Summary 565 **Appendix 13A** Stock
 Repurchases 570

Part V Types of Long-Term Capital 575

14 Common Stock and the Investment Banking Process 577

Balance Sheet Accounts and Definitions 578 Legal Rights
 and Privileges of Common Stockholders 581 Types of
 Common Stock 583 The Market for Common Stock 583
 The Investment Banking Process 590 Summary 597
Appendix 14A The Use of Rights in Financing 602

15 Long-Term Debt and Preferred Stock Financing 609

Long-Term Debt 610 Traditional Debt Instruments 610
 Recent Innovations 614 Specific Debt Contract
 Features 620 Bond Ratings 622 Preferred Stock
 Financing 628 Early Retirement of Bonds and Preferred
 Stock 631 Rationale for the Use of Different Types of
 Securities 633 Factors that Influence Long-Term
 Financing Decisions 634 Using Futures in Corporate
 Finance 640 Summary 643 **Appendix 15A** Refunding
 Operations 651 **Appendix 15B** Financing the Small
 Firm 659

16 Options, Warrants, and Convertibles 667

Options 668 The Option Pricing Model (OPM) 673
 Warrants 682 Convertibles 685 Decisions on Use of
 Warrants and Convertibles 691 Reporting Earnings when
 Warrants or Convertibles Are Outstanding 693
 Summary 694

17 Lease Financing 701

Types of Leases 702 Tax Effects 704 Financial
 Statement Effects 705 Evaluation by the Lessee 707
 Evaluation by the Lessor 714 Other Leasing Issues 720
 Summary 722

Part VI Working Capital Management 729

18 Working Capital Policy and Short-Term Credit 731

Working Capital Terminology 732 The Requirement for
 External Working Capital Financing 733 The Working
 Capital Cash Flow Cycle 734 Working Capital Investment
 and Financing Policies 736 Advantages and