DITION

# Foundations of Financial Management

STANLEY B. BLOCK GEOFFREY A. HIRT



# Foundations of Financial Management

NINTH EDITION

STANLEY B. BLOCK

Texas Christian University

GEOFFREY A. HIRT

DePaul University and Mesirow Financial



# McGraw-Hill Higher Education

A Division of The McGraw-Hill Companies

# FOUNDATIONS OF FINANCIAL MANAGEMENT

Copyright © 2000, 1997, 1994, 1992, 1989, 1987, 1984, 1981, 1978 by The McGraw-Hill Companies, Inc. All rights reserved. Printed in the United States of America. Except as permitted under the United States Copyright Act of 1976, no part of this publication may be reproduced or distributed in any form or by any means, or stored in a data base or retrieval system, without the prior written permission of the publisher.

This book is printed on acid-free paper.

domestic 1 2 3 4 5 6 7 8 9 0 VNH/VNH 9 0 9 8 7 6 5 4 3 2 1 0 9 international 1 2 3 4 5 6 7 8 9 0 VNH/VNH 9 0 9 8 7 6 5 4 3 2 1 0 9

ISBN 0-07-228336-X (student edition)
ISBN 0-07-228337-8 (annotated instructor's edition)

Vice president/Editor-in-chief: Michael W. Junior Publisher: Craig S. Beytien
Sponsoring editor: Randall Adams
Developmental editor: Michele Janicek
Senior marketing manager: Katie Rose Matthews
Senior project manager: Jean Lou Hess
Production supervisor: Michael R. McCormick
Freelance design coordinator: Laurie J. Entringer
Supplement coordinator: Cathy L. Tepper

Compositor: GAC/Indianapolis Typeface: 10.5/13 Times Roman Printer: Von Hoffmann Press, Inc.

## Library of Congress Cataloging-in-Publication Data

Block, Stanley B.

Foundations of financial management / Stanley B. Block, Geoffrey

A. Hirt. — 9th ed.

p. cm. — (The Irwin series in finance, insurance, and real estate)

Includes index.

ISBN 0-07-228336-X (student ed). — ISBN (invalid) 0-07-228317-8

(annotated instructor's ed)

1. Corporations—Finance. I. Hirt, Geoffrey A. II. Title.

III. Series.

HG4026.B589 2000

658.15—dc21

99-31782

### INTERNATIONAL EDITION

Copyright © 2000. Exclusive rights by The McGraw-Hill Companies, Inc. for manufacture and export. This book cannot be re-exported from the country to which it is consigned by McGraw-Hill. The International Edition is not available in North America.

When ordering the title, use ISBN 0-07-117439-7

### http://www.mhhe.com

We would like to thank the following companies for permission to use their logo in this text: J.C. Penney Co., Calloway's Nursery, Southwest Airlines Co., The Coca-Cola Company, Dell Computer Corporation, Dun & Bradstreet, Exxon Corporation, Nestlé USA, 3M, Eli Lilly and Company, Wal-Mart, Lowe's Home Centers, Inc., Viacom, Inc., Bell Industries, Mack Trucks, Inc., General Electric Company, Motorola, Inc., Parker Drilling Company, Johnson & Johnson, Daimler Benz, Daimler Chrysler, eBay, SuperGen, NationsBank, RJR Nabisco, Inc., Conoco, Inc., Ford Motor Company, Armco, Inc., Archer Daniels Midland Company, Netscape, IBM, JP Morgan, MCI WorldCom, DuPont, Toymax, Boeing, and The McGraw-Hill Companies.

Nestlé and Nest Design is a registered trademark of Nestlé

To Paige A. Goldsmith, whose journey through life has just begun.

Stanley B. Block

To Douglas B. Lamb, whose lifelong experience provides great wisdom.

Geoffrey A. Hirt

# About the Authors



Stanley B. Block Professor Block teaches financial management and investments at Texas Christian University, where he received the Burlington Northern Outstanding Teaching Award. His research interests include financial markets, mergers, and high-yield bonds. He has served as President of the Southwestern Finance Association, and is a Chartered Financial Analyst and a Certified Cash Manager. He enjoys sports and has run the NY Marathon. Professor Block holds a BA from the University of Texas at Austin, an MBA from Cornell University, and a Ph.D. from LSU.



Geoffrey A. Hirt Dr. Hirt is currently Professor of Finance at DePaul University and Director of Equity Research at Mesirow Financial. He received his Ph.D. in Finance from the University of Illinois at Champaign-Urbana, his MBA from Miami University of Ohio and his BA from Ohio-Wesleyan University. Geoff has directed the Chartered Financial Analysts Study program for the Investment Analysts Society of Chicago since 1987.

From 1987 to 1997 he was Chairman of the Finance Department at DePaul University and taught investments, corporate finance and strategic planning. He developed and was director of DePaul's MBA in Hong Kong and has taught in Poland, Germany, Thailand and Hong Kong.

Geoff plays tennis and golf, is a music lover, and enjoys traveling with his wife, Linda.

# **Preface**

pening a textbook can seem a glum prospect for many enrolled in a foundations of financial management course. All too often, what is already perceived to be a difficult and intimidating subject is only compounded by the text you are assigned. In contrast, *Foundations of Financial Management* is committed to making finance accessible to you. Significant content revisions have been made in the ninth edition in order to maintain the high quality that the market has come to expect from this text. As always, in the ninth edition we remain strongly committed to presenting the concepts of finance in an enlightening, interesting, and exciting manner. We have been involved in this process since the first edition of the book came out in 1978, and we have eight editions to draw upon to know what works and what doesn't work for students.

Employers of business graduates report that the most successful analysts, planners, and executives have both facility and confidence in their financial skills. We concur. One of the best ways to increase your facility in financial planning is to integrate your knowledge from prerequisite courses. Therefore, the text is designed to build on your knowledge from basic courses in accounting and economics. By applying tools learned in these courses, you can develop a conceptual and analytical understanding of financial management.

We realize, however, that for some of you some time has passed since you've completed your accounting courses. Therefore, we include Chapter 2, a thorough review of accounting principles, finance terminology, and financial statements. With a working knowledge of Chapter 2, you will have a more complete understanding of the impact of your decisions on financial statements. Furthermore, as you are about to begin your career you will be much better prepared when called upon to apply financial concepts.

Reinforcing Prerequisite Knowledge

# Content

The ninth edition incorporates several overall improvements in coverage based on trends that have occurred in the last few years:

New Features and Improvements Internationalization We have substantially increased coverage of the internationalization of the financial markets, including the effects of currency devaluations in Russia, Asia, and Latin America, and the introduction of the euro currency by 11 major European countries in 1999.

Strong Equity Market We have included consideration of the effect of the strong equity market of the 1990s on financing decisions. For example, the strong new issues market has made it possible for many internet-related companies to go public at attractive prices for the issuing company.

Consolidation of Financial Services We have also included coverage of the increased consolidation of the financial services industry with particular emphasis on mergers between major players such as Citicorp and Travelers, Bank of America and NationsBank, and Salomon and Smith Barney.

Successful improvements from previous editions that we have built on in the ninth edition include:

- Functional Integration We have taken care to include examples not
  just applicable to the finance students, but also for the marketing, management, and accounting major.
- Small Business Since over two-thirds of jobs created in the U.S. economy are by small businesses, we have continued to note when specific financial techniques are performed differently by large and small businesses.
- Comprehensive International Coverage We have updated and expanded coverage on international companies and events throughout the text.
- Contemporary Coverage The ninth edition has continued to provide updated real-world examples, using companies easily recognizable by students, to illustrate financial concepts presented in the text.

# Pedagogy

The ninth edition adds three new pedagogical elements that will help you learn the material:

Company Logos In this exciting new feature, four-color company logos (such as Netscape, IBM, Coca-Cola, and eBay) are included in the margin of the text where a situation involving the company is used as an example. This feature helps to call out our strength in providing many real-world examples. Because logos are so easy to recognize, you will have no trouble relating them to the financial concepts in the example.

Web Addresses Website addresses are included in relevant *Finance in Action* boxes for easy access to more information on that topic.

Chapter Opening Vignettes We bring in current events (such as competition among air carriers and the seasonality of toy manufacturers) as chapter openers to illustrate the material to be learned in the upcoming chapter.

Other successful pedagogical features that we have retained in this edition include:

- Finance in Action Boxes These boxed readings highlight specific topics of interest that relate to international situations, small business procedures, and marketing and advertising, to name a few.
- Functional Use of Four Colors The ninth edition continues to include the well-received functional use of four colors to enhance your understanding of tables, graphs, and exhibits. For example, the financial analysis chapter (Chapter 3) uses color to make the origin of the ratios easier to follow. For easy identification, the balance sheet appears in green and the income statement appears in red. These same two colors continue to be traced through the numerical ratios, with each number appearing in the same color as the financial statement from which it was derived. This linkage helps easily identify whether the ratio is a balance sheet ratio, an income statement ratio, or a mixed ratio.
- In-Book Acetates on Time Value of Money (Chapter 9) The concept of "time value of money" is one of the most difficult topics in any financial management course for professors to communicate to students. We think we have created a visual method for teaching future value and present value that will allow you to understand the concept simply and quickly. The ninth edition includes four-color acetates in the text that visually relate future values and present values. We hope you agree that this innovation is an advancement in financial pedagogy.
- Chapter Concepts Chapter Concepts are listed on the opening page of each chapter as a quick introduction to the material you will learn and as an indication of the key topics you should fully understand before moving to the next chapter.

# **End-of-Chapter Material**

We have continued to provide our successful end-of-chapter elements in the ninth edition:

**Summary** Each chapter ends with a Summary that ties the material back to the Chapter Concepts presented at the beginning of the chapter.

Summary List of Equations At the end of every chapter that includes equations, we provide a list of all equations used in that chapter for easy reviewing purposes.

List of Terms Similarly, you can use the list of key terms provided at the end of each chapter to test your comprehension and retention. Page numbers are provided and the term is also defined in the glossary at the back of the book.

**Discussion Questions and Problems** The material in the text is supported by over 250 questions and 340 problems in this edition, to reinforce and test your understanding of the chapter. Care has been taken to make the questions and problems consistent with the chapter material, and each problem is labeled with its topic to facilitate that link. Every problem has been revised in this edition, but the level and variety of the complete set is similar to those from the previous edition.

**Comprehensive Problems** Several chapters have Comprehensive Problems, indicated with a red sidebar, that integrate and require the application of several financial concepts into one problem.

# Supplemental Material for Students

Self-Study Software This tutorial software is packaged free with every new book purchased from Irwin/McGraw-Hill. It contains a self-study program, with questions written by the authors, that tests your understanding of the concepts, as well as provides an infinite number of time value of money problems to solve with the random number generator program. The CD also contains Financial Analysis Spreadsheet Templates (FAST) which are templates designed to help you solve problems using Excel. The end-of-chapter problems that are linked to this program are indicated with an icon at the end of each chapter. PowerPoint slides, both lecture slides and exhibits from the text, are also included.

The Wall Street Journal Edition (0072319348) If your instructor has ordered this special edition, you will find a reply card bound in the front of the book that entitles you to a 10-week subscription of *The Wall Street Journal*. No additional payment is necessary; the cost of the subscription is included in the price of the book.

Study Guide and Workbook (0072283440) This valuable resource, created by Dwight C. Anderson, provides chapter summaries, outlines with page references, and additional problems and multiple-choice questions with solutions for practice.

Cases (0072283459) These 22 cases, written by the authors, are ideal for indepth analysis and facilitate an integrated understanding of the topics presented in the book.

**Ready Notes** (0072283483) This note-taking supplement contains a reduced copy of the images of the transparency and PowerPoint packages, excluding the solutions. There is room for you to take notes next to each image, allowing a more complete and organized method for recording lecture notes.

Financial Analysis with an Electronic Calculator, Fourth Edition, by Mark A. White (0072299738) This helpful guide provides you with information and procedures to master financial calculators and gain a deeper understanding of financial mathematics. Complete instructions are included for solving all major problem

xi

types on three popular models of financial calculators: Hewlett-Packard's HP-10B, Sharp Electronics' EL-733A, and Texas Instruments' BA II Plus. Sixty hands-on problems with detailed solutions allow you to practice the skills outlined in the book and obtain instant reinforcement.

# Acknowledgments

For their valuable reviews and helpful comments, we are grateful to:

Dwight C. Anderson	Thomas R. Hamilton	Beverly Piper
Eric Anderson	Walt Hammond	Harlan Platt
Antonio Apap	Charles Higgins	Ralph A. Pope
Charles Barngrover	Stanley Jacobs	Roger Potter
Brian T. Belt	Joel Jankowski	Franklin Potts
Joseph Bentley	Gerald S. Justin	Dev Prasad
William J. Bertin	Peter R. Kensicki	Chris Prestopino
Debela Birru	Tom Kewley	Frances A. Quinn
Robert Boatler	Robert Kleiman	David Rankin
Dallas Brozik	Morris Lamberson	Robert Rittenhouse
Ezra Byler	Joe Lavely	Mauricio Rodriguez
Rosemary Carlson	Joseph Levitsky	Frederick Rommel
Alan J. Carper	John H. Lewis	Gayle Russell
Rolf Christensen	Terry Lindenberg	Robert Saemann
E. Tylor Claggett	Joe Lipscomb	Sandra Schickele
Henry Co	John P. Listro	James Scott
Allan Conway	Paul Marciano	Abu Selimuddin
Tom Copeland	Thomas Maroney	Gowri Shankar
Walter R. Dale	Kooros Maskooki	Joanne Sheridan
Jeffrey S. Dean	Patricia Matthews	Fred Shipley
Andrea DeMaskey	Michael Matukonis	William Smith
Bob Diberio	K. Gary McClure	Jan R. Squires
Clifford A. Diebold	Grant McQueen	Mark Sunderman
Fred Ebeid	Wayne E. McWee	Robert Swanson
Barry Farber	John D. Markese	Richard Taylor
O. L. Fortier	Joe Massa	Robert Taylor
Mohamed Gaber	Stuart Michelson	Mike Tuberose
Robert Gaertner	Jerry D. Miller	Donald E. Vaughn
Jim Gahlon	David Minars	Gary Wells
James Gentry	Mike Moritz	Howard R. Whitney
Elizabeth Goins	Heber Moulton	Lawrence Wolken
Bernie J. Grablowsky	Dimitrios Pachis	Don Wort
Debbie Griest	Coleen C. Pantalone	Ergun Yener
Kidane Habteselassie	Rosemary C. Peavler	Lowell Young
John R. Hall	Mario Picconi	Terry Zivney

We wish to thank Brian Hirt for technical computer assistance and Joachim Bartels of Dun & Bradstreet. Finally, we would like to thank Michele Janicek, development

editor; Randall Adams, senior sponsoring editor; Jean Lou Hess, senior project manager; Craig Beytien, publisher; Katie Rose Matthews, senior marketing manager; Laurie Entringer, designer; Michael McCormick, production supervisor; and the entire team at Irwin McGraw-Hill for its feedback, support, and enduring commitment to excellence.

Stanley B. Block Geoffrey A. Hirt

# **Brief Contents**

Part	1	INTRODUCTION	Part 5	LONG-TERM FINANCING
	1	The Goals and Functions of Financial	14	Capital Markets 411
		Management 5	15	Investment Banking: Public and Private
				Placement 434
Part	2	FINANCIAL ANALYSIS AND PLANNING	16	Long-Term Debt and Lease
	2	Review of Accounting 25		Financing 460
	3	Financial Analysis 52	17	Common and Preferred Stock
	4	Financial Forecasting 87	18	Financing 498  Dividend Believe and Betwined
	5	Operating and Financial Leverage 114	10	Dividend Policy and Retained Earnings 525
			19	Convertibles and Warrants 550
Part	3	WORKING CAPITAL MANAGEMENT		Convertibles and Warrains 550
	6	Working Capital and the Financing	Part 6	EXPANDING THE PERSPECTIVE OF
		Decision 145		CORPORATE FINANCE
	7	Current Asset Management 174	20	External Growth through Mergers 575
	8	Sources of Short-Term Financing 208	21	International Financial
				Management 594
Part	4	THE CAPITAL BUDGETING PROCESS		
	9	The Time Value of Money 237		Appendixes 627
	10	Valuation and Rates of Return 265		Glossary 645
	11	Cost of Capital 300		Index 668
	12	The Capital Budgeting Decision 344		
	13	Risk and Capital Budgeting 379		

# Contents

Part 1 INTRODUCTION 2

The Goals and Functions of Financial Management 5	
The Field of Finance 6	
<b>Evolution of the Field of Finance</b> 7	
Recent Issues in Finance 7	
Functions of Financial Management 8	
Forms of Organization 8	
Sole Proprietorship 8	
Partnership 9	
Corporation 9	
Goals of Financial Management 10	
A Valuation Approach 11	
Maximizing Shareholder Wealth 12	
Social Responsibility and Ethical Behavior 13	
The Role of the Financial Markets 14	
Structure and Functions of the Financial Markets 15	
Allocation of Capital 15	
Institutional Pressure on Public Companies to Restructure	16
Internationalization of the Financial Markets 17	
Format of the Text 17	
Parts 18	
1. Introduction 18	
2. Financial Analysis and Planning 18	
3. Working Capital Management 18	
4. The Capital Budgeting Process 18	
5. Long-Term Financing 19	
6. Expanding the Perspective of Corporate Finance	19
List of Terms 19	
Discussion Questions 19	
Selected References 20	

Part	2	FINANCIAL ANALYS	SIS AND
		PLANNING 22	

Review of Accounting 25

Return to Capital 27
Price-Earnings Ratio Applied to
Earnings per Share 27
Limitations of the Income

Statement 28

Balance Sheet 29

Interpretation of Balance Sheet Items 29 Concept of Net Worth 31

Limitations of the Balance

Sheet 32

Statement of Cash Flows 32

Developing an Actual Statement 3:

Determining Cash Flows from
Operating Activities 34

Determining Cash Flows from
Investing Activities 37

Determining Cash Flows from
Financing Activities 37
Combining the Three Sections of the

Combining the Three Sections of the Statement 38

Depreciation and Funds Flow 39 Free Cash Flow 41

Income Tax Considerations 41

Cost of a Tax-Deductible Expense 42

Depreciation as a Tax Shield 42

Summary 43
List of Terms 44
Discussion Questions 44
Problems 44
Selected References 51

Financial Analysis 52

3

**Ratio Analysis** 53 Classification System 54 The Analysis 55

A. Profitability Ratios 56

B. Asset Utilization Ratios 58

C. Liquidity Ratios 60

D. Debt Utilization Ratios 61

Trend Analysis 62

**Impact of Inflation on Financial** 

Analysis 64

An Illustration 65

Disinflation Effect 66

Deflation 67

Other Elements of Distortion in

Reported Income 67

Explanation of Discrepancies 67

Sales 67

Cost of Goods Sold 68

Extraordinary Gains/Losses 68

Net Income 69

Summary 69

List of Terms 70

Discussion Questions 70

Problems 70

Comprehensive Problems 80

Selected References 86

Financial Forecasting 87

**Constructing Pro Forma** 

Statements 88

**Pro Forma Income Statement** 88

Establish a Sales Projection 88

Determine a Production Schedule and

the Gross Profit 89

Cost of Goods Sold 91

Other Expense Items 92

Actual Pro Forma Income

Statement 93

Cash Budget 93

Cash Receipts 93

Cash Payments 94
Actual Budget 96

Pro Forma Balance Sheet 97

Explanation of Pro Forma Balance Sheet 99

Selected References 140

5

Part 3 WORKING CAPITAL Analysis of Pro Forma Statement 99 MANAGEMENT 142 Percent-of-Sales Method 100 Summary 102 Working Capital and the List of Terms 102 Financing Decision 145 Discussion Questions 102 Problems 103 Comprehensive Problems 110 The Nature of Asset Growth 146 Selected References 113 Controlling Assets—Matching Sales and Production 147 Temporary Assets under Level Operating and Financial Production—an Example 150 Leverage 114 Patterns of Financing 154 Alternative Plans 156 Leverage in a Business 115 Long-Term Financing 157 Operating Leverage 115 Short-Term Financing (Opposite Break-Even Analysis 115 Approach) 157 A More Conservative Approach 117 The Financing Decision 158 The Risk Factor 119 Term Structure of Interest Rates 158 Cash Break-Even Analysis 119 A Decision Process 162 Degree of Operating Leverage 120 Introducing Varying Conditions 164 Leveraged Firm 121 Expected Value 164 Conservative Firm 121 Shifts in Asset Structure 165 Limitations of Analysis 122 Toward an Optimal Policy 165 Financial Leverage 122 Summary 167 Impact on Earnings 123 List of Terms 168 Degree of Financial Leverage 125 Discussion Questions 168 Plan A (Leveraged) 126 Problems 168 Plan B (Conservative) 126 Selected References 173 Limitations to Use of Financial Leverage 126 Current Asset 7 **Combining Operating and Financial** Management 174 Leverage 127 Degree of Combined Leverage 128 Cash Management 175 A Word of Caution 130 Summary 131 Reasons for Holding Cash Balances 175 Review of Formulas 131 List of Terms 132 Cash Flow Cycle 175 Discussion Questions 132 Collections and Disbursements 177 Problems 133 Float 177 Comprehensive Problem 138 Improving Collections 179

Extending Disbursements 179

xvii

Cost-Benefit Analysis 179	Cash Discount Policy 209
Electronic Funds Transfer 180	Net Credit Position 210
International Cash Management 181	Bank Credit 210
Marketable Securities 183	Prime Rate and LIBOR 211
Management of Accounts	Compensating Balances 213
Receivable 187	Maturity Provisions 214
Accounts Receivable as an	Cost of Commercial Bank
Investment 187	Financing 214
Credit Policy Administration 188	Interest Costs with Compensating
Credit Standards 188	Balances 215
Terms of Trade 191	Rate on Installment Loans 216
Collection Policy 191	Annual Percentage Rate 216
An Actual Credit Decision 193	The Credit Crunch Phenomenon 217
Inventory Management 194	Financing through Commercial
Level versus Seasonal	<b>Paper</b> 217
Production 194	Advantages of Commercial
Inventory Policy in Inflation	Paper 219
(and Deflation) 195	Limitations on the Issuance of
The Inventory Decision Model 195	Commercial Paper 220
Carrying Costs 195	Foreign Borrowing 220
Ordering Costs 196	Use of Collateral in Short-Term
Economic Ordering Quantity 196	Financing 220
Safety Stock and Stock Outs 198	Accounts Receivable Financing 221
Just-in-Time Inventory	Pledging Accounts Receivable 221
Management 199	Factoring Receivables 222
Cost Savings from Lower	Asset-Backed Public Offerings 222
Inventory 199	<b>Inventory Financing</b> 223
Other Benefits 199	Stages of Production 224
Summary 200	Nature of Lender Control 224
List of Terms 201	Blanket Inventory Liens 224
Discussion Questions 201	Trust Receipts 225
Problems 202	Warehousing 225
Comprehensive Problem 206	Appraisal of Inventory Control
Selected References 207	Devices 225
	<b>Hedging to Reduce Borrowing</b>
*	<b>Risk</b> 225
Sources of Short-Term	Summary 228
	List of Terms 228
Financing 208	Discussion Questions 229
T 1 C 11/2 200	Problems 229
Trade Credit 209	Selected References 233
Payment Period 209	William Control of the Control of th

8

Part	4 THE CAPITAL BUDGETING	Valuation of Bonds 266
	PROCESS 234	Present Value of Interest
	11100200 201	Payments 267
		Present Value of Principal
9	The Time Value of Money 237	Payment (Par Value)
		at Maturity 268
	Relationship to the Capital Outlay	Concept of Yield to Maturity 268
	Decision 238	Changing the Yield to Maturity and
	Future Value—Single Amount 238	the Impact on Bond
	Present Value—Single Amount 239	Valuation 270
	Future Value—Annuity 240	Increase in Inflation
	Present Value—Annuity 243	Premium 270
	<b>Graphical Presentation of Time Value</b>	Decrease in Inflation
	Relationships 244	Premium 271
	The Relationship between Present	Time to Maturity 272
	Value and Future Value 244	Determining Yield to Maturity from
	The Relationship between the Present	the Bond Price 273
	Value of a Single Amount and	A 13 Percent Discount Rate 274
	the Present Value of an	A 12 Percent Discount Rate 274
	Annuity 247	Formula for Bond Yield 275
	Future Value Related to the Future	Semiannual Interest and Bond
	Value of an Annuity 248	Prices 276
	<b>Determining the Annuity Value</b> 250	Valuation and Preferred Stock 277
	Annuity Equaling a Future	Determining the Required Rate of
	Value 250	Return (Yield) from the
	Annuity Equaling a Present	Market Price 279
	Value 250	Valuation of Common Stock 279
	Determining the Yield on an	No Growth in Dividends 280
	Investment 252	Constant Growth in Dividends 280
	Yield—Present Value of a Single	Stock Valuation Based on Future
	Amount 252	Stock Value 282
	Yield—Present Value of an	Determining the Required Rate of
	Annuity 253	Return from the Market
	Special Considerations in Time Value	Price 283
	Analysis 254	The Price-Earnings Ratio Concept and
	Patterns of Payment 254	Valuation 284
	Special Review of the Chapter 257	Variable Growth in Dividends 287
	List of Terms 259	Summary and Review of
	Discussion Questions 259	Formulas 288
	Problems 260	Bonds 288
	Selected References 264	Preferred Stock 289
	V20 = 0	Common Stock 289
10	Valuation and Dates of	List of Terms 290
10	Valuation and Rates of	Discussion Questions 290
	Return 265	Problems 291

Valuation Concepts 266

Selected References 295