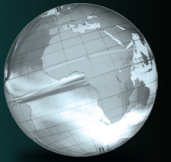


GLOBAL
EDITION



FINANCIAL MANAGEMENT

CORE CONCEPTS

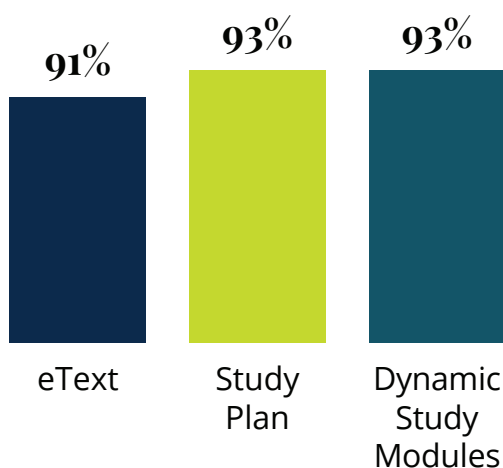
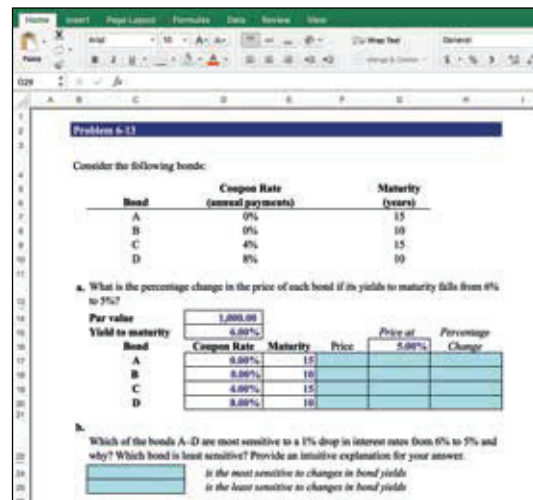


FOURTH EDITION

RAYMOND M. BROOKS



Using proven, field-tested technology, auto-graded **Excel Projects** allow instructors to seamlessly integrate Microsoft Excel® content into their course without having to manually grade spreadsheets. Students have the opportunity to practice important **finance skills** in Excel, helping them to master key concepts and gain proficiency with the program.



% of students who found learning tool helpful

Dynamic Study Modules help students study chapter topics effectively on their own by continuously assessing their **knowledge application** and performance in real time. These are available as graded assignments prior to class, and accessible on smartphones, tablets, and computers.

Pearson eText enhances student learning—both in and outside the classroom. Take notes, highlight, and bookmark important content, or engage with interactive lecture and example videos that bring learning to life (available with select titles). Accessible anytime, anywhere via MyLab or the app.

The **MyLab Gradebook** offers an easy way for students and instructors to view course performance. Item Analysis allows instructors to quickly see trends by analyzing details like the number of students who answered correctly/incorrectly, time on task, and median time spend on a question by question basis. And because it's correlated with the AACSB Standards, instructors can track students' progress toward outcomes that the organization has deemed important in preparing students to be **leaders**.



of students would tell their instructor to keep using MyLab Finance

For additional details visit: www.pearson.com/mylab/finance

This page is intentionally left blank



FINANCIAL MANAGEMENT

Raymond M. Brooks

CORE CONCEPTS

FOURTH EDITION
GLOBAL EDITION



Pearson

Harlow, England • London • New York • Boston • San Francisco • Toronto • Sydney • Dubai • Singapore • Hong Kong
Tokyo • Seoul • Taipei • New Delhi • Cape Town • São Paulo • Mexico City • Madrid • Amsterdam • Munich • Paris • Milan

The Pearson Series in Finance

Berk/DeMarzo
*Corporate Finance**†

*Corporate Finance: The Core**†

Berk/DeMarzo/Harford
*Fundamentals of Corporate Finance**

Brooks
*Financial Management: Core Concepts**†

Copeland/Weston/Shastri
Financial Theory and Corporate Policy

Dorfman/Cather
Introduction to Risk Management and Insurance

Eakins/McNally
Corporate Finance Online

Eiteman/Stonehill/Moffett
*Multinational Business Finance**†

Fabozzi
Bond Markets: Analysis and Strategies

Foerster
*Financial Management: Concepts and Applications**†

Frasca
Personal Finance

Haugen
The Inefficient Stock Market: What Pays Off and Why

Modern Investment Theory

Holden
Excel Modeling in Corporate Finance

Excel Modeling in Investments

Hughes/MacDonald
International Banking: Text and Cases

Hull
Fundamentals of Futures and Options Markets†

Options, Futures, and Other Derivatives†

Keown
*Personal Finance: Turning Money into Wealth**

Keown/Martin/Petty
*Foundations of Finance: The Logic and Practice of Financial Management**†

Madura
*Personal Finance**

McDonald
Derivatives Markets

Fundamentals of Derivatives Markets

Mishkin/Eakins
Financial Markets and Institutions†

Moffett/Stonehill/Eiteman
*Fundamentals of Multinational Finance**†

Pennacchi
Theory of Asset Pricing

Rejda/McNamara
Principles of Risk Management and Insurance†

Smart/Gitman/Joehnk
*Fundamentals of Investing**

Solnik/McLeavey
Global Investments

Titman/Keown/Martin
*Financial Management: Principles and Applications**†

Titman/Martin
Valuation: The Art and Science of Corporate Investment Decisions

Weston/Mitchell/Mulherin
Takeovers, Restructuring, and Corporate Governance

Zutter/Smart
*Principles of Managerial Finance**†

*Principles of Managerial Finance—Brief Edition**†

*denotes titles with **MyLab Finance**. Log onto www.pearson.com/mylab/finance to learn more.

†denotes availability of **Global Edition** titles.

To Greta, Michael, Aracely, Ariana, Tyler, and Allyson
Thanks for giving me such an enjoyable and fun-filled life.

Please contact <https://support.pearson.com/getsupport/s/contactsupport> with any queries on this content.
Cover Image: rikkyall / Shutterstock

Microsoft and/or its respective suppliers make no representations about the suitability of the information contained in the documents and related graphics published as part of the services for any purpose. All such documents and related graphics are provided “as is” without warranty of any kind. Microsoft and/or its respective suppliers hereby disclaim all warranties and conditions with regard to this information, including all warranties and conditions of merchantability, whether express, implied or statutory, fitness for a particular purpose, title, and non-infringement. In no event shall Microsoft and/or its respective suppliers be liable for any special, indirect, or consequential damages or any damages whatsoever resulting from loss of use, data, or profits, whether in an action of contract, negligence, or other tortious action, arising out of or in connection with the use or performance of information available from the services.

The documents and related graphics contained herein could include technical inaccuracies or typographical errors. Changes are periodically added to the information herein. Microsoft and/or its respective suppliers may make improvements and/ or changes in the product(s) and/or the program(s) described herein at any time. Partial screen shots may be viewed in full within the software version specified.

Microsoft® and Windows® are registered trademarks of the Microsoft Corporation in the U.S.A. and other countries. This book is not sponsored or endorsed by or affiliated with the Microsoft Corporation.

Pearson Education Limited
KAO Two
KAO Park
Hockham Way
Harlow
Essex
CM17 9SR
United Kingdom

and Associated Companies throughout the world

Visit us on the World Wide Web at: www.pearsonglobaleditions.com

© Pearson Education Limited 2023

The rights of Raymond M. Brooks, to be identified as the author of this work, has been asserted by him in accordance with the Copyright, Designs and Patents Act 1988.

Authorized adaptation from the United States edition, entitled *Financial Management: Core Concepts*, 4th Edition, ISBN 978-0-13-473041-7 by Raymond M. Brooks, published by Pearson Education © 2019.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without either the prior written permission of the publisher or a license permitting restricted copying in the United Kingdom issued by the Copyright Licensing Agency Ltd, Saffron House, 6–10 Kirby Street, London EC1N 8TS.

All trademarks used herein are the property of their respective owners. The use of any trademark in this text does not vest in the author or publisher any trademark ownership rights in such trademarks, nor does the use of such trademarks imply any affiliation with or endorsement of this book by such owners. For information regarding permissions, request forms, and the appropriate contacts within the Pearson Education Global Rights and Permissions department, please visit www.pearsoned.com/permissions/.

This eBook is a standalone product and may or may not include all assets that were part of the print version. It also does not provide access to other Pearson digital products like MyLab and Mastering. The publisher reserves the right to remove any material in this eBook at any time.

ISBN 10: 1-292-43732-4
ISBN 13: 978-1-292-43732-3
eBook ISBN 13: 978-1-292-43723-1

British Library Cataloguing-in-Publication Data
A catalogue record for this book is available from the British Library

Typeset in Times NR MT Pro by Integra Software Services

ABOUT THE AUTHOR



RAYMOND M. BROOKS is Emeritus Professor of Finance at Oregon State University. He taught a variety of finance courses, including introduction to financial management, investments, advanced corporate finance, financial institutions, financial planning, and risk management. Previously, he taught at Washington University in St. Louis; the University of Southern Illinois, Edwardsville; and the University of Missouri–Columbia. Professor Brooks authored a variety of articles

on topics from dividends to when-issued trading. He twice won best paper awards at financial conferences.

BRIEF CONTENTS

PART 1	Fundamental Concepts and Basic Tools of Finance	29
CHAPTER 1	Financial Management	30
CHAPTER 2	Financial Statements	57
CHAPTER 3	The Time Value of Money (Part 1)	87
CHAPTER 4	The Time Value of Money (Part 2)	116
CHAPTER 5	Interest Rates	151
PART 2	Valuing Stocks and Bonds and Understanding Risk and Return	183
CHAPTER 6	Bonds and Bond Valuation	184
CHAPTER 7	Stocks and Stock Valuation	221
CHAPTER 8	Risk and Return	255
PART 3	Capital Budgeting	301
CHAPTER 9	Capital Budgeting Decision Models	302
CHAPTER 10	Cash Flow Estimation	344
CHAPTER 11	The Cost of Capital	375
PART 4	Financial Planning and Evaluating Performance	407
CHAPTER 12	Forecasting and Short-Term Financial Planning	408
CHAPTER 13	Working Capital Management	439
CHAPTER 14	Financial Ratios and Firm Performance	479
PART 5	Other Selected Finance Topics	517
CHAPTER 15	Raising Capital	518
CHAPTER 16	Capital Structure	553
CHAPTER 17	Dividends, Dividend Policy, and Stock Splits	585
CHAPTER 18	International Financial Management	618
APPENDIX 1	Future Value Interest Factors	653
APPENDIX 2	Present Value Interest Factors	655
APPENDIX 3	Future Value Interest Factors of an Annuity	657
APPENDIX 4	Present Value Interest Factors of an Annuity	659
APPENDIX 5	Answers to Prepping for Exam Questions	661
GLOSSARY		671
INDEX		679

CONTENTS

PART 1

Fundamental Concepts and Basic Tools of Finance 29

- 1 Financial Management 30**
 - 1.1 The Cycle of Money 31
 - 1.2 Overview of Finance Areas 32
 - 1.3 Financial Markets 33
 - 1.4 The Finance Manager and Financial Management 34
 - 1.5 Objective of the Finance Manager 36
 - Profit Maximization* 36
 - 1.6 Internal and External Players 38
 - 1.7 The Legal Forms of Business 39
 - Sole Proprietorship* 39
 - Partnership* 40
 - Corporations* 41
 - Hybrid Corporations* 41
 - Not-for-Profit Corporations* 42
 - 1.8 The Financial Management Setting: The Agency Model 42
 - 1.9 Corporate Governance and Business Ethics 45
 - FINANCE FOLLIES** The Financial Meltdown of 2008 47
 - 1.10 Why Study Finance? 48
 - Employability* 48
 - PUTTING FINANCE TO WORK** Now Hiring 49
 - Key Terms 51
 - Questions 51
 - Prepping for Exams 52
 - MINI-CASE** Richardses' Tree Farm Grows Up 54
 - Summary Card at end of text
- 2 Financial Statements 57**
 - 2.1 Financial Statements 58
 - The Balance Sheet* 59
 - The Income Statement* 61
 - Statement of Retained Earnings* 64
 - 2.2 Cash Flow Identity and the Statement of Cash Flows 64

- The First Component: Cash Flow from Assets* 65
- The Second Component: Cash Flow to Creditors* 67
- The Third Component: Cash Flow to Owners* 67
- Putting It All Together: The Cash Flow Identity* 68
- The Statement of Cash Flows* 68
- Free Cash Flow* 70
- 2.3 Financial Performance Reporting 70
 - Regulation Fair Disclosure* 71
 - Notes to the Financial Statements* 71
- 2.4 Financial Statements on the Internet 71
- PUTTING FINANCE TO WORK** Look Before You Leap 74
- Key Terms 75
- Questions 76
- Prepping for Exams 76
- Problems 78
- Advanced Problems for Spreadsheet Application 81
- MINI-CASE** Hudson Valley Realty 83
 - Summary Card at end of text
- 3 The Time Value of Money (Part 1) 87**
 - 3.1 Future Value and Compounding Interest 88
 - The Single-Period Scenario* 88
 - The Multiple-Period Scenario* 88
 - Methods of Solving Future Value Problems* 90
 - 3.2 Present Value and Discounting 93
 - The Single-Period Scenario* 94
 - The Multiple-Period Scenario* 94
 - The Use of Time Lines* 96
 - 3.3 One Equation and Four Variables 96
 - 3.4 Applications of the Time Value of Money Equation 98
 - PUTTING FINANCE TO WORK** Sports Agent 103
 - 3.5 Doubling of Money: The Rule of 72 104
 - Key Terms 106
 - Questions 106
 - Prepping for Exams 106
 - Problems 108
 - Advanced Problems for Spreadsheet Application 112

CONTENTS

- MINI-CASE** Richardses' Tree Farm, Inc.:
The Continuing Saga 113
- Summary Card at end of text

4 The Time Value of Money (Part 2) 116

- 4.1 Future Value of Multiple Payment Streams 117
- 4.2 Future Value of an Annuity Stream 118
Future Value of an Annuity: An Application 120
- 4.3 Present Value of an Annuity 122
- 4.4 Annuity Due and Perpetuity 125
- PUTTING FINANCE TO WORK** Modeling the Future with Actuarial Science 126
Perpetuity 128
- 4.5 Three Loan Payment Methods 129
Interest and Principal at Maturity of Loan (Discount Loan) 129
Interest as You Go, Principal at Maturity of Loan (Interest-Only Loan) 130
Interest and Principal as You Go (Amortized Loan) 130
- 4.6 Amortization Schedules 131
- 4.7 Waiting Time and Interest Rates for Annuities 133
- 4.8 Solving a Lottery Problem 135
- 4.9 Ten Important Points about the TVM Equation 138

- Key Terms 138
- Questions 139
- Prepping for Exams 139
- Problems 141
- Advanced Problems for Spreadsheet Application 147

- MINI-CASE** Fitchminster Injection Molding, Inc.: Rose Climbs High 148
- Summary Card at end of text

5 Interest Rates 151

- 5.1 How Financial Institutions Quote Interest Rates: Annual and Periodic Interest Rates 152
- 5.2 Effect of Compounding Periods on the Time Value of Money Equations 155
- 5.3 Consumer Loans and Amortization Schedules 159

- 5.4 Nominal and Real Interest Rates 163
- 5.5 Risk-Free Rate and Premiums 165
Maturity Premiums 167
- 5.6 Yield Curves 169
- 5.7 A Brief History of Interest Rates and Inflation in the United States 170

- Key Terms 173
- Questions 174
- Prepping for Exams 174
- Problems 176
- Advanced Problems for Spreadsheet Application 179
- MINI-CASE** Sweetening the Deal: Povero Construction Company 180
- Summary Card at end of text

PART 2

Valuing Stocks and Bonds and Understanding Risk and Return 183

6 Bonds and Bond Valuation 184

- 6.1 Application of the Time Value of Money Tool: Bond Pricing 185
Key Components of a Bond 185
Pricing a Bond in Steps 187
- 6.2 Semiannual Bonds and Zero-Coupon Bonds 190
Pricing Bonds after Original Issue 192
Zero-Coupon Bonds 194
Amortization of a Zero-Coupon Bond 195
- 6.3 Yields and Coupon Rates 196
The First Interest Rate: Yield to Maturity 197
The "Other" Interest Rate: Coupon Rate 198
Relationship of Yield to Maturity and Coupon Rate 199
- 6.4 Bond Ratings 200
- 6.5 Some Bond History and More Bond Features 203
- 6.6 U.S. Government Bonds 207
Pricing a U.S. Government Note or Bond 207
- PUTTING FINANCE TO WORK** Municipal Manager 208
Pricing a Treasury Bill 209

CONTENTS

Key Terms	211
Questions	212
Prepping for Exams	212
Problems	213
Advanced Problems for Spreadsheet Application	216
MINI-CASE Bay Path Cranberry Products	218
■ Summary Card at end of text	
7 Stocks and Stock Valuation	221
7.1 Characteristics of Common Stock	222
Ownership	222
Claim on Assets and Cash Flow (Residual Claim)	222
Vote (Voice in Management)	223
No Maturity Date	223
Dividends and Their Tax Effect	223
Authorized, Issued, and Outstanding Shares	223
Treasury Stock	224
Preemptive Rights	224
7.2 Stock Markets	224
Primary Markets	225
Secondary Markets: How Stocks Trade	226
Bull Markets and Bear Markets	226
7.3 Stock Valuation	227
The Constant Dividend Model with an Infinite Horizon	229
The Constant Dividend Model with a Finite Horizon	231
The Constant Growth Dividend Model with an Infinite Horizon	233
The Constant Growth Dividend Model with a Finite Horizon	235
Nonconstant Growth Dividends	236
FINANCE FOLLIES Irrational Expectations: Bulbs and Bubbles	237
7.4 Dividend Model Shortcomings	238
7.5 Preferred Stock	241
7.6 Efficient Markets	243
Operational Efficiency	243
Informational Efficiency	243
Key Terms	244
Questions	245
Prepping for Exams	245
Problems	247
Advanced Problems for Spreadsheet Application	251
MINI-CASE Lawrence's Legacy: Part 1	252
■ Summary Card at end of text	
8 Risk and Return	255
8.1 Returns	256
Dollar Profits and Percentage Returns	256
Converting Holding Period Returns to Annual Returns	257
Extrapolating Holding Period Returns	259
8.2 Risk (Certainty and Uncertainty)	260
FINANCE FOLLIES "Dangerous to Your Wealth": Is Investing Just Gambling?	260
8.3 Historical Returns	261
8.4 Standard Deviation as a Measure of Risk	265
Normal Distributions	267
8.5 Returns in an Uncertain World (Expectations and Probabilities)	269
FINANCE FOLLIES "Scam of the Century": Bernie Madoff and the \$50 Billion Fraud	270
Determining the Probabilities of All Potential Outcomes	272
8.6 The Risk-and-Return Trade-Off	274
Investment Rules	275
8.7 Diversification: Minimizing Risk or Uncertainty	276
When Diversification Works	277
Adding More Stocks to the Portfolio: Systematic and Unsystematic Risk	280
8.8 Beta: The Measure of Risk in a Well-Diversified Portfolio	281
8.9 The Capital Asset Pricing Model and the Security Market Line	282
The Capital Asset Pricing Model	283
Application of the SML	285
Key Terms	287
Questions	287
Prepping for Exams	288
Problems	290
Advanced Problems for Spreadsheet Application	296
MINI-CASE Lawrence's Legacy: Part 2	298
■ Summary Card at end of text	

CONTENTS

PART 3

Capital Budgeting 301

9 Capital Budgeting Decision Models 302

9.1 Short-Term and Long-Term Decisions 303

9.2 Payback Period and Discounted Payback Period 305

Payback Period 305

FINANCE FOLLIES IBM Exits the Consumer Software Market: Misreading Future Cash Flows 305

Discounted Payback Period 307

9.3 Net Present Value 309

Mutually Exclusive versus Independent Projects 311

Unequal Lives of Projects 313

Net Present Value Example: Equation and Calculator Function 314

9.4 Internal Rate of Return and Modified Internal Rate of Return 316

Internal Rate of Return 316

PUTTING FINANCE TO WORK Marketing and Sales: Your Product = Your Customer's Capital Budgeting Decision 321

Modified Internal Rate of Return 324

9.5 Profitability Index 327

9.6 Overview of Six Decision Models 328

Capital Budgeting Using a Spreadsheet 330

Key Terms 332

Questions 332

Prepping for Exams 332

Problems 334

Advanced Problems for Spreadsheet Application 340

MINI-CASE BioCom, Inc.: Part 1 340

■ Summary Card at end of text

10 Cash Flow Estimation 344

10.1 The Importance of Cash Flow 345

10.2 Estimating Cash Flow for Projects: Incremental Cash Flow 347

Sunk Costs 347

Opportunity Costs 348

Erosion Costs 348

Synergy Gains 350

Working Capital 351

FINANCE FOLLIES Boston's "Big Dig" Gets Dug Under 353

10.3 Capital Spending and Depreciation 353

Straight-Line Depreciation 354

Modified Accelerated Cost Recovery System 355

10.4 Cash Flow and the Disposal of Capital Equipment 357

10.5 Projected Cash Flow for a New Product 358

Key Terms 363

Questions 363

Prepping for Exams 364

Problems 365

Advanced Problems for Spreadsheet Application 369

MINI-CASE BioCom, Inc.: Part 2, Evaluating a New Product Line 371

■ Summary Card at end of text

11 The Cost of Capital 375

11.1 The Cost of Capital: A Starting Point 376

11.2 Components of the Weighted Average Cost of Capital 379

Debt Component 379

Preferred Stock Component 381

Equity Component 381

Retained Earnings 383

The Debt Component and Taxes 384

11.3 Weighting the Components: Book Value or Market Value? 384

Book Value 385

Adjusted Weighted Average Cost of Capital 386

Market Value 386

11.4 Using the Weighted Average Cost of Capital in a Budgeting Decision 388

The Weighted Average Cost of Capital for Individual Projects 389

11.5 Selecting Appropriate Betas for Projects 391

11.6 Constraints on Borrowing and Selecting Projects for the Portfolio 393

Key Terms 395

Questions 395

CONTENTS

- Prepping for Exams 395
- Problems 398
- Advanced Problems for Spreadsheet Application 402
- MINI-CASE** BioCom, Inc.: Part 3, A Fresh Look at the WACC 403
 - Summary Card at end of text

PART 4

Financial Planning and Evaluating Performance 407

12 Forecasting and Short-Term Financial Planning 408

- 12.1** Sources and Uses of Cash 410
- 12.2** Cash Budgeting and the Sales Forecast 411
 - Cash Inflow from Sales* 414
 - Other Cash Receipts* 415
- 12.3** Cash Outflow from Production 416
- 12.4** The Cash Forecast: Short-Term Deficits and Short-Term Surpluses 417
 - Funding Cash Deficits* 418
 - Investing Cash Surpluses* 420
- 12.5** Planning with Pro Forma Financial Statements 420
 - Pro Forma Income Statement* 421
 - Pro Forma Balance Sheet* 423
- PUTTING FINANCE TO WORK** Information Technology 425
- Key Terms 427
- Questions 427
- Prepping for Exams 428
- Problems 429
- Advanced Problems for Spreadsheet Application 433
- MINI-CASE** Midwest Properties: Quarterly Forecasting 434
 - Summary Card at end of text

13 Working Capital Management 439

- 13.1** The Cash Conversion Cycle 440
 - Average Production Cycle* 443
 - Average Collection Cycle* 443

- Average Payment Cycle* 444
- Putting It All Together: The Cash Conversion Cycle* 445

- 13.2** Managing Accounts Receivable and Setting Credit Policy 446
 - Collecting Accounts Receivable* 446
 - Credit: A Two-Sided Coin* 447
 - Qualifying for Credit* 448
 - Setting Payment Policy* 450
 - Collecting Overdue Debt* 453

- 13.3** The Float 454
 - Speeding Up the Collection Float (Shortening the Lag Time)* 455
 - Extending the Disbursement Float (Lengthening the Lag Time)* 456

- 13.4** Inventory Management: Carrying Costs and Ordering Costs 456
 - ABC Inventory Management* 457
 - Redundant Inventory Items* 458
 - Economic Order Quantity* 458
 - Just in Time* 462

- 13.5** The Effect of Working Capital on Capital Budgeting 463

- PUTTING FINANCE TO WORK** Operations Management 464
 - Inventories and Daily Operations* 465

Key Terms 467

Questions 468

Prepping for Exams 468

Problems 470

Advanced Problems for Spreadsheet Application 473

MINI-CASE Cranston Dispensers, Inc.: Part 1 474

■ Summary Card at end of text

14 Financial Ratios and Firm Performance 479

- 14.1** Financial Statements 480
 - Benchmarking* 481

- 14.2** Financial Ratios 485
 - Short-Term Solvency: Liquidity Ratios* 486
 - Long-Term Solvency: Financial Leverage Ratios* 488
 - Asset Management Ratios* 489

CONTENTS

Profitability Ratios 491

Market Value Ratios 492

DuPont Analysis 494

14.3 External Uses of Financial Statements and Industry Averages 495

Cola Wars 496

Industry Ratios 499

FINANCE FOLLIES *Cooking the Books at Enron and WorldCom* 500

Key Terms 502

Questions 502

Prepping for Exams 502

Problems 504

Advanced Problems for Spreadsheet Application 510

MINI-CASE *Cranston Dispensers, Inc.: Part 2* 510

■ Summary Card at end of text

The Marketing Process: Road Show 535

The Auction 535

The Aftermarket: Dealer in the Shares 535

PUTTING FINANCE TO WORK *Corporate Law* 538

15.6 Other Borrowing Options for a Mature Business 538

15.7 The Final Phase: Closing the Business 541

Straight Liquidation: Chapter 7 541

Reorganization: Chapter 11 542

Key Terms 542

Questions 543

Prepping for Exams 543

Problems 545

Advanced Problems for Spreadsheet Application 548

MINI-CASE *AK Web Developers.com* 549

■ Summary Card at end of text

PART 5

Other Selected Finance Topics 517

15 Raising Capital 518

15.1 The Business Life Cycle 519

15.2 Borrowing for a Start-Up and a Growing Business 519

Personal Funds and Family Loans 520

Commercial Bank Loans 520

Commercial Bank Loans through the Small Business Administration 520

Angel Financing and Venture Capital 521

15.3 Borrowing for a Stable and Mature Business: Taking Out Bank Loans 525

Straight Loans 526

Discount Loans 526

Letters of Credit or Lines of Credit 527

Compensating Balance Loans 527

15.4 Borrowing for a Stable and Mature Business: Selling Bonds 528

15.5 Borrowing for a Stable and Mature Business: Selling Stock 530

Initial Public Offerings and Underwriting 531

Registration, Prospectus, and Tombstone 533

16 Capital Structure 553

16.1 Capital Markets: A Quick Review 554

16.2 Benefits of Debt 556

Earnings per Share as a Measure of the Benefits of Borrowing 557

16.3 Break-Even Earnings for Different Capital Structures 558

16.4 Pecking Order 561

Firms Prefer Internal Financing First 562

Firms Choose to Issue the Cheapest Security First and Use Equity as a Last Resort 562

16.5 Modigliani and Miller on Optimal Capital Structure 564

Capital Structure in a World of No Taxes and No Bankruptcy 565

Capital Structure in a World of Corporate Taxes and No Bankruptcy 568

Debt and the Tax Shield 569

16.6 The Static Theory of Capital Structure 572

Bankruptcy 572

Optimal Capital Structure 573

FINANCE FOLLIES *Hedge Funds: Some Really Smart Guys Get into Big Trouble* 573

Key Terms 576

Questions 576

CONTENTS

Prepping for Exams	577
Problems	578
Advanced Problems for Spreadsheet Application	581
MINI-CASE General Energy Storage Systems: How Much Debt and How Much Equity?	582
■ Summary Card at end of text	
17 Dividends, Dividend Policy, and Stock Splits	585
17.1 Cash Dividends	586
<i>Buying and Selling Stock</i>	586
<i>Declaring and Paying a Cash Dividend: A Chronology</i>	587
<i>Different Types of Dividends</i>	589
17.2 Dividend Policy	591
<i>Dividend Clienteles</i>	591
<i>Dividend Policy Irrelevance</i>	592
<i>Reasons Favoring a Low- or No-Dividend-Payout Policy</i>	596
<i>Reasons Favoring a High-Dividend-Payout Policy</i>	596
<i>Optimal Dividend Policy</i>	597
17.3 Selecting a Dividend Policy	597
<i>Some Further Considerations in the Selection of a Dividend Policy</i>	600
17.4 Stock Dividends, Stock Splits, and Reverse Splits	600
<i>Reasons for Stock Splits</i>	601
<i>Reverse Splits</i>	603
17.5 Specialized Dividend Plans	603
<i>Stock Repurchase</i>	603
<i>Dividend Reinvestment Plans</i>	606
Key Terms	608
Questions	608
Prepping for Exams	609
Problems	610
Advanced Problems for Spreadsheet Application	613
MINI-CASE East Coast Warehouse Club	614
■ Summary Card at end of text	
18 International Financial Management	618
18.1 Managing Multinational Operations	619
<i>Cultural Risk</i>	619
<i>Business Risk</i>	622
<i>Political Risk</i>	622
FINANCE FOLLIES Rino International	623
18.2 Foreign Exchange	625
<i>Purchasing Power Parity</i>	625
<i>Currency Exchange Rates</i>	627
<i>Cross Rates</i>	628
<i>Arbitrage Opportunities</i>	630
<i>Forward Rates</i>	631
<i>Using Forward Rates</i>	633
<i>Changing Spot Rates</i>	635
18.3 Transaction, Operating, and Translation Exposures	636
<i>Transaction Exposure</i>	636
<i>Operating Exposure</i>	636
<i>Translation Exposure</i>	638
18.4 Foreign Investment Decisions	638
Key Terms	642
Questions	642
Prepping for Exams	643
Problems	644
Advanced Problems for Spreadsheet Application	648
MINI-CASE Scholastic Travel Services, Inc.	649
■ Summary Card at end of text	
Appendix 1 Future Value Interest Factors	653
Appendix 2 Present Value Interest Factors	655
Appendix 3 Future Value Interest Factors of an Annuity	657
Appendix 4 Present Value Interest Factors of an Annuity	659
Appendix 5 Answers to Prepping for Exam Questions	661
Glossary	671
Index	679



PREFACE

New to This Edition

Many updates and enhancements are featured in this fourth edition of **Financial Management: Core Concepts**, including the following key material:

- We have updated the material that was time-related. For example, the interest rates now reflect the historically low levels of the twenty-first century.
- We have continued to strengthen Chapter 16 on helping the student have a better understanding on valuing firms. We have added the distinction between the value of a firm as a whole and the value of the firm to the owner.
- We have used the helpful suggestions of reviewers to clarify topics, present enhanced examples, and arrange the order of topic presentations.
- We have provided additional insight on ratio analysis in Chapter 14 by expanding the horizon for analysis with data comparisons over an extended time frame.
- The fourth edition MyLab Finance course includes an enhanced eText with animated figures and author-created solutions videos for in-text examples.
- The chapter-ending Advanced Problems for Spreadsheet Application are now offered in MyLab Finance as auto-graded Excel Projects. Using proven, field-tested technology, auto-graded Excel Projects allow instructors to seamlessly integrate Microsoft Excel® content into their course without having to manually grade spreadsheets. Students have the opportunity to practice important finance skills in Excel, helping them to master key concepts and gain proficiency with the program.

We began with a simple concept. When a student takes an introductory finance class, he or she may encounter a wonderful instructor with great teaching talent and insight. But outside of class, it is the book and the support materials with which the student forms a learning partnership. *Therefore, the book and support materials need to put the student front and center.* They need to present the information in such a way that it connects directly to the student's experiences. So our goal in this book is to introduce the core concepts of finance in a way that reconnects the student to his or her personal financial experiences, provides student-centered feedback in a timely and understandable fashion, and then uses such experiences as a springboard into the world of corporate finance.

The introductory finance class is the first and last class in finance for the vast majority of college students. The perspective of these students often differs from that of students majoring in finance. They need a book that demonstrates why finance matters across disciplines and that builds from the basics to more complex topics in an organic approach. Our purpose throughout the presentation of topics has been to make the material as simple as possible, but not overly simplified. It is this balance that we hope creates a solid foundation for the fundamental concepts of finance for *all* students.

The student is at the heart of this book. Our hope is that we have made the path easier and finance more transparent.

SOLVING TEACHING AND LEARNING CHALLENGES



The evolution of technical support for finance has been amazing. Students now have advanced calculators and spreadsheet software that can provide solutions to many of the basic financial problems. However, understanding finance is more than just solving a financial problem with the aid of these technological tools. These different tools are all interconnected, and students who can move seamlessly from one to another gain a better understanding of the basics behind the answer. So the book presents three methods to solve many financial problems: the equation approach, the calculator approach, and the spreadsheet approach. In this way, students see that there are different roads to the same destination.

Designed for the nonfinance major, **Financial Management: Core Concepts** structures a student-centric learning environment built around three major competencies:

- Using the tools of finance
- Making connections
- Studying for success

Using the Tools of Finance

Problem Solving: Technology Tools and the Three-Methods Approach: Students can develop their skills in problem solving by using a three-pronged approach that shows there are several paths to the same destination. Taking a single problem, three methods can be used to solve the problem.

Method one is the equation approach: Equation is presented and the problem is solved mathematically.

Method two is using a calculator with time value of money keys: The problem is solved using a financial calculator, explaining the key strokes. The answer is displayed in red on the appropriate calculator key.

Method three is using a spreadsheet: For some examples, an Excel solution is added. Basic spreadsheet variables are explained as well as how to set up the application.

EXAMPLE 3.4 Let's make a deal! (future value)

MyLab Finance Video

Problem In 1867, Secretary of State William H. Seward purchased Alaska from Russia for the sum of \$7,200,000, or about two cents per acre. At the time, the deal was dubbed Seward's Folly, but from our vantage point today, did Seward get a bargain after all? What would it cost today (assume it is 2015) if the land were in exactly the same condition as it was 148 years ago and the prevailing interest rate over this time were 4%?

Solution At first glance, it seems as if we have a present value problem, not a future value problem, but it all depends on where we are standing in reference to time. Phrasing this question another way, we could ask, "What will the value of \$7,200,000 be in 148 years at an annual interest rate of 4%?" Restated this way, we can more easily view the problem as a future value problem. A time line is particularly helpful in this instance. We can show the 148-year span from T_{-148} to T_0 or from T_0 to T_{148} .

METHOD 1 Using the equation

$$FV = PV \times (1 + r)^n = \$7,200,000 \times (1.04)^{148} \\ = \$7,200,000 \times 313.8442 = \$2,389,278,156$$

METHOD 2 Using the TVM keys

Input	148	4.0	-7,200,000	0	?
Key	N	I/Y	PV	PMT	FV
CPT					2,389,278,156

METHOD 3 Using a spreadsheet

B6	fx =FV(B1,B2,B3,B4,B5)				
Use the future value function to find the price of Alaska if purchased today instead of 148 years ago.					
	A	B	C	D	E
1	Rate	0.04			
2	Nper	148			
3	Pmt	0			
4	Pv	(\$ 7,200,000.00)			
5	Type	0			
6	Fv	\$2,389,278,156			



Making Connections

MyLab Finance Video

EXAMPLE 4.2 Making retirement golden (present value of an annuity)

Problem Ben and Donna determine that upon retirement they will need to withdraw \$50,000 annually at the end of each year for the next thirty years. They know that they can earn 4% each year on their investment. What is the present value of this annuity? In other words, how much will Ben and Donna need in their retirement account (at the beginning of their retirement) to generate this future cash flow?

Solution In this problem, we assume that Ben and Donna need to have the present value of the thirty-year annuity in their account at the start of their retirement, even though they will not make the first withdrawal of \$50,000 until the end of the first year of retirement. They will make thirty withdrawals from this account during retirement. The investment rate is 4%. It is the same as the discount rate for the future payments of \$50,000 that will come at the end of each year for the next thirty years. The known variables are $r = 4\%$, $n = 30$, and $PMT = \$50,000$. Solve for PV.

METHOD 1 Using the equation

First, calculate the PVIFA value for $n = 30$ and $r = 4\%$:

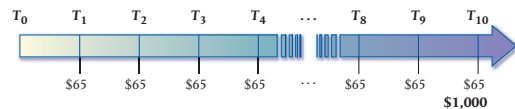


$$\frac{1 - [1/(1 + 0.04)^{30}]}{0.04} = \frac{1 - 0.308319}{0.04} = 17.292033$$

Then multiply the annuity payment by this factor:

Early TVM Tools. The key concepts of finance are identified as “tools.” Students first need to learn how to use these tools of finance before they can apply them to larger problems. The material drills down to basics quickly, developing time value of money (TVM) concepts and interest rates early in the course.

Figure 6.3 Future cash flow of the Merrill Lynch bond.



Later Application and Visual Links. Students soon begin to see just how powerful these tools are. They learn to forge links between basic principles and new applications. A tool icon alerts students when a new tool is introduced and when a tool can be applied in a new situation.



value or principal—in this case, the \$1,000 par value of the bond—at the maturity date of July 15, 2018. Recall from Chapter 4 that this is one method of paying back a loan: interest as you go and principal repaid at maturity.

We can set out the future cash flow as shown in Figure 6.3. Note that in the time line, T_0 represents the original issue date of July 15, 2008, and T_1 is the first annual coupon payment date of July 15, 2009. The annual payments continue for ten years, with T_{10} being the last payment on July 15, 2018. This point is a moment of recognition in which we can apply previously learned concepts: the coupon payments constitute an annuity stream, the same amount at regular intervals. The principal or par value of \$1,000 also pays out at maturity. Here we recognize another key concept: the final amount is a lump-sum payment. So we now have the promised set of future cash flows for the Merrill Lynch bond.



Connections with the Real World. “Finance Follies” capture some fascinating examples of current and historical scandals and manias and give the student context for the necessity of studying finance.

FINANCE FOLLIES

The Financial Meltdown of 2008

Between October 2007 and October 2008, financial markets in the United States lost more than 40% of their value, and several financial institutions collapsed or were swallowed up by healthier firms. This “perfect storm” of mortgage defaults, a housing market collapse, a lack of appropriate regulation and oversight, and a major international credit freeze led to the worst financial meltdown since the Great Depression of the 1930s.

We can find the seeds of this financial debacle in the housing market, but the soil in which they were planted had been prepared for a long time. In the 1980s, a new philosophy that the capital markets worked best when regulations were removed became the prevailing paradigm. Over the next twenty years, a slow and deliberate dismantling of regulations surrounding the financial markets took place. The central idea behind these deregulation efforts was that government is the problem rather than the solution and that if we remove the government from the market, free competition will efficiently allocate resources for a stronger economy.

A key catalyst for the meltdown was the dismantling of the Glass-Steagall Act (officially called the Banking Act of 1933). In 1999, the Gramm-Leach-Bliley Act overturned segments of Glass-Steagall that prevented investment banks from competing with commercial banks in areas like mortgage lending. Later the SEC would relax requirements on investment banks regarding the amount of borrowing in which they could engage, and the race was on to sell more and more mortgages.

continue lending through conventional loans to qualified applicants or lower the qualifying standards with new, unconventional loans and risk higher defaults. Because mortgage originators could eliminate most risk by selling off the mortgages—which they repackaged and sold as securities—they naturally chose the latter course.

With relaxed loan qualifications, red-hot demand heated up the residential housing market. Many individuals found themselves in the middle of the American dream that they thought they might never realize—a new home—but the new home often brought with it an unconventional loan. The industry collectively called these unconventional loans “sub-prime” loans because the initial monthly payment on the loan in the first few years was well below that of a conventional mortgage loan. The interest rate on subsequent payments, however, would increase well above that of a standard loan. So a new homeowner might enjoy relatively low mortgage payments in the first couple of years only to face a large increase when the financial institution reset the interest rate. In many of these loans, the cost jumped by more than \$500 per month.

When the loan payments jumped, many mortgage holders could no longer afford to stay in their homes. The default rate rose to over 20% on these loans, which is much higher than the typical 1% to 3% default rate on conventional loans. Normally, the bank would simply repossess the home, sell it, and recover the loan. But with a glut of houses on the market, the housing mar-

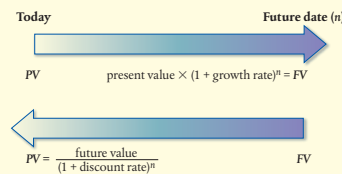
Studying for Success

For the Student on the Go. Summary Cards for every chapter provide instantaneous mini-reviews. In addition to summarizing the main points of the chapter, these portable study aids include mathematical notation, calculator keys, and key equations, all great to read over right before an exam!

CHAPTER 3

The Time Value of Money (Part 1)

AT A GLANCE



LO1 Calculate future values and understand compounding.

Future value is the value of an asset at a specific point in time in the future that is equivalent in value to a specific amount today. There is a direct relationship between the future value of an asset and the asset's present value, growth rate, and time

to the future point. Future values grow faster and faster due to interest earning interest, a phenomenon called compounding of interest.

LO2 Calculate present values and understand discounting.

Present value is the value today of tomorrow's cash flow. You can determine the equivalent value of a future value in today's

dollars by discounting the future value back to the present.

For Students with Test Anxieties. “Prepping for Exams” is designed for those students who worry about how well they will do on the finance exam. To build confidence and expose students to the types of problems they will see on some exams, multiple-choice questions at the end of each chapter are pulled directly from the test bank. Answers are printed in the back of the book in Appendix 5.

PREPPING FOR EXAMS

- Five years ago Thompson Tarps, Inc. issued twenty-five-year 10% annual coupon bonds with a \$1,000 face value. Since then, interest rates in general have risen, and the yield to maturity on the Thompson Tarps bonds is now 12%. Given this information, what is the price today for a Thompson Tarps bond?
 - \$843.14
 - \$850.61
 - \$1,181.54
 - \$1,170.27



For the Student Who Wants

Practice. The book features approximately 400 end-of-chapter problems and 180 conceptual questions. Advanced spreadsheet problems appear at the end of most chapters for more flexibility in assigning problems for individuals or teams and are also offered in the fourth edition as auto-graded Excel Projects in MyLab Finance.

KEY TERMS

basis point, p. 201
 bearer bond, p. 203
 bond, p. 185
 bond equivalent yield (BEY), p. 210
 callable bond, p. 205
 collateral, p. 204
 convertible bond, p. 206

QUESTIONS

1. What is a bond? What determines the price of this financial asset?
2. What is the primary difference between an annual bond and a semiannual bond? What changes do you expect to see in the price of a bond when the yield to maturity changes?
3. When we talk about the yield to maturity of a bond, why do we say "yield"?

PROBLEMS

Bond prices. For Problems 1 through 4, use the information in the following table.

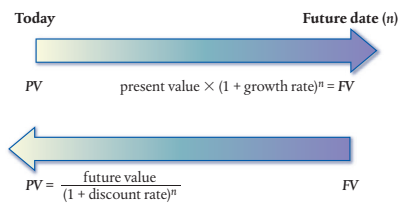
Par Value	Coupon Rate	Years to Maturity	Yield to Maturity	Price
\$1,000.00	8%	10	6%	?
\$1,000.00	6%	10	8%	?
\$5,000.00	9%	20	7%	?
\$5,000.00	12%	30	5%	?

These problems are available in MyLab Finance.

ADVANCED PROBLEMS FOR SPREADSHEET APPLICATION

1. **Bond ladder.** Mathew and Anna are setting up a retirement payout account for the next twenty years. They have decided to buy government bonds that

Figure 3.1 Time lines of growth rates (top) and discount rates (bottom) illustrate present value and future value.



For the Visual Student. Illustrations with a Purpose

help students visualize important financial concepts. The time line is given special treatment in the all-important time value of money and capital budgeting chapters. To depict movement, present value is always in a lighter shade and future value in a darker shade, and PV is always on the left and FV always on the right. This setup makes it easier to see compounding from the present into the future and discounting “back from the future” to the present.



Graphic illustrations are occasionally presented as another way of “seeing” a concept. All illustrations say something about finance.

MYLAB FINANCE



Reach Every Student by Pairing This Text with MyLab Finance

MyLab is the teaching and learning platform that empowers you to reach *every* student. By combining trusted author content with digital tools and a flexible platform, MyLab personalizes the learning experience and improves results for each student. Learn more about MyLab Finance at <http://www.pearson.com/mylab/finance>.

Deliver Trusted Content

You deserve teaching materials that meet your own high standards for your course. That's why Pearson partners with highly respected authors to develop interactive content and course-specific resources that you can trust—and that keep your students engaged.

Empower Each Learner

Each student learns at a different pace. Personalized learning pinpoints the precise areas where each student needs practice, giving all students the support they need—when and where they need it—to be successful.

Teach Your Course Your Way

Your course is unique. So whether you'd like to build your own assignments, teach multiple sections, or set prerequisites, MyLab gives you the flexibility to easily create *your* course to fit *your* needs.

Improve Student Results

When you teach with MyLab, student performance improves. That's why instructors have chosen MyLab for over 15 years, touching the lives of over 50 million students.

Just as the evolution of technical support has been great for students, it has also been great for the instructor. MyLab Finance provides the extra support that time constraints often prevent an instructor from providing to students. With every end-of-chapter problem formatted in MyLab Finance, an instructor can assign a text-related problem that students solve online with technical support. The problem's solution is available to students, and the marking of student homework assignments is completed by MyLab Finance. In addition, MyLab Finance includes features such as Help Me Solve This, which leads students step by step through the problem with a different set of numbers.

New to the fourth edition, MyLab Finance now offers auto-graded Excel Projects for the Advanced Problems for Spreadsheet Application in Chapters 2 through 18. These data-intensive problems offer more flexibility in assigning problems and provide students with the opportunity to practice important finance skills in Excel.



DEVELOPING EMPLOYABILITY SKILLS

One of the major objectives of all students is to develop and improve those skills that increase their employability. Regardless of a student's major, there are certain common skills that employers seek from their new hires across all facets of the business. In *Financial Management: Core Concepts*, students are challenged to hone these skills by learning which of the factors in a decision are relevant and which are irrelevant. They learn how to properly weigh different factors so that the solution is driven by the most important facts, not the minor or marginal facts that often lead to poor solutions.

Additionally, students develop *technical skills* with calculators and spreadsheets. This book teaches not only how to manipulate input for calculators and spreadsheets, but also what the reasoning is behind the inputs that produce the desired solution. For example, we use a three-method approach to problems, with the starting method being the basic equation that forms the theoretical understanding of the problem. We then help translate this equation directly into a calculator that solves the problem efficiently. Finally, we translate the problem so it can be solved using a spreadsheet. In fact, this book provides many problems that utilize spreadsheet applications. Job seekers who are able to translate a problem from its original setting into either a calculator or a spreadsheet problem are more employable because they can work with large sets of information and find correct answers more quickly and efficiently.

Lastly, *Financial Management: Core Concepts* helps develop *analytical skills*—increasing students' ability to analyze performance and make decisions based on this analysis. Students learn how to compare performance over time and with competitors. By analyzing differences in performance over time or across companies, students can make decisions about what actions will be beneficial to their future employers' business. Employees who can understand what actions influence performance in either a positive or a negative direction and can then advocate for actions that will increase performance are the most critical employees in a business.



Careers. “Putting Finance to Work” answers a question students often ask: “Why do I need to take a finance course, anyway?” These snapshots of widely varied careers show that specific finance concepts are used in many different career paths.

PUTTING FINANCE TO WORK

Information Technology

The quality of short-term financial plans and forecasts depends completely on the quality of information that goes into them. The cash flow forecast requires us to know what inventory we have on hand, where it is, how long we expect to hold it before we sell it, and how long it takes us to replace it. It requires us to know how much money our customers owe us and when we expect them to pay. The sales forecast requires data on what we sold recently, what we sold in the same period last year, and what trends are developing. For a company like McDonald's



that handles thousands of transactions a minute in every corner of the globe, an apparently simple question such as “How much cash do we have on hand?” is not that simple.

These data requirements present a challenge even for relatively uncomplicated businesses that manufacture just a few products like furniture or that retail a single product like automobiles. For a company such as Procter and Gamble that manufactures an array of consumer products from many different raw materials in many locations or for a retailer

Different Kinds of Businesses. “Mini-Cases” at the end of every chapter put abstract concepts to work in the types of organizations for which students will later work. The cases feature small businesses, large corporations, town organizations, and start-ups.

MINI-CASE

Richardses' Tree Farm Grows Up

Jake Richards is surprised to hear from Paul Augustus, his accountant for many years, that income from his tree farm is just over \$150,000 for the year and that his land and other assets are valued at almost \$2,000,000. The \$600,000 he owes to the bank is not a surprise.

Twenty years ago Jake realized that with seven long days of backbreaking labor a week, his western Massachusetts dairy farm was just about breaking even. Without his wife's income as a high school science teacher and the health insurance that came with it, the young family would have been struggling.

Along the way, Jake sold the dairy herd, but he did want to keep the land that had been farmed by his family for three generations. At the time, his plan was to repurpose the farm and some of its equipment by boarding horses, selling hay bales to construction companies, starting a small landscaping business, and plowing snow in the winter. Almost on a whim, he planted a few acres with seedling-size blue spruces and Fraser firs, expecting to sell them as Christmas trees. He quickly found that he could use them more profitably in his landscaping business and that he could sell them to local nurseries and other landscapers. Gradually, he added plantings of other popular landscape trees: arborvitae, yew, dogwood, red maple,

This mini-case is available in **MyLab Finance**.

corporation, and a limited liability company, or LLC. He asks Jake to look them over and get back to him in a week or two.

Questions

1. Major financial management decisions involve capital budgeting, capital structure, and working capital management. Give an example of each that relates to Richardses' Tree Farm.
2. Should the Richardses form a regular corporation or choose one of the hybrid forms? Whichever form they use, they intend to distribute ownership equally among Jake, his wife, and their two children so that each party will own 25% of the shares. Consider the tax consequences of their decision.
3. How does incorporating affect the family's overall risk exposure?
4. How does incorporating affect the ability of the business to expand?
5. Jake is concerned that if the business gets much bigger or if he should just decide to slow down and enjoy life a little more, he will need to hire professional management and possibly lose control over key business decisions. Are his concerns justified?
6. Jake occasionally hires day workers, who may or may not be in the United States legally. What are

TABLE OF CONTENTS OVERVIEW

Part 1 Fundamental Concepts and Basic Tools of Finance	
Ch. 1: Financial Management	Introduces the movement of money from lender to borrower and back, the main areas of finance, and the setting of finance in a paradigm known as agency theory.
Ch. 2: Financial Statements	Introduces the four key financial statements and the cash flow identity to prepare students for analyzing cash flow.
Ch. 3: The Time Value of Money (Part 1)	Presents the time value of money for single (lump sum) payments and the four variables; time, interest rate, present value, and future value.
Ch. 4: The Time Value of Money (Part 2)	Expands time value of money with multiple payment streams and the annuity concept. Introduces different loan formats and amortization schedules.
Ch. 5: Interest Rates	Discusses the various ways interest rates are quoted and introduces the components of interest rates.
Part 2 Valuing Stocks and Bonds and Understanding Risk and Return	
Ch. 6: Bonds and Bond Valuation	Introduces the terminology of bonds, bond pricing, bond ratings, and the relationship between coupon rates and yields.
Ch. 7: Stocks and Stock Valuation	Explains the characteristics of stocks, primary and secondary stock markets, and values stocks based on historical dividends of the individual stock.
Ch. 8: Risk and Return	Calculates profits and returns using the holding period and converts the holding period return to annual return. Defines risk and ways to measure risk using standard deviation and beta.
Part 3 Capital Budgeting	
Ch. 9: Capital Budget Decision Models	Introduces capital budgeting and six models: pay-back, discounted pay-back, net present value, internal rate of return, modified internal rate of return, and profitability index for capital budgeting decision making.
Ch. 10: Cash Flow Estimation	Introduces incremental cash flow for capital budgeting and how to calculate depreciation and cost recovery using an accelerated depreciation method.
Ch. 11: The Cost of Capital	Presents the different types of funding available for companies, the calculation of weighted average cost of capital, and the application of the cost of capital to individual projects of the company.
Part 4 Financial Planning and Evaluating Performance	
Ch. 12: Forecasting and Short Term Financial Planning	Introduces the sources and uses of cash and the use of forecasting to predict cash flow, timing of production costs, potential cash excess or cash short-fall, and the preparation of pro forma statements.
Ch. 13: Working Capital Management	Models the cash conversion cycle, introduces issues with credit, and introduces inventory management models.
Ch. 14: Financial Ratios and Firm Performance	Introduces financial ratios and provides ways to interpret the ratios across time for individual companies and between competitors.
Part 5 Other Selected Finance Topics	
Ch. 15: Raising Capital	Introduces the life cycle of a business and how that impacts the different funding sources of a business. Explains the process to legally end a business.
Ch. 16: Capital Structure	Explains different borrowing rates based on the ability to repay and introduces optimal capital structure through a combination of debt and equity financing.
Ch. 17: Dividends, Dividend Policy, and Stock Splits	Explains the process for paying dividends, individual preferences for different types of dividends, and how a company determines dividend policy and stock splits.
Ch. 18: International Financial Management	Introduces the cultural, business, and political differences for a multinational business. Explains exchange rates, cross-rates, and forward rates and their impact on business profits.

INSTRUCTOR TEACHING RESOURCES

The program is offered with the following teaching resources.

Supplements available to instructors at www.pearsonglobaleditions.com	Features of the Supplement
Instructor's Manual Authored by Jim DeMello of Western Michigan University	<ul style="list-style-type: none"> • Answers and solutions to all end-of-chapter questions and problems • Big-picture overviews • Lecture launchers, often with real-world examples of the chapter concepts • Chapter outlines, suitable as lecture notes, with appropriate PowerPoint slides referenced • Trouble spots or pitfalls that students often encounter • Additional examples and homework problems with worked-out solutions
Test Bank Authored by Curt Bacon of Southern Oregon University	Approximately 1,800 multiple-choice, true/false, short-answer, and essay questions with these annotations: <ul style="list-style-type: none"> • Difficulty level (1 for straight recall, 2 for some analysis, 3 for complex analysis) • Type (Multiple-choice, true/false, short-answer, essay) • Topic (The term or concept the question supports) • Learning outcome • AACSB learning standard (Ethical Understanding and Reasoning; Analytical Thinking Skills; Information Technology; Diverse and Multicultural Work; Reflective Thinking; Application of Knowledge)
Computerized TestGen	TestGen allows instructors to: <ul style="list-style-type: none"> • Customize, save, and generate classroom tests • Edit, add, or delete questions from the Test Item Files • Analyze test results • Organize a database of tests and student results
PowerPoints Authored by Jim DeMello of Western Michigan University	Slides include all the graphs and tables from the textbook; lecture outlines, with equations and examples on separate slides; and an assortment of new worked-out examples to provide fresh input on key points. PowerPoints meet accessibility standards for students with disabilities. Features include, but are not limited to: <ul style="list-style-type: none"> • Keyboard and Screen Reader access • Alternative text for images • High color contrast between background and foreground colors

REVIEWERS

- Khaled Abdou, *Penn State University—Berks*
Anna Agapova, *Florida Atlantic University*
Arvi Arunachalam, *Salisbury University*
Tom Ashman, *Eckerd College*
Ted Azarmi, *University of Tuebingen, Germany*
Curtis Bacon, *Southern Oregon University*
Robert J. Balik, *Western Michigan University*
John C. Banko, *University of Florida*
Robert Bartolacci, *Carnegie Mellon University*
Steve Bennett, *San Jose State University*
Karan Bhanot, *University of Texas, San Antonio*
Eugene Bland, *Texas A&M University, Corpus Christi*
Charles Blaylock, *Murray State University*
James Bohenic, *Pennsylvania State University*
Elizabeth Booth, *Michigan State University*
Lionel Booth, *Tulane University*
Patricia Born, *California State University, Northridge*
William Brunsen, *Eastern New Mexico University*
Alva Butcher, *University of Puget Sound*
Deanne Butchey, *Florida International University*
P. R. Chandy, *University of North Texas*
Eric Chen, *University of Saint Joseph*
Jeffrey (Jun) Chen, *North Dakota State University*
Yi-Kai Chen, *National University of Kaohsiung, Taiwan*
Darla Chisholm, *Sam Houston State University*
Cetin Ciner, *University of North Carolina, Wilmington*
William Compton, *University of North Carolina, Wilmington*
Anthony Daly-Leonard, *Delaware County Community College*
Nandita Das, *Delaware State University*
Jim DeMello, *Western Michigan University*
Philip DeMoss, *West Chester University*
Anand Desai, *Kansas State University*
John Dobson, *California Polytechnic State University*
Jocelyn Evans, *College of Charleston*
Eurico Ferreira, *Indiana State University*
Mary Filice, *Columbia College, Chicago*
Marianne Fortuna, *University of Georgia*
Roger Fuhrman, *North Central College*
Scott Fullwiler, *Wartburg College*
Lucia Gao, *University of Massachusetts, Boston*
Sharon Garrison, *University of Arizona*
Sudip Ghosh, *Penn State University*
Cathy Goldberg, *University of San Francisco*
Levon Goukasian, *Pepperdine University*
Lori Grady, *Bucks County Community College*
Ed Graham, *University of North Carolina, Wilmington*
Joe Greco, *California State University, Fullerton*
Terry Grieb, *University of Idaho*
Harry Griffin, *Sam Houston State University*
Wei Guan, *University of South Florida, St. Petersburg*
Melody Gunter, *Florida State University*
Manak Gupta, *Temple University*
Lester Hadsell, *College at Oneonta, State University of New York*
Joseph Haley, *St. Cloud State University*
Pamela Hall, *Western Washington University*
Thomas Hall, *Christopher Newport University*
Robert Hartwig, *Worcester State College*
Eric Hayden, *University of Massachusetts, Boston*
Vanessa Holmes, *Pennsylvania State University, Worthington Scranton*
Ping Hsiao, *San Francisco State University*
Richard Hudanick, *East Central College*
Stephen Huffman, *University of Wisconsin, Oshkosh*
Rob Hull, *Washburn University*
Nancy Jay, *Mercer University*
Samuel Kyle Jones, *Stephen F. Austin State University*
Tejendra Kalia, *Worcester State College*
James Kaney, *California Polytechnic State University*
Howard Keen, *Temple University*
Jim Keys, *Florida International University*
Daniel Klein, *Bowling Green State University*
Raj Kohli, *Indiana University, South Bend*
Mark Lane, *Hawaii Pacific University*
Dina Layish, *Binghamton University*
Vance Lesseig, *Texas State University*
Donglin Li, *San Francisco State University*
Huimin Li, *West Chester University*
Jo-Ann Li, *Towson University*
Ralph Lim, *Sacred Heart University*
Angelo Luciano, *Columbia College, Chicago*
Thomas Lyon, *Rockhurst University*
Yulong Ma, *California State University, Long Beach*
Anne Macy, *West Texas A&M University*
Inayat Mangla, *Western Michigan University*
Iqbal Mansur, *Widener University*
Jon Matthews, *Central Carolina Community College*
Stefano Mazzotta, *Kennesaw State University*

Lee McClain, *Western Washington University*
Ilhan Meric, *Rider University*
Cynthia Miglietti, *Bowling Green State University*
Richard Mikolajczak, *Tidewater Community College*
James A. Milanese, *University of North Carolina, Greensboro*
Lalatendu Misra, *University of Texas, San Antonio*
John Mitchell, *Central Michigan University*
William Mosher, *Clark University*
Tom Nelson, *University of Colorado*
William B. Nelson, *Indiana University Northwest*
Nga Nguyen, *Marquette University*
Srinivas Nippani, *Texas A&M University, Commerce*
Rosilyn Overton, *New Jersey City University*
James Owens, *West Texas A&M University*
Warren Palmer, *Beloit College*
Coleen Pantalone, *Northeastern University*
James Papademas, *Wilbur Wright College*
Ohannes George Paskelian, *University of Houston, Downtown*
Tony Plath, *University of North Carolina, Charlotte*
Rose Prasad, *Central Michigan University*
Vijayan Ramachandran, *Oklahoma City Community College*

Rathin Rathinasamy, *Ball State University*
Mario Reyes, *University of Idaho*
Stanley Roesler, *Eastern Connecticut State University*
David Russell, *California State University, Northridge*
Salil Sarkar, *University of Texas at Arlington*
William Sawatski, *Southwestern College*
Atul Saxena, *Georgia Guinnett College*
Dennis Shannon, *Webster University*
Maneesh Sharma, *Indiana-Purdue University*
Kilman Shin, *Ferris State University*
David Suk, *Rider University*
Kenneth Surbrugg, *Labette Community College*
Michael Townsend, *Canyon College*
Irina Vlasova, *University of Maryland*
Victor Wakeling, *Kennesaw State University*
Joe Walker, *University of Alabama, Birmingham*
Sally Wells, *Columbia College of Missouri*
Susan White, *University of Maryland*
Alex Wilson, *University of Arizona*
Fred Yeager, *St. Louis University*
Emily Zietz, *Middle Tennessee State University*

Focus Group Participants

John Banko, *University of Central Florida*
Rafiqul Bhuyan, *California State University, San Bernardino*
George Chang, *Bradley University*
Chiaku Chukwuogor-Ndu, *Eastern Connecticut State University*
Cetin Ciner, *University of North Carolina, Wilmington*
Beverly Frickel, *University of Nebraska, Kearney*
Luis Garcia-Feijoo, *Creighton University*
Anne Gleason, *University of Central Oklahoma*
Terry Grieb, *University of Idaho*
Thomas Krissek, *Northeastern Illinois University*

Francis Laatsch, *Bowling Green State University*
Richard Levy, *Roosevelt University*
Piman Limpaphayom, *Chulalongkorn University, Thailand*
Angelo Luciano, *Columbia College, Chicago*
Elisa Muresan, *Long Island University, Brooklyn*
Prakash Pai, *University of Texas of the Permian Basin*
Debbie Psihountas, *Webster University*
Rasoul Rezvanian, *Northeastern Illinois University*
Jimmy Senteza, *Drake University*
Janikan Supanvanij, *St. Cloud State University*
Chu-Sheng Tai, *Texas Southern University*
Jill Wetmore, *Saginaw Valley State University*

Global Edition Acknowledgments

Pearson would like to thank the contributors and reviewers who helped improve this Global Edition.

John Banko, *University of Central Florida*
Rafiqul Bhuyan, *California State University*

George Chang, *Bradley University*

ACKNOWLEDGMENTS

I OWE A GREAT DEAL OF GRATITUDE to the many people who helped create this book.

First, I would like to thank the marvelous people at Pearson Education, especially the editors on the first edition of the text: development editor Mary Clare McEwing and Donna Battista, Vice President, Business Publishing. Mary Clare and Donna were great supporters and contributors from the inception of the first edition to final production. For the fourth edition, I owe much gratitude to my editor/portfolio manager Kate Fernandes and content producer Meredith Gertz. All of these individuals have put as much love into the book as I have.

Heidi Allgair of Cenveo[®] Publisher Services, along with the rest of the team at Cenveo, pulled off a superb production job. I also salute Miguel Leonarte and Melissa Honig of Pearson for the technological expertise they brought to the product, particularly in the development of MyLab Finance. Jerilyn Bockorick of Cenveo Publisher Services did a magnificent job on the interior design and gave us a splendid cover. My marketing manager, Kaylee Carlson, spent productive time in talks with me, coaxing out the differential advantages of the book and putting all to use in a terrific marketing campaign.

I am particularly grateful to Robert Hartwig of Worcester State College for his creative work in previous editions. He put a great deal of thought into the “Putting Finance to Work” boxes, the “Finance Follies” snapshots, and the “Mini-Cases” at the end of each chapter. Bob has been a great contributor to the project, although he did not know at the beginning how rich the source material would be for the “Finance Follies” boxes!

I have been most fortunate in having a talented team of supplement authors on this project. Curt Bacon of Southern Oregon University did an excellent job on the test bank, and Jim DeMello of Western Michigan University made great contributions with his authorship of the Instructor’s Manual and PowerPoint slides. Also, a special thank-you to Kevin Thorpe, one of my teaching assistants, who helped with the solutions to the end-of-chapter questions and problems.

All the reviewers of the book—and there were many—provided exceptional insights for improving the various drafts, adding new dimensions to the chapters, and pointing out new directions to explore. I am most grateful to these instructors for lending their time and expertise to this project; their names appear on the following pages.

I cannot sufficiently thank those who inspired this book: my students at Oregon State University. Hundreds of them used the book in preliminary form and provided valuable feedback on all aspects of the presentation. I will forever be grateful for their patience and understanding.

Finally, I thank my wife, Greta, for her endless support and encouragement.

To all these people, my profound thanks. Your countless contributions have made for a better book and the writing of it all worthwhile.

Raymond M. Brooks



PART ONE

Fundamental Concepts and Basic Tools of Finance



CHAPTER 1

Financial Management

In this text, we embark on a journey of the study of finance and financial management. It is probably your first trip through these uncharted waters, but you may already have an intuitive understanding of certain aspects of finance. If you have saved money, borrowed money, or loaned money, you have performed a fundamental activity of finance. Your intuition should serve you well as you develop your personal skill set for finance and financial management.

In this chapter, you will learn about finance activities, the main areas of finance, the key financial players, and the types of business organizations. Together, we'll examine the relationship of a company's officers to its owners through a

LEARNING OBJECTIVES

LO1

Describe the cycle of money, the participants in the cycle, and the common objective of borrowing and lending.

LO2

Distinguish the four main areas of finance and briefly explain the financial activities that each encompasses.

LO3

Explain the different ways of classifying financial markets.

LO4

Discuss the three main categories of financial management.

LO5

Identify the main objective of the finance manager and how he or she might meet that objective.

LO6

Explain how the finance manager interacts with both internal and external players.

LO7

Delineate the three main legal categories of business organizations and their respective advantages and disadvantages.

LO8

Illustrate agency theory and the principal-agent problem.

LO9

Define issues in corporate governance and business ethics.

LO10

Explain why studying finance improves your employability.