

Principles *of* Corporate Finance

TWELFTH EDITION

Richard A. Brealey

*Professor of Finance
London Business School*

Stewart C. Myers

*Robert C. Merton (1970) Professor of Finance
Sloan School of Management
Massachusetts Institute of Technology*

Franklin Allen

*Professor of Finance and Economics
Imperial College London and
Nippon Life Professor of Finance
The Wharton School
University of Pennsylvania*

Brief Contents

Preface vii

Part One: Value

- 1 Introduction to Corporate Finance 1
- 2 How to Calculate Present Values 19
- 3 Valuing Bonds 46
- 4 The Value of Common Stocks 76
- 5 Net Present Value and Other Investment Criteria 105
- 6 Making Investment Decisions with the Net Present Value Rule 132

Part Two: Risk

- 7 Introduction to Risk and Return 162
- 8 Portfolio Theory and the Capital Asset Pricing Model 192
- 9 Risk and the Cost of Capital 221

Part Three: Best Practices in Capital Budgeting

- 10 Project Analysis 249
- 11 Investment, Strategy, and Economic Rents 279
- 12 Agency Problems, Compensation, and Performance Measurement 302

Part Four: Financing Decisions and Market Efficiency

- 13 Efficient Markets and Behavioral Finance 327
- 14 An Overview of Corporate Financing 355
- 15 How Corporations Issue Securities 379

Part Five: Payout Policy and Capital Structure

- 16 Payout Policy 410
- 17 Does Debt Policy Matter? 436

- 18 How Much Should a Corporation Borrow? 460
- 19 Financing and Valuation 491

Part Six: Options

- 20 Understanding Options 525
- 21 Valuing Options 547
- 22 Real Options 573

Part Seven: Debt Financing

- 23 Credit Risk and the Value of Corporate Debt 597
- 24 The Many Different Kinds of Debt 618
- 25 Leasing 652

Part Eight: Risk Management

- 26 Managing Risk 673
- 27 Managing International Risks 707

Part Nine: Financial Planning and Working Capital Management

- 28 Financial Analysis 732
- 29 Financial Planning 759
- 30 Working Capital Management 787

Part Ten: Mergers, Corporate Control, and Governance

- 31 Mergers 813
- 32 Corporate Restructuring 843
- 33 Governance and Corporate Control Around the World 867

Part Eleven: Conclusion

- 34 Conclusion: What We Do and Do Not Know about Finance 887

Preface vii

I Part One: Value

1 Introduction to Corporate Finance 1

- 1-1** Corporate Investment and Financing Decisions 2
Investment Decisions/Financing Decisions/What Is a Corporation?/The Role of the Financial Manager
- 1-2** The Financial Goal of the Corporation 7
Shareholders Want Managers to Maximize Market Value/A Fundamental Result/The Investment Trade-Off/Should Managers Look After the Interests of Their Shareholders?/Agency Problems and Corporate Governance
- 1-3** Preview of Coming Attractions 13
- Summary 14 · Problem Sets 14 · Appendix: Why Maximizing Shareholder Value Makes Sense 17

2 How to Calculate Present Values 19

- 2-1** Future Values and Present Values 19
Calculating Future Values/Calculating Present Values/Valuing an Investment Opportunity/Net Present Value/Risk and Present Value/Present Values and Rates of Return/Calculating Present Values When There Are Multiple Cash Flows/The Opportunity Cost of Capital
- 2-2** Looking for Shortcuts—Perpetuities and Annuities 27
How to Value Perpetuities/How to Value Annuities/Valuing Annuities Due/Calculating Annual Payments/Future Value of an Annuity
- 2-3** More Shortcuts—Growing Perpetuities and Annuities 34
Growing Perpetuities/Growing Annuities

- 2-4** How Interest Is Paid and Quoted 36
Continuous Compounding

Summary 39 · Problem Sets 40 · Finance on the Web 45

3 Valuing Bonds 46

- 3-1** Using the Present Value Formula to Value Bonds 47
A Short Trip to Paris to Value a Government Bond/Back to the United States: Semiannual Coupons and Bond Prices
- 3-2** How Bond Prices Vary with Interest Rates 50
Duration and Volatility
- 3-3** The Term Structure of Interest Rates 54
Spot Rates, Bond Prices, and the Law of One Price/Measuring the Term Structure/Why the Discount Factor Declines as Futurity Increases—and a Digression on Money Machines
- 3-4** Explaining the Term Structure 58
Expectations Theory of the Term Structure/Introducing Risk/Inflation and Term Structure
- 3-5** Real and Nominal Rates of Interest 60
Indexed Bonds and the Real Rate of Interest/What Determines the Real Rate of Interest?/Inflation and Nominal Interest Rates
- 3-6** The Risk of Default 64
Corporate Bonds and Default Risk/Sovereign Bonds and Default Risk

Summary 70 · Further Reading 71 · Problem Sets 71
Finance on the Web 75

4 The Value of Common Stocks 76

- 4-1** How Common Stocks Are Traded 76
Trading Results for GE
- 4-2** How Common Stocks Are Valued 78
Valuation by Comparables/Stock Prices and Dividends

- 4-3** Estimating the Cost of Equity Capital 85
Using the DCF Model to Set Gas and Electricity Prices/Dangers Lurk in Constant-Growth Formulas
- 4-4** The Link Between Stock Price and Earnings per Share 90
Calculating the Present Value of Growth Opportunities for Fledgling Electronics
- 4-5** Valuing a Business by Discounted Cash Flow 93
Valuing the Concatenator Business/Valuation Format/Estimating Horizon Value/A Further Reality Check/Free Cash Flow, Dividends, and Repurchases
- Summary 98 · Problem Sets 99 · Finance on the Web 103
Mini-Case: Reeby Sports 104

5 Net Present Value and Other Investment Criteria 105

- 5-1** A Review of the Basics 105
Net Present Value's Competitors/Three Points to Remember about NPV/NPV Depends on Cash Flow, Not on Book Returns
- 5-2** Payback 109
Discounted Payback
- 5-3** Internal (or Discounted-Cash-Flow) Rate of Return 111
Calculating the IRR/The IRR Rule/Pitfall 1—Lending or Borrowing?/Pitfall 2—Multiple Rates of Return/Pitfall 3—Mutually Exclusive Projects/Pitfall 4—What Happens When There Is More than One Opportunity Cost of Capital?/The Verdict on IRR
- 5-4** Choosing Capital Investments When Resources Are Limited 119
An Easy Problem in Capital Rationing/Uses of Capital Rationing Models

Summary 123 · Further Reading 124 · Problem Sets 125 · Mini-Case: Vegetron's CFO Calls Again 129

6 Making Investment Decisions with the Net Present Value Rule 132

- 6-1** Applying the Net Present Value Rule 132
Rule 1: Only Cash Flow Is Relevant/Rule 2: Estimate Cash Flows on an Incremental Basis/

Rule 3: Treat Inflation Consistently/Rule 4: Separate Investment and Financing Decisions

- 6-2** Example—IM&C's Fertilizer Project 139
Separating Investment and Financing Decisions/Investments in Working Capital/A Further Note on Depreciation/A Final Comment on Taxes/Project Analysis/Calculating NPV in Other Countries and Currencies
- 6-3** Using the NPV Rule to Choose among Projects 146
Problem 1: The Investment Timing Decision/Problem 2: The Choice between Long- and Short-Lived Equipment/Problem 3: When to Replace an Old Machine/Problem 4: Cost of Excess Capacity

Summary 151 · Problem Sets 152 · Mini-Case: New Economy Transport (A) and (B) 159

I Part Two: Risk

7 Introduction to Risk and Return 162

- 7-1** Over a Century of Capital Market History in One Easy Lesson 162
Arithmetic Averages and Compound Annual Returns/Using Historical Evidence to Evaluate Today's Cost of Capital/Dividend Yields and the Risk Premium
- 7-2** Measuring Portfolio Risk 169
Variance and Standard Deviation/Measuring Variability/How Diversification Reduces Risk
- 7-3** Calculating Portfolio Risk 176
General Formula for Computing Portfolio Risk/Do I Really Have to Add up 25 Million Boxes?
- 7-4** How Individual Securities Affect Portfolio Risk 180
Market Risk Is Measured by Beta/Why Security Betas Determine Portfolio Risk
- 7-5** Diversification and Value Additivity 184

Summary 185 · Further Reading 186
Problem Sets 186 · Finance on the Web 191

8 Portfolio Theory and the Capital Asset Pricing Model 192

- 8-1** Harry Markowitz and the Birth of Portfolio Theory 192
Combining Stocks into Portfolios/We Introduce Borrowing and Lending
- 8-2** The Relationship Between Risk and Return 199
Some Estimates of Expected Returns/Review of the Capital Asset Pricing Model/What If a Stock Did Not Lie on the Security Market Line?
- 8-3** Validity and Role of the Capital Asset Pricing Model 202
Tests of the Capital Asset Pricing Model/Assumptions behind the Capital Asset Pricing Model
- 8-4** Some Alternative Theories 206
Arbitrage Pricing Theory/A Comparison of the Capital Asset Pricing Model and Arbitrage Pricing Theory/The Three-Factor Model

Summary 211 · Further Reading 212 · Problem Sets 212 · Finance on the Web 218 · Mini-Case: John and Marsha on Portfolio Selection 219

9 Risk and the Cost of Capital 221

- 9-1** Company and Project Costs of Capital 222
Perfect Pitch and the Cost of Capital/Debt and the Company Cost of Capital
- 9-2** Measuring the Cost of Equity 225
Estimating Beta/The Expected Return on Union Pacific Corporation's Common Stock/Union Pacific's After-Tax Weighted-Average Cost of Capital/Union Pacific's Asset Beta
- 9-3** Analyzing Project Risk 229
What Determines Asset Betas?/Don't Be Fooled by Diversifiable Risk/Avoid Fudge Factors in Discount Rates/Discount Rates for International Projects
- 9-4** Certainty Equivalents—Another Way to Adjust for Risk 235
Valuation by Certainty Equivalents/When to Use a Single Risk-Adjusted Discount Rate for Long-Lived Assets/A Common Mistake/When You Cannot Use a Single Risk-Adjusted Discount Rate for Long-Lived Assets

Summary 241 · Further Reading 242 · Problem Sets 242 · Finance on the Web 246 · Mini-Case: The Jones Family, Incorporated 247

I Part Three: Best Practices in Capital Budgeting

10 Project Analysis 249

- 10-1** The Capital Investment Process 250
Project Authorizations—and the Problem of Biased Forecasts/Postaudits
- 10-2** Sensitivity Analysis 252
Value of Information/Limits to Sensitivity Analysis/Scenario Analysis/Break-Even Analysis/Operating Leverage and the Break-Even Point
- 10-3** Monte Carlo Simulation 259
Simulating the Electric Scooter Project
- 10-4** Real Options and Decision Trees 262
The Option to Expand/The Option to Abandon/Production Options/Timing Options/More on Decision Trees/Pro and Con Decision Trees

Summary 270 · Further Reading 271
Problem Sets 271 · Mini-Case: Waldo County 277

11 Investment, Strategy, and Economic Rents 279

- 11-1** Look First to Market Values 279
The Cadillac and the Movie Star
- 11-2** Economic Rents and Competitive Advantage 284
- 11-3** Marvin Enterprises Decides to Exploit a New Technology—an Example 288
Forecasting Prices of Gargle Blasters/The Value of Marvin's New Expansion/Alternative Expansion Plans/The Value of Marvin Stock/The Lessons of Marvin Enterprises

Summary 295 · Further Reading 295 · Problem Sets 295
Mini-Case: Ecsy-Cola 300

12 Agency Problems, Compensation, and Performance Measurement 302

- 12-1** Incentives and Compensation 302
*Agency Problems in Capital Budgeting/
 Agency Problems and Risk Taking/Monitoring/
 Management Compensation/Incentive
 Compensation/Monitoring Pay for Performance*
- 12-2** Measuring and Rewarding Performance:
 Residual Income and EVA 311
Pros and Cons of EVA
- 12-3** Biases in Accounting Measures of
 Performance 314
*Example: Measuring the Profitability of the Nodhead
 Supermarket/Measuring Economic Profitability/
 Do the Biases Wash Out in the Long Run?/What
 Can We Do about Biases in Accounting Profitability
 Measures?/Earnings and Earnings Targets*

Summary 320 · Further Reading 321 · Problem Sets 322

I Part Four: Financing Decisions and Market Efficiency

13 Efficient Markets and Behavioral Finance 327

- 13-1** We Always Come Back to NPV 328
*Differences between Investment and Financing
 Decisions*
- 13-2** What Is an Efficient Market? 329
*A Startling Discovery: Price Changes Are Random/
 Competition and the Efficient Market Hypothesis/
 Efficient Markets: The Evidence*
- 13-3** The Evidence Against Market Efficiency 336
*Do Investors Respond Slowly to New Information?/
 Bubbles and Market Efficiency*
- 13-4** Behavioral Finance 340
*Sentiment/Limits to Arbitrage/Incentive Problems
 and the Subprime Crisis*
- 13-5** The Five Lessons of Market Efficiency 344
*Lesson 1: Markets Have No Memory/Lesson 2:
 Trust Market Prices/Lesson 3: Read the Entrails/
 Lesson 4: The Do-It-Yourself Alternative/Lesson 5:*

*Seen One Stock, Seen Them All/What If Markets
 Are Not Efficient? Implications for the Financial
 Manager*

Summary 349 · Further Reading 350
 Problem Sets 351 · Finance on the Web 354

14 An Overview of Corporate Financing 355

- 14-1** Patterns of Corporate Financing 355
*Do Firms Rely Too Much on Internal Funds?/How
 Much Do Firms Borrow?*
- 14-2** Common Stock 358
*Voting Procedures/Dual-Class Shares and Private
 Benefits/Equity in Disguise/Preferred Stock*
- 14-3** Debt 363
*Debt Comes in Many Forms/A Debt by Any Other
 Name/Variety's the Very Spice of Life*
- 14-4** Financial Markets and Institutions 366
*Financial Markets/Financial Intermediaries/
 Investment Funds/Financial Institutions*
- 14-5** The Role of Financial Markets and
 Intermediaries 372
*The Payment Mechanism/Borrowing and Lending/
 Pooling Risk/Information Provided by Financial
 Markets/The Financial Crisis of 2007–2009*

Summary 376 · Further Reading 376
 Problem Sets 377 · Finance on the Web 378

15 How Corporations Issue Securities 379

- 15-1** Venture Capital 379
The Venture Capital Market
- 15-2** The Initial Public Offering 384
*Arranging an Initial Public Offering/The Sale of
 Marvin Stock/The Underwriters/Costs of a New
 Issue/Underpricing of IPOs/Hot New-Issue Periods*
- 15-3** Alternative Issue Procedures for IPOs 392
Types of Auction: A Digression
- 15-4** Security Sales by Public Companies 394
*General Cash Offers/International Security
 Issues/The Costs of a General Cash Offer/Market
 Reaction to Stock Issues/Rights Issues*

15-5 Private Placements and Public Issues 399

Summary 400 · Further Reading 400

Problem Sets 401 · Finance on the Web 405

Appendix: Marvin's New-Issue Prospectus 406

I Part Five: Payout Policy and Capital Structure**16 Payout Policy 410****16-1** Facts About Payout 411*How Firms Pay Dividends/How Firms Repurchase Stock***16-2** The Information Content of Dividends and Repurchases 413*The Information Content of Share Repurchases***16-3** Dividends or Repurchases? The Payout Controversy 416*Payout Policy Is Irrelevant in Perfect Capital Markets/Dividends or Repurchases? An Example/Stock Repurchases and DCF Models of Share Price/Dividends and Share Issues***16-4** The Rightists 421*Payout Policy, Investment Policy, and Management Incentives***16-5** Taxes and the Radical Left 422*Empirical Evidence on Dividends and Taxes/Alternative Tax Systems/Taxes and Payout—A Summary***16-6** Payout Policy and the Life Cycle of the Firm 426*Payout and Corporate Governance*

Summary 429 · Further Reading 430 · Problem Sets 430

17 Does Debt Policy Matter? 436**17-1** The Effect of Financial Leverage in a Competitive Tax-Free Economy 437*Enter Modigliani and Miller/The Law of Conservation of Value/An Example of Proposition 1***17-2** Financial Risk and Expected Returns 442*Proposition 2/How Changing Capital Structure Affects Beta/Watch Out for Hidden Leverage***17-3** The Weighted-Average Cost of Capital 448*Two Warnings/Rates of Return on Levered Equity—The Traditional Position/Today's Unsatisfied Clienteles Are Probably Interested in Exotic Securities/Imperfections and Opportunities***17-4** A Final Word on the After-Tax Weighted-Average Cost of Capital 452

Summary 453 · Further Reading 453 · Problem Sets 454

Mini-Case: Claxton Drywall Comes to the Rescue 458

18 How Much Should a Corporation Borrow? 460**18-1** Corporate Taxes 461*How Do Interest Tax Shields Contribute to the Value of Stockholders' Equity?/Recasting Johnson & Johnson's Capital Structure/MM and Taxes***18-2** Corporate and Personal Taxes 464**18-3** Costs of Financial Distress 467*Bankruptcy Costs/Evidence on Bankruptcy Costs/Direct versus Indirect Costs of Bankruptcy/Financial Distress without Bankruptcy/Debt and Incentives/Risk Shifting: The First Game/Refusing to Contribute Equity Capital: The Second Game/And Three More Games, Briefly/What the Games Cost/Costs of Distress Vary with Type of Asset/The Trade-Off Theory of Capital Structure***18-4** The Pecking Order of Financing Choices 479*Debt and Equity Issues with Asymmetric Information/Implications of the Pecking Order/The Trade-Off Theory vs. the Pecking-Order Theory—Some Evidence/The Bright Side and the Dark Side of Financial Slack/Is There a Theory of Optimal Capital Structure?*Summary 485 · Further Reading 486 · Problem Sets 486
Finance on the Web 490**19 Financing and Valuation 491****19-1** The After-Tax Weighted-Average Cost of Capital 491*Review of Assumptions/Mistakes People Make in Using the Weighted-Average Formula*

- 19-2** Valuing Businesses 496
Valuing Rio Corporation/Estimating Horizon Value/WACC vs. the Flow-to-Equity Method
- 19-3** Using WACC In Practice 501
Some Tricks of the Trade/Adjusting WACC when Debt Ratios and Business Risks Differ/Unlevering and Relevering Betas/The Importance of Rebalancing/The Modigliani–Miller Formula, Plus Some Final Advice
- 19-4** Adjusted Present Value 508
APV for the Perpetual Crusher/Other Financing Side Effects/APV for Businesses/APV for International Investments
- 19-5** Your Questions Answered 512
- Summary 514 · Further Reading 515
Problem Sets 515 · Finance on the Web 520
Appendix: Discounting Safe, Nominal Cash Flows 521

I Part Six: Options

20 Understanding Options 525

- 20-1** Calls, Puts, and Shares 526
Call Options and Position Diagrams/Put Options/Selling Calls and Puts/Position Diagrams Are Not Profit Diagrams
- 20-2** Financial Alchemy with Options 530
Spotting the Option
- 20-3** What Determines Option Values? 536
Risk and Option Values
- Summary 541 · Further Reading 541
Problem Sets 542 · Finance on the Web 546

21 Valuing Options 547

- 21-1** A Simple Option-Valuation Model 548
Why Discounted Cash Flow Won't Work for Options/Constructing Option Equivalents from Common Stocks and Borrowing/Valuing the Google Put Option
- 21-2** The Binomial Method for Valuing Options 552
Example: The Two-Step Binomial Method/The General Binomial Method/The Binomial Method and Decision Trees

- 21-3** The Black–Scholes Formula 557
Using the Black–Scholes Formula/The Risk of an Option/The Black–Scholes Formula and the Binomial Method
- 21-4** Black–Scholes in Action 561
Executive Stock Options/Warrants/Portfolio Insurance/Calculating Implied Volatilities
- 21-5** Option Values at a Glance 564
- 21-6** The Option Menagerie 566
- Summary 567 · Further Reading 567
Problem Sets 567 · Finance on the Web 571
Mini-Case: Bruce Honiball's Invention 571

22 Real Options 573

- 22-1** The Value of Follow-On Investment Opportunities 573
Questions and Answers about Blitzen's Mark III/Other Expansion Options
- 22-2** The Timing Option 577
Valuing the Malted Herring Option/Optimal Timing for Real Estate Development
- 22-3** The Abandonment Option 580
Bad News for the Perpetual Crusher/Abandonment Value and Project Life/Temporary Abandonment
- 22-4** Flexible Production and Procurement 583
Aircraft Purchase Options
- 22-5** Investment in Pharmaceutical R&D 587
- 22-6** Valuing Real Options 589
A Conceptual Problem?/What about Taxes?/Practical Challenges
- Summary 591 · Further Reading 592 · Problem Sets 592

I Part Seven: Debt Financing

23 Credit Risk and the Value of Corporate Debt 597

- 23-1** Yields on Corporate Debt 597
What Determines the Yield Spread?
- 23-2** The Option to Default 602
How the Default Option Affects a Bond's Risk and Yield/A Digression: Valuing Government Financial Guarantees

- 23-3** Bond Ratings and the Probability of Default 608
23-4 Predicting the Probability of Default 609
Credit Scoring/Market-Based Risk Models
23-5 Value at Risk 613
 Summary 614 · Further Reading 615
 Problem Sets 615 · Finance on the Web 617

24 The Many Different Kinds of Debt 618

- 24-1** Long-Term Bonds 619
Bond Terms/Security and Seniority/Asset-Backed Securities/Sinking Funds/Call Provisions/Bond Covenants/Privately Placed Bonds/Foreign Bonds, Eurobonds, and Global Bonds
24-2 Convertible Securities and Some Unusual Bonds 630
The Value of a Convertible at Maturity/Forcing Conversion/Why Do Companies Issue Convertibles?/Valuing Convertible Bonds/A Variation on Convertible Bonds: The Bond–Warrant Package/Innovation in the Bond Market
24-3 Bank Loans 636
Commitment/Maturity/Rate of Interest/Syndicated Loans/Security/Debt Covenants
24-4 Commercial Paper and Medium-Term Notes 640
Commercial Paper/Medium-Term Notes
 Summary 642 · Further Reading 643 · Problem Sets 643
 Mini-Case: The Shocking Demise of Mr. Thorndike 648
 Appendix: Project Finance 649

25 Leasing 652

- 25-1** What Is a Lease? 652
25-2 Why Lease? 653
Sensible Reasons for Leasing/Some Dubious Reasons for Leasing
25-3 Operating Leases 657
Example of an Operating Lease/Lease or Buy?
25-4 Valuing Financial Leases 660
Example of a Financial Lease/Who Really Owns the Leased Asset?/Leasing and the Internal Revenue Service/A First Pass at Valuing a Lease Contract/The Story So Far

- 25-5** When Do Financial Leases Pay? 665
Leasing around the World
25-6 Leveraged Leases 666
 Summary 667 · Further Reading 668 · Problem Sets 668

I Part Eight: Risk Management

26 Managing Risk 673

- 26-1** Why Manage Risk? 673
Reducing the Risk of Cash Shortfalls or Financial Distress/Agency Costs May Be Mitigated by Risk Management/The Evidence on Risk Management
26-2 Insurance 676
26-3 Reducing Risk with Options 678
26-4 Forward and Futures Contracts 679
A Simple Forward Contract/Futures Exchanges/The Mechanics of Futures Trading/Trading and Pricing Financial Futures Contracts/Spot and Futures Prices—Commodities/More about Forward Contracts/Homemade Forward Rate Contracts
26-5 Swaps 687
Interest Rate Swaps/Currency Swaps/Some Other Swaps
26-6 How to Set Up a Hedge 691
Hedging Interest Rate Risk/Hedge Ratios and Basis Risk
26-7 Is “Derivative” A Four-Letter Word? 695
 Summary 697 · Further Reading 698
 Problem Sets 698 · Finance on the Web 704
 Mini-Case: Rensselaer Advisers 704

27 Managing International Risks 707

- 27-1** The Foreign Exchange Market 707
27-2 Some Basic Relationships 709
Interest Rates and Exchange Rates/The Forward Premium and Changes in Spot Rates/Changes in the Exchange Rate and Inflation Rates/Interest Rates and Inflation Rates/Is Life Really That Simple?

- 27-3** Hedging Currency Risk 717
Transaction Exposure and Economic Exposure
- 27-4** Exchange Risk and International Investment Decisions 720
The Cost of Capital for International Investments
- 27-5** Political Risk 723
- Summary 725 · Further Reading 726
- Problem Sets 726 · Finance on the Web 730
- Mini-Case: Exacta, s.a. 730

I Part Nine: Financial Planning and Working Capital Management

28 Financial Analysis 732

- 28-1** Financial Ratios 732
- 28-2** Financial Statements 733
- 28-3** Home Depot's Financial Statements 734
The Balance Sheet/The Income Statement
- 28-4** Measuring Home Depot's Performance 737
Economic Value Added (EVA)/Accounting Rates of Return/Problems with EVA and Accounting Rates of Return
- 28-5** Measuring Efficiency 741
- 28-6** Analyzing the Return on Assets: The Du Pont System 743
The Du Pont System
- 28-7** Measuring Leverage 744
Leverage and the Return on Equity
- 28-8** Measuring Liquidity 746
- 28-9** Interpreting Financial Ratios 748
- Summary 752 · Further Reading 752
- Problem Sets 753 · Finance on the Web 758

29 Financial Planning 759

- 29-1** Links Between Short-Term and Long-Term Financing Decisions 759
- 29-2** Tracing Changes in Cash 762
The Cash Cycle
- 29-3** Cash Budgeting 767
Preparing the Cash Budget: Inflows/Preparing the Cash Budget: Outflows

- 29-4** The Short-Term Financing Plan 769
Options for Short-Term Financing/Dynamic's Financing Plan/Evaluating the Plan/A Note on Short-Term Financial Planning Models
- 29-5** Long-Term Financial Planning 772
Why Build Financial Plans?/A Long-Term Financial Planning Model for Dynamic Mattress/Pitfalls in Model Design/Choosing a Plan
- 29-6** Growth and External Financing 777
- Summary 778 · Further Reading 779
- Problem Sets 779 · Finance on the Web 786

30 Working Capital Management 787

- 30-1** Inventories 788
- 30-2** Credit Management 790
Terms of Sale/The Promise to Pay/Credit Analysis/The Credit Decision/Collection Policy
- 30-3** Cash 796
How Purchases Are Paid For/Speeding Up Check Collections/International Cash Management/Paying for Bank Services
- 30-4** Marketable Securities 800
Calculating the Yield on Money-Market Investments/Yields on Money-Market Investments/The International Money Market/Money-Market Instruments
- Summary 805 · Further Reading 806
- Problem Sets 807 · Finance on the Web 812

I Part Ten: Mergers, Corporate Control, and Governance

31 Mergers 813

- 31-1** Sensible Motives for Mergers 814
Economies of Scale/Economies of Vertical Integration/Complementary Resources/Surplus Funds/Eliminating Inefficiencies/Industry Consolidation
- 31-2** Some Dubious Reasons for Mergers 819
Diversification/Increasing Earnings per Share: The Bootstrap Game/Lower Financing Costs

- 31-3** Estimating Merger Gains and Costs 822
Right and Wrong Ways to Estimate the Benefits of Mergers/More on Estimating Costs—What If the Target’s Stock Price Anticipates the Merger?/ Estimating Cost When the Merger Is Financed by Stock/Asymmetric Information
- 31-4** The Mechanics of a Merger 827
Mergers, Antitrust Law, and Popular Opposition/ The Form of Acquisition/Merger Accounting/Some Tax Considerations/Cross-Border Mergers and Tax Inversion
- 31-5** Proxy Fights, Takeovers, and the Market for Corporate Control 830
Proxy Contests/Takeovers/Oracle Bids for PeopleSoft/ Takeover Defenses/Who Gains Most in Mergers?
- 31-6** Mergers and the Economy 836
Merger Waves/Do Mergers Generate Net Benefits?

Summary 837 · Further Reading 838 · Problem Sets 838
Appendix: Conglomerate Mergers and Value Additivity 841

32 Corporate Restructuring 843

- 32-1** Leveraged Buyouts 843
The RJR Nabisco LBO/Barbarians at the Gate?/ Leveraged Restructurings/LBOs and Leveraged Restructurings
- 32-2** Fusion and Fission in Corporate Finance 848
Spin-offs/Carve-outs/Asset Sales/Privatization and Nationalization
- 32-3** Private Equity 853
Private-Equity Partnerships/Are Private-Equity Funds Today’s Conglomerates?
- 32-4** Bankruptcy 858
Is Chapter 11 Efficient?/Workouts/Alternative Bankruptcy Procedures

Summary 863 · Further Reading 864 · Problem Sets 865

33 Governance and Corporate Control Around the World 867

- 33-1** Financial Markets and Institutions 867
Investor Protection and the Development of Financial Markets

- 33-2** Ownership, Control, and Governance 871
Ownership and Control in Japan/Ownership and Control in Germany/European Boards of Directors/Shareholders versus Stakeholders/ Ownership and Control in Other Countries/ Conglomerates Revisited
- 33-3** Do These Differences Matter? 880
Risk and Short-Termism/Growth Industries and Declining Industries/Transparency and Governance

Summary 883 · Further Reading 884 · Problem Sets 885

I Part Eleven: Conclusion

34 Conclusion: What We Do and Do Not Know about Finance 887

- 34-1** What We Do Know: The Seven Most Important Ideas in Finance 887
1. Net Present Value/2. The Capital Asset Pricing Model/3. Efficient Capital Markets/4. Value Additivity and the Law of Conservation of Value/5. Capital Structure Theory/6. Option Theory/7. Agency Theory
- 34-2** What We Do Not Know: 10 Unsolved Problems in Finance 890
1. What Determines Project Risk and Present Value?/2. Risk and Return—What Have We Missed?/3. How Important Are the Exceptions to the Efficient-Market Theory?/4. Is Management an Off-Balance-Sheet Liability?/5. How Can We Explain the Success of New Securities and New Markets?/6. How Can We Resolve the Payout Controversy?/7. What Risks Should a Firm Take?/8. What Is the Value of Liquidity?/9. How Can We Explain Merger Waves?/10. Why Are Financial Systems So Prone to Crisis?
- 34-3** A Final Word 896

APPENDIX A-1

GLOSSARY G-1

INDEX I-1

Note: Present value tables are available in Connect.