

Contents in Brief

PART ONE	INTRODUCTION TO CORPORATE FINANCE	1
Chapter 1	Introduction to Corporate Finance	3
Chapter 2	The Objective in Corporate Finance	11
Chapter 3	The Time Value of Money	44
Chapter 4	Understanding Financial Statements	68
Chapter 5	Value and Price: An Introduction	116
Chapter 6	The Basics of Risk	149
PART TWO	INVESTMENT ANALYSIS	185
Chapter 7	Estimating Hurdle Rates for Firms	186
Chapter 8	Estimating Hurdle Rates for Projects	228
Chapter 9	Estimating Earnings and Cash Flows on Projects	256
Chapter 10	Investment Decision Rules	285
Chapter 11	Investment Analysis with Inflation and Exchange Rate Risk	318
Chapter 12	Project Interactions, Side Benefits, and Side Costs	352
Chapter 13	Investments in Noncash Working Capital	389
Chapter 14	Investments in Cash and Marketable Securities	423
Chapter 15	Investment Returns and Corporate Strategy	451
PART THREE	THE FINANCING DECISION	481
Chapter 16	An Overview of Financing Choices	482
Chapter 17	The Financing Process	509
Chapter 18	The Financing Mix: Tradeoffs on Theory	537
Chapter 19	The Optimal Financing Mix	571
Chapter 20	The Financing Mix and Choices	619
PART FOUR	THE DIVIDEND DECISION	657
Chapter 21	Dividend Policy	658
Chapter 22	Analyzing Cash Returned to Stockholders	686
Chapter 23	Beyond Cash Dividends: Buybacks, Spinoffs, and Divestitures	718
PART FIVE	VALUATION	749
Chapter 24	Valuation: Principles and Practice	750
Chapter 25	Value Enhancement: Tools and Techniques	791
Chapter 26	Acquisitions and Takeovers	834
PART SIX	THE LINK BETWEEN VALUATION AND CORPORATE FINANCE DECISIONS	879
Chapter 27	Option Applications in Corporate Finance	887
Chapter 28	Back to First Principles	924
	Solutions to Odd-Numbered Questions and Problems	933
	Index	971

Contents

Preface vii

A Reader's Guide xi

PART ONE INTRODUCTION TO CORPORATE FINANCE 1

Chapter 1	Introduction to Corporate Finance 3
	Corporate Finance and the Firm 3
	First Principles of Corporate Finance 4
	Corporate Financial Decisions, Firm Value, and Equity Value 8
	The Tools of Corporate Finance 9
	Summary 9
Chapter 2	The Objective in Corporate Finance 11
	Stockholder Wealth Maximization as the Objective in Decision Making 11
	Why Do We Need a Unique Objective? 12
	The Characteristics of the 'Right' Objective 13
	Why Corporate Finance Focuses on Stock Price Maximization 13
	When Is Stock Price Maximization the Only Objective a Firm Needs? 14
	Stock Price Maximization and Agency Costs 15
	Stockholders and Managers 16
	Stockholders and Bondholders 21
	The Firm and Financial Markets 22
	The Firm and Society 27
	Stock Price Maximization with Agency Costs 27
	Alternatives to Stock Price Maximization 28
	A Different System for Disciplining Management (Corporate Governance) 29
	Choosing an Alternative Objective 30
	Stock Price Maximization with Lower Agency Costs 31
	Stockholders and Managers 32
	Stockholders and Bondholders 34
	Firms and Financial Markets 35
	Firms and Society 36
	A Postscript — The Limits of Corporate Finance 37
	Summary 38
	Real Companies, Real Time: Corporate Governance Analysis 40

Chapter 3	The Time Value of Money 44
	The Intuitive Basis for the Time Value of Money 44
	Cash Flows and Time Lines 45
	Time Value of Money: Compounding and Discounting 46
	Compounding 46
	Discounting 48
	The Frequency of Discounting and Compounding 49
	Time Value of Money: Annuities and Perpetuities 52
	Annuities 52
	Growing Annuities 60
	Perpetuities 62
	Growing Perpetuities 62
	Summary 63
Chapter 4	Understanding Financial Statements 68
	The Basic Accounting Statements 68
	Informational Needs 69
	Asset Measurement and Valuation 72
	Accounting Principles Underlying Asset Measurement 72
	Measuring Asset Value 72
	How Well Do Accountants Categorize Assets and Measure Value? 76
	Measuring Financing Mix 81
	Accounting Principles Underlying Liability and Equity Measurement 81
	Measuring the Value of Liabilities and Equities 81
	How Well Do Accountants Measure the Financing Mix of the Firm? 86
	Measuring Earnings and Profitability 89
	Accounting Principles Underlying Measurement of Earnings and Profitability 89
	Measuring Accounting Earnings and Profitability 89
	How Well Do Accountants Measure Profitability? 99
	Measuring Risk 100
	Accounting Principles Underlying Risk Measurement 100
	Accounting Measures of Risk 101
	How Well Do Accountants Measure the Risk in a Business? 106
	Other Issues in Analyzing Financial Statements 107
	Differences in Accounting Standards and Practices 107
	Summary 110
	Real Companies, Real Time: Accounting Information and Financial Analysis 113
Chapter 5	Value and Price: An Introduction 116
	Why Do We Need Valuation? 116
	Valuing an Asset with Guaranteed Cash Flows 117
	Default-free Zero-coupon Bond 117
	Default-free Coupon Bond 118
	Bond Value and Interest Rate Sensitivity and Duration 119
	Introducing Uncertainty into Valuation 121
	Valuing an Asset with Default Risk 121
	Valuing an Asset with Equity Risk 124
	Valuing an Asset with an Infinite Life 127
	Equity and Firm Valuation 127
	Dividends and Equity Valuation 128
	A Broader Measure of Cash Flows to Equity 131
	From Valuing Equity to Valuing the Firm 133
	Valuing an Asset with Contingent Cash Flows (Options) 134
	Cash Flows on Options 135

Adjusting Discount Rates	246
Adjusting Expected Cash Flows	247
Risk Adjustment Practices	249
Common Errors in Project Risk Assessment	250
Summary	250
Real Companies, Real Time: Risk and Return	254

Chapter 9 Estimating Earnings and Cash Flows on Projects 256

Estimating Project Revenues and Expenses	256
Experience and History	257
Market Testing	259
Scenario Analysis	260
Estimation Error and Risk	263
Converting Operating Forecasts into Accounting Forecasts	263
Why Forecast Accounting Earnings?	263
From Forecasts to Operating Income	263
From Operating Income to Net Income on Projects	267
From Project Earnings to Project Cash Flows	269
From Project Cash Flows to Incremental Cash Flows	273
Nonincremental Cash Flows	273
The Argument for Incremental Cash Flows	275
An Argument for Time Weighting Cash Flows	277
The Process of Time Weighting	278
Project Decisions and Time-weighted Cash Flows	278
The Case for Time-weighted Cash Flows	279
Summary	279
Real Companies, Real Time: Estimating Earnings and Cash Flows	284

Chapter 10 Investment Decision Rules 285

What Is an Investment Decision Rule?	285
Categorizing Investment Decision Rules	286
Accounting Income-Based Decision Rules	286
Cash Flow-Based Decision Rules	292
Discounted Cash Flow Measures	296
Comparing Investment Decision Rules	307
Net Present Value and Internal Rate of Return: A Closer Look	307
What Approaches Do Firms Use in Investment Analysis?	310
Summary	312
Real Companies, Real Time: Analyzing Investment Decision Rules Only If Feasible	316

Chapter 11 Investment Analysis with Inflation and Exchange Rate Risk 318

Dealing with Inflation in Project Analysis	318
Understanding Inflation	319
Dealing with Expected Inflation in Project Analysis	320
Dealing with the Effects of Unanticipated Inflation on Net Present Value	322
Analyzing Foreign Projects	325
An Introduction to Exchange Rates	325
Estimating Discount Rates for Foreign Projects	331
Estimating Cash Flows for a Foreign Project	335
Other Issues in Estimating Cash Flows on Foreign Projects	339
Domestic Projects with International Exposure	340
Managing Project Risk	341
Should Project Risk Be Managed?	341
How Do You Manage Project Risk?	342
Summary	347
Real Companies, Real Time: Analyzing Inflation and International Risk	350

Chapter 12	Project Interactions, Side Benefits, and Side Costs	352
	Mutually Exclusive Projects	352
	Projects with Equal Lives	353
	Projects with Different Lives	356
	The Replacement Decision: A Special Case of Mutually Exclusive Projects	361
	Capital Rationing	362
	Reasons for Capital Rationing Constraints	363
	Sources of Capital Rationing	364
	Project Selection with Capital Rationing	366
	Side Costs of Projects	369
	Opportunity Costs	369
	Product Cannibalization	373
	Side Benefits of Projects and Project Synergies	377
	Options Embedded in Projects	379
	Ingredients of an Option	379
	The Option to Delay a Project	379
	The Option to Expand a Project	381
	The Option to Abandon a Project	382
	Incorporating Options into Investment Analysis	383
	Summary	383
Chapter 13	Investments in Noncash Working Capital	389
	Noncash Working Capital	389
	Working Capital in Investment Analysis	391
	Measuring and Estimating Working Capital Needs	392
	The Effect of Working Capital on Cash Flows	394
	Working Capital and Net Present Value	396
	The Tradeoff from Reducing Working Capital	396
	The Effect on Cash Flows	397
	The Effect on Liquidity	397
	The Effect on Operations	398
	The Optimal Level of Working Capital	398
	Industry Differences in Management of Working Capital	400
	Components of Noncash Working Capital	402
	Inventory	402
	The Granting of Trade Credit: Accounts Receivable	410
	The Use of Trade Credit: Accounts Payable	414
	Summary	417
	Real Companies, Real Time: Analyzing Working Capital Policy	421
Chapter 14	Investments in Cash and Marketable Securities	423
	Operating Cash	423
	Reasons for Holding Operating Cash	424
	How Much Operating Cash to Hold	424
	The Effect of Operating Cash on Value	427
	Reducing the Need for Operating Cash	428
	Near-Cash Investments	429
	Near-Cash Investment Choices	429
	Cash versus Near-cash Investments	433
	The Effect of Near-cash Investments on Value	435
	Investments in Risky Securities	440
	Reasons for Holding Risky Securities	440
	Accounting for Investments in Risky Securities	442
	The Effect of Risky Investments on Firm Value	443
	Cash Holdings at U.S. Firms	444

Summary	446
Real Companies, Real Time: Analyzing Cash and Marketable Securities	449

Chapter 15	Investment Returns and Corporate Strategy	451
	Analyzing a Firm's Existing Projects	452
	Analyzing an Individual Project Using Cash Flows	452
	Analyzing a Firm's Project Portfolio	453
	The Sources of Good Projects	458
	Competitive Product Markets, Barriers to Entry, and Good Projects	458
	Management Actions and Investment Returns	462
	Acquisitions	463
	Corporate Strategy and Project Quality	464
	Underperforming Projects: Reasons and Response	466
	Reasons for Project Failure	466
	The Response to Bad Investments	469
	Summary	474
	Real Companies, Real Time: Analyzing a Firm's Existing Investments	479

PART THREE THE FINANCING DECISION

481

Chapter 16	An Overview of Financing Choices	482
	The Distinction between Debt and Equity	482
	Equity Financing Options	484
	Equity Choices for Private Firms	484
	Equity Choices for Publicly Traded Firms	485
	Debt Financing Options	488
	Bank Debt	488
	Bonds	489
	Leasing	492
	Hybrid Securities	498
	Convertible Debt	498
	Preferred Stock	501
	Option-linked Bonds	503
	Summary	504
	Real Companies, Real Time: Analyzing a Firm's Current Financing Choices	507
Chapter 17	The Financing Process	509
	Financing Choices and a Firm's Life Cycle	509
	Internal versus External Financing	510
	Growth, Risk, and Financing	511
	How Firms have Actually Raised Funds	512
	The Process of Raising Capital	518
	Private Firm Expansion: Raising Funds from Private Equity	518
	From Private to Publicly Traded Firm: The Initial Public Offering	520
	The Choices for a Publicly Traded Firm	528
	Summary	532
	Real Companies, Real Time: Examining a Firm's Financial Transitions	535
Chapter 18	The Financing Mix: Tradeoffs and Theory	537
	The Benefits of Debt	538
	The Tax Advantages of Debt	538
	The Discipline of Debt	540
	The Costs of Debt	542
	Expected Bankruptcy Costs from Debt	542
	The Agency Costs of Borrowing	545

Loss of Flexibility	549
Summarizing the Debt Tradeoff	550
The Tradeoff for Equity Investors	550
The Managerial View of the Tradeoff	552
No Optimal Capital Structure	553
The Irrelevance of Debt in a Tax-free World	554
The Irrelevance of Debt with Taxes	555
The Consequences of Debt Irrelevance	557
The Significance of the Miller-Modigliani Theorem	558
Optimal Capital Structure	559
The Case for an Optimal Capital Structure	559
Empirical Evidence on the Existence of an Optimal Capital Structure	559
How Firms Choose their Capital Structures	560
The Financing Mix and a Firm's Life Cycle	561
A Financing Mix Based on Comparable Firms	563
Following a Financing Hierarchy	563
Summary	565
Real Companies, Real Time: Capital Structure Choices	569

Chapter 19

The Optimal Financing Mix	571
Operating Income Approach	571
Steps in Applying the Operating Income Approach	571
Limitations of the Operating Income Approach	574
Refinements on the Operating Income Approach	574
Cost of Capital Approach	574
Cost of Capital and Firm Value	575
Steps in Cost of Capital Approach	577
Constrained Cost of Capital Approaches	589
Extensions of the Cost of Capital Approach	592
Leverage and the Return Differential	596
Steps in the Return Differential Approach	596
Limitations of the Return Differential Approach	599
Adjusted Present Value Approach	600
Steps in the Adjusted Present Value Approach	600
Benefits and Limitations of the Adjusted Present Value Approach	604
Comparative Analysis	605
Comparing to Industry Average	605
Controlling for Differences among Firms	606
Selecting the Optimal Debt Ratio	608
Summary	608
Real Companies, Real Time: The Optimal Financing Mix	616

Chapter 20

The Financing Mix and Choices	619
Choosing a Financing Mix	619
No Change, Gradual Change, or Immediate Change	620
Implementing Changes in Financial Mix	623
Choosing the Right Financing Instruments	631
Matching Financing Cash Flows with Asset Cash Flows	632
Tax Implications	639
Views of Ratings Agencies, Equity Research Analysts, and Regulatory Authorities	640
The Effects of Asymmetric Information	641
Implications for Agency Costs	642
Summary	649
Real Companies, Real Time: Mechanics of Moving to the Optimal Financing Mix	653

PART FOUR THE DIVIDEND DECISION

Chapter 21	Dividend Policy 658
	Background on Dividend Policy 658
	The Dividend Process 659
	Measures of Dividend Policy 660
	Empirical Evidence on Dividend Policy 661
	The Dividend Irrelevance School 666
	Assumptions Needed for Dividend Irrelevance 666
	A Proof of Dividend Irrelevance 667
	Dividend Policy when Dividends are Irrelevant 669
	The "Dividends Are Bad" School 669
	Taxing Ordinary Income and Capital Gains 670
	Timing of Tax Payments 670
	Measuring the Dividend Tax Disadvantage 671
	The "Dividends are Good" School 674
	Some Reasons for Paying Dividends that Do Not Measure Up 674
	Some Good Reasons for Paying Dividends 676
	Summary 682
	Real Companies, Real Time: The Tradeoff on Dividend Policy 684
Chapter 22	Analyzing Cash Returned to Stockholders 686
	Cash Returned to Stockholders 687
	The Effects of Buying Back Stock 687
	The Magnitude of Stock Buybacks 687
	A Cash Flow Approach to Analyzing Dividend Policy 689
	Step 1: Measuring Cash Available to Be Returned to Stockholders 689
	Step 2: Assessing Project Quality 694
	Step 3: Evaluating Dividend Policy 697
	Step 4: Interaction between Dividend Policy and Financing Policy 702
	A Comparable-firm Approach to Analyzing Dividend Policy 704
	Using Firms in the Industry 704
	Using the Market 706
	Managing Changes in Dividend Policy 708
	Empirical Evidence 708
	Lessons for Firms 710
	Summary 710
	Real Companies, Real Time: A Framework for Analyzing Dividends 715
Chapter 23	Beyond Cash Dividends: Buybacks, Spinoffs, and Divestitures 718
	Alternative Ways of Returning Cash to Stockholders 719
	Equity Repurchases 719
	Forward Contracts to Buy Equity 725
	Actions that Affect Number of Shares Outstanding 726
	Stock Splits 726
	Stock Dividends 729
	Actions that Affect Claims on Assets 729
	Divestitures 730
	Spinoffs, Splitoffs, and Splitups 732
	Equity Carve-outs (ECOs) 735
	Tracking Stock 739
	Comparing the Alternatives 741
	Common Objectives 741
	Key Differences 742
	Choosing between the Alternatives 743

Summary 744

Real Companies, Real Time: Choosing a Way of Returning Cash to Stockholders 747

PART FIVE VALUATION

749

Chapter 24

Valuation: Principles and Practice 750

Discounted Cash Flow Valuation 750

Cash Flow to the Firm 751

Expected Growth 757

Discount Rate 760

Asset Life 761

The Missing Pieces of Value 765

The Final Estimate of Value 769

Valuing Equity Directly 774

Relative Valuation 775

Standardized Values and Multiples 775

Determinants of Multiples 776

The Use of Comparable Firms 778

Reconciling Different Valuations 783

Summary 784

Real Companies, Real Time: Valuation 789

Chapter 25

Value Enhancement: Tools and Techniques 791

Value-Creation: A Discounted Cash Flow (DCF) Perspective 791

Value-Creating and Value-Neutral Actions 792

Ways of Increasing Value 793

The Value Enhancement Chain 807

Alternatives to the Traditional Valuation Model 810

Economic Value Added 812

Cash Flow Return on Investment 822

Cash Flow Return on Investment, Internal Rate of Return, and Discounted Cash Flow Value 823

CFROI and Firm Value: Potential Conflicts 826

A Postscript on Value Enhancement 826

Summary 827

Real Companies, Real Time: Value Enhancement 832

Chapter 26

Acquisitions and Takeovers 834

Background on Acquisitions 834

Classifying Acquisitions 835

The Process of an Acquisition 835

A Brief History of Mergers and Acquisitions in the United States 836

Empirical Evidence on the Value Effects of Takeovers 837

Steps in an Acquisition 838

Developing an Acquisition Strategy 839

Choosing a Target Firm and Valuing Control/Synergy 843

Structuring the Acquisition 857

Following Up on the Acquisition 863

Takeover Restrictions 866

Restrictions on Acquisitions 867

Analyzing Management and Leveraged Buyouts 868

Summary 872

Real Companies, Real Time: Acquisitions Analysis 876

PART SIX THE LINK BETWEEN VALUATION AND CORPORATE FINANCE DECISIONS

879

Chapter 27	Option Applications in Corporate Finance 881
	Basics of Option Pricing 881
	Alternatives to the Binomial Model 882
	Extensions of Option Pricing 886
	Options in Investment Analysis 889
	The Option to Delay a Project 889
	The Option to Expand a Project 897
	When Are Delay and Expansion Options Valuable? 901
	The Option to Abandon a Project 903
	Option Applications in Valuation 905
	Valuing Firms with Patents or Licenses 905
	Valuing Natural Resource Firms 906
	Valuing Equity in Troubled Firms 907
	Option Pricing in Capital Structure and Dividend Policy Decisions 913
	The Conflict between Bondholders and Stockholders 914
	Security Design and Valuation 915
	Value of Financial Flexibility 916
	Summary 919
Chapter 28	Back to First Principles 924
	Back to First Principles 924
	The Investment Principle 924
	The Financing Principle 925
	The Dividend Principle 926
	Interrelationships and Life Cycle Effects 926
	Interrelationship between Principles 927
	The Life Cycle Effect 927
	Core Propositions/Beliefs 929
	Faith in Markets, but not Blind Faith... 929
	The Future, Not the Past 930
	Show Me the Money 930
	Manage for the Marginal Investor 931
	Summary 932
	Solutions to Odd-Numbered Questions and Problems 933
	Index 971