
Contents

Contents	vii
Chapter 1 Introduction	1
1.1 The Goal of Finance: Relative Valuation	1
1.2 Investments, Projects, and Firms	3
1.3 Firms versus Individuals	5
Part I Value and Capital Budgeting	9
Chapter 2 Present Value	11
2.1 The Basic Scenario	11
2.2 Loans and Bonds	12
2.3 Returns, Net Returns, and Rates of Return	13
2.4 Time Value, Future Value, and Compounding	16
2.5 Present Value, Discounting, and Capital Budgeting	22
2.6 Net Present Value	26
Summary	31
Chapter 3 Stock and Bond Valuation: Annuities and Perpetuities	37
3.1 Perpetuities	37
3.2 Annuities	44
3.3 The Four Formulas Summarized	48
Summary	50
Chapter 4 A First Encounter with Capital-Budgeting Rules	55
4.1 Net Present Value	55
4.2 The Internal Rate of Return (IRR)	59
4.3 The Profitability Index	67
4.4 The Payback Capital-Budgeting Rule	68
4.5 How Do Executives Decide?	69
Summary	70

Chapter 5	Time-Varying Rates of Return and the Yield Curve	75
5.1	Working with Time-Varying Rates of Return	76
5.2	Inflation	82
5.3	U.S. Treasuries and the Yield Curve	86
5.4	Why Does the Yield Curve Usually Slope Up?	95
5.5	Corporate Time-Varying Costs of Capital	99
	Summary	100
Chapter 6	Uncertainty, Default, and Risk	105
6.1	An Introduction to Statistics	105
6.2	Interest Rates and Credit Risk (Default Risk)	110
6.3	Uncertainty in Capital Budgeting	121
6.4	Splitting Uncertain Project Payoffs into Debt and Equity	123
	Summary	131
Part II	Risk and Return	135
Chapter 7	A First Look at Investments	137
7.1	Stocks, Bonds, and Cash, 1990-2016	137
7.2	Overview of Equity-Related Market Institutions	154
	Summary	161
Chapter 8	Investor Choice: Risk and Reward	165
8.1	Measuring Risk and Reward	165
8.2	Diversification	169
8.3	Investor Preferences and Risk Measures	173
8.4	Interpreting Some Typical Stock Market Betas	183
8.5	Market Betas for Portfolios and Conglomerate Firms	185
	Summary	187
Chapter 9	Benchmarked Costs of Capital	193
9.1	What You Already Know	193
9.2	The Risk-Free Rate — Time Compensation	194
9.3	The Equity Premium — Risk Compensation	195
9.4	Forward-Looking Benchmarks	204
9.5	Asset Costs of Capital vs. Equity Costs of Capital	208
9.6	Deconstructing Quoted Rates of Return	208
9.7	Other Benchmarks and “The Method”	210
	Summary	210
Chapter 10	The Capital Asset Pricing Model	213
10.1	What You Already Know	213
10.2	The Capital Asset Pricing Model (CAPM)	214
10.3	Estimating the Extra Input: Market Beta	221
10.4	Neutralizing Equity-Premium Uncertainty?!	224
10.5	Is the CAPM the Right Model?	224
10.6	Good CAPM Alternatives and Perspectives	231
	Summary	234

Part III Market Efficiency	239
Chapter 11 Market Imperfections	241
11.1 Causes and Consequences of Imperfect Markets	241
11.2 Opinions, Disagreements, and Insider Information	247
11.3 Market Depth and Transaction Costs	250
11.4 Taxes	257
11.5 Entrepreneurial Finance	263
11.6 Deconstructing Quoted Rates of Return—Imperfect Market Premiums	264
11.7 Multiple Effects: How to Work Novel Problems	268
Summary	270
Chapter 12 Perfect and Efficient Markets, and Classical and Behavioral Finance	277
12.1 Market Efficiency	277
12.2 Market Efficiency Beliefs and Behavioral Finance	283
12.3 The Random Walk and the Signal-to-Noise Ratio	286
12.4 True Arbitrage and Risk(y) Arbitrage	291
12.5 Investment Consequences	294
12.6 A Cynical Perspective	301
12.7 Corporate Consequences	303
12.8 Event Studies	307
Summary	309
Part IV Real-World Applications	313
Chapter 13 Capital Budgeting Applications and Pitfalls	315
13.1 So Many Returns: The Internal Rate of Return, the Cost of Capital, the Expected Rate of Return, and the Hurdle Rate	315
13.2 Promised, Expected, Typical, or Most Likely?	316
13.3 Badly Blended Costs of Capital	318
13.4 The Economics of Project Interactions	323
13.5 Evaluating Projects Incrementally	328
13.6 Real Options	334
13.7 Behavioral Biases	339
13.8 Incentive Issues	340
13.9 An NPV Checklist	346
Summary	348
Chapter 14 From Financial Statements to Economic Cash Flows	355
14.1 Financial Statements	355
14.2 Long-Term Accruals (Depreciation)	363
14.3 Deferred Taxes	371
14.4 Short-Term Accruals and Working Capital	374
14.5 Earnings Management	377

14.6	Economic Cash Flows from Intel's Financials	378
14.7	What To Believe on the Balance Sheet	380
	Summary	381
Chapter 15 Valuation from Comparables and Financial Ratios		387
15.1	Got Your Marbles?	387
15.2	Comparables and Net Present Value	388
15.3	The Price-Earnings (P/E) Ratio	392
15.4	Problems with Price-Earnings Ratios	396
15.5	The Empirical Evidence in 2016	403
15.6	Other Financial Ratios	408
	Summary	418
Part V Capital Structure and Payout Policy		423
Chapter 16 Corporate Claims		425
16.1	The Basic Building Blocks	425
16.2	Liabilities	428
16.3	Equity (Stock)	435
16.4	Understanding Intel's Capital Structure in 2015	436
	Summary	443
Chapter 17 Capital Structure in a Perfect Market		447
17.1	Maximization of Equity Value or Firm Value?	447
17.2	Modigliani and Miller	450
17.3	The Weighted Average Cost of Capital (WACC)	456
17.4	State Prices and Credit Derivatives	466
17.5	Cost of Capital Nuances and Non-Financial Liabilities	467
	Summary	471
Chapter 18 Taxes and Capital Structure		475
18.1	Relative Taxation of Debt and Equity	475
18.2	Firm Value Under Different Capital Structures	477
18.3	Formulaic Valuation Methods: APV and WACC	479
18.4	Sample Applications of Tax-Adjusted Valuation	487
18.5	Contemplating Corporate Taxes and Leverage	493
18.6	Personal Income Taxes and Clientele Effects	496
18.7	The U.S. Tax System (Mess)	504
	Summary	507
Chapter 19 More Imperfect-Market Capital Structure		515
19.1	What Really Matters?	515
19.2	Operating Policy in Bad Times (Distress)	516
19.3	Operating Policy in Good Times (Agency)	526

19.4	Bondholder Expropriation	529
19.5	Private Information and Adverse Selection	535
19.6	Other Important Concerns	539
19.7	Static Capital Structure Summary	541
19.8	The Effect of Leverage on the Cost of Capital and Value	541
19.9	Valuation Formulas with Many Market Imperfections	544
19.10	Capital Structure Dynamics	548
	Summary	549
Chapter 20	Equity Payouts: Dividends and Share Repurchases	555
20.1	Background	555
20.2	Perfect-Market Irrelevance	558
20.3	Dividends and Share Repurchases	560
20.4	Empirical Evidence	565
20.5	Survey Evidence	575
	Summary	576
Part VI	Projecting the Future	581
Chapter 21	Pro Forma Financial Statements and An Intel Case	583
21.1	The Goal and Logic	583
21.2	The Template	585
21.3	The Length of the Detailed Projection Period	585
21.4	The Detailed Projection Phase	588
21.5	The Terminal Value (TV) Multiplier	597
21.6	Basic Intel Pro Formas	600
21.7	Sensitivity and Scenario Analyses	603
21.8	Caution—The Emperor's New Clothes	605
	Summary	606
	Back Matter	609
	Epilogue	611
	Theory or Practice?	611
	Thoughts on Business and Finance Education	613
	Finance, Economic, and Data Degree Programs	617
	Bon Voyage	618
	Appendix Chapter. Technical Background	621
	General Mathematical and Statistical Background	621
	Laws of Probability, Portfolios, and Expectations	624
	Cumulative Normal Distribution Table	628

