FUNDAMENTALS OF CORPORATE FINANCE

CANADIAN EDITION

JONATHAN BERK
STANFORD UNIVERSITY

PETER DEMARZO
STANFORD UNIVERSITY

JARRAD HARFORD
UNIVERSITY OF WASHINGTON

DAVID STANGELAND
UNIVERSITY OF MANITOBA

CONTRIBUTOR:
JERROD FALK
UNIVERSITY OF MANITOBA

FUNDAMENTALS OF CORPORATE FINANCE

CANADIAN EDITION

PEARSON

Toronto

Vice-President, Editorial Director: Gary Bennett
Editor-in-Chief: Nicole Lukach
Acquisitions Editor: Claudine O'Donnell
Senior Marketing Manager: Leigh-Anne Graham
Supervising Developmental Editor: Maurice Esses
Developmental Editor: Toni Chahley
Project Managers: Sarah Lukaweski, Rachel Thompson
Manufacturing Coordinator: Susan Johnson
Production Editor: Vasundhara Sawhney, Cenveo Publisher Services
Proofreader: Audrey Dorsch
Compositor: Cenveo Publisher Services
Photo and Permissions Researcher: Rosie Gowsell
Art Director: Julia Hall
Cover and Interior Designer: Anthony Leung
Cover Image: Shutterstock Images

Credits and acknowledgments for material borrowed from other sources and reproduced, with permission, in this textbook appear on the appropriate page within the text (or on page C1).

10 9 8 7 6 5 4 3 2 1 [CKV]

Library and Archives Canada Cataloguing in Publication

Fundamentals of corporate finance / Jonathan Berk … [et al.].
Canadian ed.

Includes index.
ISBN 978-0-321-49406-1

1. Corporations—Finance—Textbooks. I. Berk, Jonathan B., 1962- II. Title.

HG4026.F845 2011 658.15 C2011-905835-9

PEARSON

ISBN 978-0-321-49406-1

To my family, friends, colleagues and God for all the love, support and encouragement, and to Canada for all the freedoms we can enjoy, especially free enterprise.

—David Stangeland

To my family for their patience, love, and support.

—Jerrod Falk

Brief Contents

PART 1 Introduction 1

Chapter 1 Corporate Finance and the Financial Manager 2
Chapter 2 Introduction to Financial Statement Analysis 26

PART 2 Interest Rates and Valuing Cash Flows 65

Chapter 3 The Valuation Principle: The Foundation of Financial Decision Making 66
Chapter 4 NPV and the Time Value of Money 88
Chapter 5 Interest Rates 136
Chapter 6 Bonds 164

PART 3 Valuation and the Firm 203

Chapter 7 Investment Decision Rules 204
Chapter 8 Fundamentals of Capital Budgeting 240
Chapter 9 Valuing Stocks 284

PART 4 Risk and Return 339

Chapter 10 Risk and Return in Capital Markets 340
Chapter 11 Systematic Risk and the Equity Risk Premium 370
Chapter 12 Determining the Cost of Capital 412

PART 5 Long-Term Financing 441

Chapter 13 Raising Equity Capital 442
Chapter 14 Debt Financing 474

PART 6 Capital Structure and Payout Policy 497

Chapter 15 Capital Structure 498
Chapter 16 Payout Policy 538

PART 7 Financial Planning and Forecasting 577

Chapter 17 Financial Modelling and Pro Forma Analysis 578
Chapter 18 Working Capital Management 610
Chapter 19 Short-Term Financial Planning 640

PART 8 Special Topics 669

Chapter 20 Option Applications and Corporate Finance 670
Chapter 21 Risk Management 698
Chapter 22 International Corporate Finance 728
Chapter 23 Leasing 764
Chapter 24 Mergers and Acquisitions 794
Online Chapter 25 Corporate Governance W1

Detailed Contents

PART 1 Introduction 1

1 Corporate Finance and the Financial Manager 2

- INTERVIEW WITH Amy Kwan, Certified Management Accountants of Ontario 3

1.1 Why Study Finance? 4
1.2 The Three Types of Firms 4
Sole Proprietorships 5
Partnerships 5
Corporations 6
Tax Implications for Corporate Entities 7

- Corporate Taxation Around the World 10

1.3 The Financial Manager 11
Making Investment Decisions 11
Making Financing Decisions 12
Managing Short-Term Cash Needs 12
The Goal of the Financial Manager 12
1.4 The Financial Manager's Place in the Corporation 13
The Corporate Management Team 13
Ethics and Incentives in Corporations 13
1.5 The Stock Market 16
The Largest Stock Markets 16
TSX 18
NYSE 18
Listing Standards 18
Other Financial Markets 18
1.6 Financial Institutions 19
The Financial Cycle 19
Types of Financial Institutions 20
Role of Financial Institutions 20

MyFinanceLab *Summary 21 ◗ Problems 23*

2 Introduction to Financial Statement Analysis 26

- INTERVIEW WITH Fatoumata Diané, CIBC World Markets 27

2.1 Firms' Disclosure of Financial Information 28

- International Financial Reporting Standards 28

Preparation of Financial Statements 29
Types of Financial Statements 29
2.2 The Balance Sheet 29
Assets 30
Liabilities 31
Shareholders' Equity 31
2.3 Balance Sheet Analysis 33
Market-to-Book Ratio 33
Debt-Equity Ratio 33
Enterprise Value 34
Other Balance Sheet Information 35
2.4 The Income Statement 35
Earnings Calculations 36
2.5 Income Statement Analysis 37
Profitability Ratios 37
Asset Efficiency 38
Working Capital Ratios 39
EBITDA 39
Leverage Ratios 39
Investment Returns 40
The DuPont Identity 40
Valuation Ratios 42

- COMMON MISTAKE: Mismatched Ratios 42

2.6 The Statement of Cash Flows 44
Operating Activity 45
Investment Activity 46
Financing Activity 47
2.7 Other Financial Statement Information 48
Management Discussion and Analysis 48
Statement of Shareholders' Equity 49
Notes to the Financial Statements 49
2.8 Financial Reporting in Practice 49
Enron 49
The Sarbanes-Oxley Act 50

- PRACTITIONER INTERVIEW WITH Sue Frieden, Ernst & Young 51

The Financial Statements: A Useful Starting Point 52

MyFinanceLab *Summary 53 ◗ Review Questions 55 ◗ Problems 56 ◗ Data Case 62*

PART 2 Interest Rates and Valuing Cash Flows 65

3 The Valuation Principle: The Foundation of Financial Decision Making 66

- INTERVIEW WITH Karrilyn Wilcox, Marshall & Stevens Valuation Consulting 67

3.1 Managerial Decision Making 68
- Your Personal Financial Decisions 68

3.2 Cost-Benefit Analysis 69

3.3 Valuation Principle 70
- When Competitive Market Prices Are Not Available 71

3.4 The Time Value of Money and Interest Rates 72
The Time Value of Money 73
The Interest Rate: Converting Cash Across Time 73

3.5 The *NPV* Decision Rule 77
Net Present Value 77
The NPV Decision Rule 78
NPV and Cash Needs 79

3.6 The Law of One Price 80
Arbitrage 81
Law of One Price 81
- An Old Joke 81
- Transactions Costs 83

MyFinanceLab *Summary 84* ◗ *Review Questions 85* ◗ *Problems 85*

4 NPV and the Time Value of Money 88

- INTERVIEW WITH Amanda Wittick, Investors Group 89

4.1 The Timeline 90
Constructing a Timeline 90
Identifying Dates on a Timeline 90
Distinguishing Cash Inflows from Outflows 90
Representing Various Time Periods 91

4.2 Valuing Cash Flows at Different Points in Time 91
Rule 1: Comparing and Combining Values 91
- COMMON MISTAKE: Summing Cash Flows Across Time 91

Rule 2: Compounding 92
- Rule of 72 94

Rule 3: Discounting 94
- Using a Financial Calculator: Solving for Present and Future Values 96

Applying the Rules of Valuing Cash Flows 97

4.3 Valuing a Stream of Cash Flows 99

4.4 The Net Present Value of a Stream of Cash Flows 101

4.5 Perpetuities, Annuities, and Other Special Cases 102
Perpetuities 102
- Historical Examples of Perpetuities 104

Annuities 105
- COMMON MISTAKE: Discounting One Too Many Times 105

Growing Cash Flows 110

4.6 Solving for Variables Other Than Present Value or Future Value 114
Solving for the Cash Flows 114
Internal Rate of Return 117
Solving for n the Number of Periods 121
- Solving for *n* Using Logarithms 121

MyFinanceLab *Summary 123* ◗ *Review Questions 125* ◗ *Problems 125* ◗ *Data Case 131*

Chapter 4 Appendix: Using a Financial Calculator 133

5 Interest Rates 136

- INTERVIEW WITH Erica Pimentel, Ernst & Young 137

5.1 Interest Rate Quotes and Adjustments 138
The Effective Annual Rate 138
Adjusting the Effective Annual Rate to an Effective Rate Over Different Time Periods 139
Annual Percentage Rates 140
- COMMON MISTAKE: Using the *APR* or *EAR* in the Annuity Formula 141

5.2 Application: Discount Rates and Loans 143
Computing Loan Payments 143
Computing Canadian Mortgage Payments 146
Computing the Outstanding Loan Balance 146

5.3 The Determinants of Interest Rates 147
Inflation and Real Versus Nominal Rates 148
Investment and Interest Rate Policy 149
The Yield Curve and Discount Rates 150

COMMON MISTAKE: Using the Annuity Formula When Discount Rates Vary 152
The Yield Curve and the Economy 153

5.4 The Opportunity Cost of Capital 155

Interest Rates, Discount Rates, and the Cost of Capital 156

MyFinanceLab *Summary 157* ◗ *Review Questions 159* ◗ *Problems 159*

6 Bonds 164

INTERVIEW WITH Shaun O'Malley, RBC Dominion Securities 165

6.1 Bond Terminology 166

6.2 Zero-Coupon Bonds 167
Zero-Coupon Bond Cash Flows 167
Yield to Maturity of a Zero-Coupon Bond 167
Risk-Free Interest Rates 168

6.3 Coupon Bonds 170
Coupon Bond Cash Flows 170
Yield to Maturity of a Coupon Bond 170

Finding Bond Prices on the Web 174

Coupon Bond Price Quotes 174

6.4 Why Bond Prices Change 174
Interest Rate Changes and Bond Prices 175
Time and Bond Prices 177
Interest Rate Risk and Bond Prices 178
Bond Prices in Practice 180

6.5 Corporate Bonds 182
Credit Risk 182
Corporate Bond Yields 183
Bond Ratings 183
Corporate and Provincial Yield Curves 185

PRACTITIONER INTERVIEW WITH Lisa Black, Teachers Insurance and Annuity Association 186

The Credit Crisis and Bond Yields 188

MyFinanceLab *Summary 189* ◗ *Review Questions 191* ◗ *Problems 191* ◗ *Data Case 195*

Chapter 6 Appendix A: Solving for the Yield to Maturity of a Bond Using a Financial Calculator 196

Chapter 6 Appendix B: The Yield Curve and the Law of One Price 197

PART 3 Valuation and the Firm 203

7 Investment Decision Rules 204

INTERVIEW WITH Jeff Blake, Porter Airlines, Inc. 205

7.1 Using the *NPV* Rule 206
Organizing the Cash Flows and Computing the NPV 206
The NPV Profile 206
Measuring Sensitivity with IRR 207
Alternative Rules Versus the NPV Rule 208

7.2 Alternative Decision Rules 208
The Payback Rule 208
The Internal Rate of Return Rule 210

COMMON MISTAKE: *IRR* Versus the *IRR* Rule 214

Why Do Rules Other Than the *NPV* Rule Persist? 214

7.3 Choosing Between Projects 215
Differences in Scale 215
Timing of the Cash Flows 220

PRACTITIONER INTERVIEW WITH Dick Grannis, Qualcomm, Inc. 221

7.4 Evaluating Projects with Different Lives 223
Important Considerations When Using the Equivalent Annual Annuity 224

7.5 Choosing Among Projects When Resources Are Limited 225
Evaluating Projects with Different Resource Requirements 225

7.6 Putting It All Together 228

MyFinanceLab *Summary 230* ◗ *Review Questions 231* ◗ *Problems 231* ◗ *Data Case 236*

Chapter 7 Appendix: Using Excel to Make an *NPV* Profile 237

8 Fundamentals of Capital Budgeting 240

INTERVIEW WITH Miriam Waldman, TD Commercial Banking 241

8.1 The Capital Budgeting Process 242

8.2 Forecasting Incremental Earnings 243
Revenue and Cost Estimates 243
Incremental Revenue and Cost Estimates 245

8.3 **Determining Incremental Free Cash Flow 248**
Calculating Free Cash Flow from Earnings 248
Calculating Free Cash Flow Directly 252
Calculating the NPV 253

8.4 **Other Effects on Incremental Free Cash Flows 254**
Opportunity Costs 254
- COMMON MISTAKE: The Opportunity Cost of an Idle Asset 255

Project Externalities 255
Sunk Costs 255
- COMMON MISTAKE: The Sunk Cost Fallacy 255

Adjusting Free Cash Flow 256
Replacement Decisions 262

8.5 **Analyzing the Project 263**
Sensitivity Analysis 264
Break-Even Analysis 264
Scenario Analysis 266

8.6 **Real Options in Capital Budgeting 267**
Option to Delay 268
Option to Expand 268
Option to Abandon 268

MyFinanceLab *Summary 269* ▸ *Review Questions 271* ▸ *Problems 271* ▸ *Data Case 276*

Chapter 8 Appendix A: Using Excel for Capital Budgeting 278

9 Valuing Stocks 284

- INTERVIEW WITH Christopher Ellis-Ferrara, AllianceBersntein 285

9.1 **Stock Basics 286**
Stock Market Reporting: Stock Quotes 286
Common Stock 287
Preferred Stock 288

9.2 **The Dividend-Discount Model 289**
A One-Year Investor 289
Dividend Yields, Capital Gains, and Total Returns 290
A Multi-Year Investor 290
Dividend-Discount Model Equation 292

9.3 **Estimating Dividends in the Dividend-Discount Model 293**
Constant Dividend Growth 293
Dividends Versus Investment and Growth 294
Changing Growth Rates 297
- COMMON MISTAKE: The First Dividend 298

Value Drivers and the Dividend-Discount Model 299

9.4 **Limitations of the Dividend-Discount Model 300**
Non-Dividend-Paying Stocks 301

9.5 **Share Repurchases and the Total Payout Model 301**

9.6 **The Discounted Free Cash Flow Model 303**

9.7 **Valuation Based on Comparable Firms 308**
Valuation Multiples 308
Limitations of Multiples 311
Comparison with Discounted Cash Flow Methods 312
Stock Valuation Techniques: The Final Word 313
- PRACTITIONER INTERVIEW WITH Marilyn Fedak, Vice Chair, Investment Services 314

9.8 **Information, Competition, and Stock Prices 315**
Information in Stock Prices 315
Competition and Efficient Markets 317
Lessons for Investors and Corporate Managers 319
The Efficient Markets Hypothesis Versus No Arbitrage 321

9.9 **Individual Biases and Trading 321**
Excessive Trading and Overconfidence 321
Hanging on to Losers and the Disposition Effect 322
Investor Attention, Mood, and Experience 323

MyFinanceLab *Summary 324* ▸ *Critical Thinking 328* ▸ *Problems 328* ▸ *Data Case 335*

Part 3 Integrative Case 337

PART 4 Risk and Return 339

10 Risk and Return in Capital Markets 340

- INTERVIEW WITH Manmeet Bhatia, OceanRock Investments 341

10.1 **A First Look at Risk and Return 342**

10.2 **Historical Risks and Returns of Stocks 344**
Computing Historical Returns 344

Average Annual Returns 348
The Variance and Volatility of Returns 350

Arithmetic Average Returns Versus Compound Annual Returns 350

COMMON MISTAKE: Mistakes When Computing Standard Deviation 352
The Normal Distribution 353

10.3 The Historical Tradeoff Between Risk and Return 356
The Returns of Large Portfolios 356
The Returns of Individual Stocks 356

10.4 Common Versus Independent Risk 357
Theft Versus Earthquake Insurance: An Example 357
Types of Risk 358

10.5 Diversification in Stock Portfolios 359
Unsystematic Versus Systematic Risk 360
Diversifiable Risk and the Risk Premium 361
The Importance of Systematic Risk 362

COMMON MISTAKE: A Fallacy of Long-Run Diversification 363

MyFinanceLab *Summary 365* ◗ *Review Questions 366* ◗ *Problems 367*

11 Systematic Risk and the Equity Risk Premium 370

INTERVIEW WITH Alexander Morgan, Pantheon Ventures 371

11.1 The Expected Return of a Portfolio 372
Portfolio Weights 372
Portfolio Returns 372
Expected Portfolio Return 374

11.2 The Volatility of a Portfolio 375
Diversifying Risks 376
Measuring Stocks' Comovement: Correlation 376
Computing a Portfolio's Variance and Standard Deviation 381
The Volatility of a Large Portfolio 382

NOBEL PRIZE: Harry Markowitz 382

11.3 Measuring Systematic Risk 383
Role of the Market Portfolio 384
Stock Market Indexes as the Market Portfolio 385

Index Funds 386
Market Risk and Beta 386

COMMON MISTAKE: Mixing Standard Deviation and Beta 387
Estimating Beta from Historical Returns 389

11.4 Putting It All Together: The Capital Asset Pricing Model 392
The CAPM Equation Relating Risk to Expected Return 392

Why Not Estimate Expected Returns Directly? 393
The Security Market Line 394
The CAPM and Portfolios 396
Summary of the Capital Asset Pricing Model 397
The Big Picture 398

NOBEL PRIZE: William Sharpe 398

MyFinanceLab *Summary 399* ◗ *Review Questions 401* ◗ *Problems 401*

Chapter 11 Appendix: Alternative Models of Systematic Risk 408

12 Determining the Cost of Capital 412

INTERVIEW WITH Elizabeth Anton, RBC 413

12.1 A First Look at the Weighted Average Cost of Capital 414
The Firm's Capital Structure 414
Opportunity Cost and the Overall Cost of Capital 414
Weighted Averages and the Overall Cost of Capital 414
Weighted Average Cost of Capital Calculations 416

12.2 The Firm's Costs of Debt and Equity Capital 417
Cost of Debt Capital 417

COMMON MISTAKE: Using the Coupon Rate as the Cost of Debt 418
Cost of Preferred Stock Capital 419
Cost of Common Stock Capital 420

12.3 A Second Look at the Weighted Average Cost of Capital 422
WACC Equation 423
Weighted Average Cost of Capital in Practice 423
Methods in Practice 424

12.4 Using the WACC to Value a Project 426
Key Assumptions 427
WACC Method Application: Extending the Life of Facilities at BCE 428
Summary of the WACC Method 429

12.5 **Project-Based Costs of Capital 429**
Cost of Capital for a New Acquisition 429
Divisional Costs of Capital 430

12.6 **When Raising External Capital Is Costly 431**

MyFinanceLab *Summary 432* ◗ *Review Questions 434* ◗ *Problems 435* ◗ *Data Case 438*

Part 4 Integrative Case 440

PART 5 Long-Term Financing 441

13 Raising Equity Capital 442

◗ **INTERVIEW WITH** Zeke Purves-Smith, McMillan LLP 443

13.1 **Equity Financing for Private Companies 444**
Sources of Funding 444
Securities and Valuation 446
Exiting an Investment in a Private Company 448

13.2 **Taking Your Firm Public: The Initial Public Offering 449**
Advantages and Disadvantages of Going Public 449
Primary and Secondary IPO Offerings 450
Other IPO Types 455
◗ Google's IPO 458

13.3 **IPO Puzzles 459**
Underpriced IPOs 459
"Hot" and "Cold" IPO Markets 460
◗ 2008–09: A Very Cold IPO Market 461
High Cost of Issuing an IPO 461
Poor Post-IPO Long-Run Stock Performance 463

13.4 **Raising Additional Capital: The Seasoned Equity Offering 463**
SEO Process 463
SEO Price Reaction 466
SEO Costs 467

MyFinanceLab *Summary 467* ◗ *Review Questions 469* ◗ *Problems 470*

14 Debt Financing 474

◗ **INTERVIEW WITH** Damian Creber, RBC Capital Markets 475

14.1 **Corporate Debt 476**
Private Debt 476
◗ Debt Financing at Hertz: Bank Loans 476
◗ Debt Financing at Hertz: Private Placements 477
Public Debt 477
◗ Debt Financing at Hertz: Public Debt 479

14.2 **Bond Covenants 481**
Types of Covenants 481
Advantages of Covenants 482
Application: Hertz's Covenants 482

14.3 **Repayment Provisions 482**
Call Provisions 482
The Canada Call or Make-Whole Call Provision 485
Sinking Funds 485
Convertible Provisions 486

MyFinanceLab *Summary 488* ◗ *Review Questions 490* ◗ *Problems 491*

Chapter 14 Appendix: Using a Financial Calculator to Calculate Yield to Call 492

Part 5 Integrative Case 493

PART 6 Capital Structure and Payout Policy 497

15 Capital Structure 498

◗ **INTERVIEW WITH** Eric Hassberger, Strategic Hotels & Resorts 499

15.1 **Capital Structure Choices 500**
Capital Structure Choices Across Industries 500
Capital Structure Choices Within Industries 500

15.2 **Capital Structure in Perfect Capital Markets 502**
Application: Financing a New Business 502
Leverage and Firm Value 504
The Effect of Leverage on Risk and Return 505
Homemade Leverage 507
Leverage and the Cost of Capital 507
M&M and the Real World 509
◗ **COMMON MISTAKE:** Capital Structure Fallacies 510

- NOBEL PRIZE: Franco Modigliani and Merton Miller 511

15.3 Debt and Taxes 512
The Interest Tax Deduction and Firm Value 512
Value of the Interest Tax Shield 513
The Interest Tax Shield with Permanent Debt 515
Leverage and the WACC with Taxes 516
Debt and Taxes: The Bottom Line 517

15.4 The Costs of Bankruptcy and Financial Distress 518
Direct Costs of Bankruptcy 518
- Bankruptcy Can Be Expensive 518

Indirect Costs of Financial Distress 519

15.5 Optimal Capital Structure: The Tradeoff Theory 519
Differences Across Firms 520
Optimal Leverage 520

15.6 Additional Consequences of Leverage: Agency Costs and Information 521
Agency Costs 522
- Airlines Use Financial Distress to Their Advantage 522
- Financial Distress and Rolling the Dice, *Literally* 523

Debt and Information 524

15.7 Capital Structure: Putting It All Together 526

MyFinanceLab *Summary 527* ▸ *Review Questions 530* ▸ *Problems 530*

Chapter 15 Appendix: The Bankruptcy Code 537

16 Payout Policy 538

- INTERVIEW WITH Paul Asmundson, TD Securities Inc. 539

16.1 Distributions to Shareholders 540
Dividends 540
Share Repurchases 542

16.2 Dividends Versus Share Repurchases in a Perfect Capital Market 543
Alternative Policy 1: Pay a Dividend with Excess Cash 544
Alternative Policy 2: Share Repurchase (No Dividend) 545
- COMMON MISTAKE: Repurchases and the Supply of Shares 546

Alternative Policy 3: High Dividend (Equity Issue) 546
Modigliani & Miller and Dividend Policy Irrelevance 547
- COMMON MISTAKE: The Bird in the Hand Fallacy 548

Dividend Policy with Perfect Capital Markets 549

16.3 The Tax Disadvantage of Dividends 549
Taxes on Dividends and Capital Gains 549
Optimal Dividend Policy with Taxes 550
Tax Differences Across Investors 554

16.4 Payout Versus Retention of Cash 555
Retaining Cash with Perfect Capital Markets 556
Retaining Cash with Imperfect Capital Markets 557

16.5 Signalling with Payout Policy 560
Dividend Smoothing 560
Dividend Signalling 562
- Royal & SunAlliance's Dividend Cut 562
- PRACTITIONER INTERVIEW WITH John Connors, Microsoft 563

Signalling and Share Repurchases 564

16.6 Stock Dividends, Splits, and Spinoffs 565
Stock Dividends and Splits 565
- Berkshire Hathaway's A and B Shares 565

Spinoffs 566

16.7 Advice for the Financial Manager 567

MyFinanceLab *Summary 568* ▸ *Review Questions 570* ▸ *Problems 570* ▸ *Data Case 573*

Part 6 Integrative Case 575

PART 7 Financial Planning and Forecasting 577

17 Financial Modelling and Pro Forma Analysis 578

- INTERVIEW WITH Dennis NG, PhD Student, University of Manitoba 579

17.1 Goals of Long-Term Financial Planning 580
Identify Important Linkages 580

Analyze the Impact of Potential Business Plans 580
Plan for Future Funding Needs 580

17.2 Forecasting Financial Statements: The Percent of Sales Method 581
Percent of Sales Method 581
Pro Forma Income Statement 582
Pro Forma Balance Sheet 583
COMMON MISTAKE: Confusing Stockholders' Equity with Retained Earnings 584
The Plug: Net New Financing 585
Choosing a Forecast Target 585

17.3 Forecasting a Planned Expansion 587
KXS Design's Expansion: Financing Needs 587
KXS Design's Expansion: Pro Forma Income Statement 588
Forecasting the Balance Sheet 590

17.4 Growth and Firm Value 592
Sustainable Growth Rate and External Financing 592

17.5 Valuing the Planned Expansion 595
Forecasting Free Cash Flows 596
COMMON MISTAKE: Confusing Total and Incremental Net Working Capital 597
KXS Design's Expansion: Effect on Firm Value 597
Optimal Timing and the Option to Delay 600

MyFinanceLab *Summary 601* ◗ *Review Questions 603* ◗ *Problems 603*

Chapter 17 Appendix: The Balance Sheet and Statement of Cash Flows 608

18 Working Capital Management 610

INTERVIEW WITH Jessica Rempel, TD Commercial Banking 611

18.1 Overview of Working Capital 612
The Cash Cycle 612
Working Capital Needs by Industry 614
Firm Value and Working Capital 615

18.2 Trade Credit 617
Trade Credit Terms 617
Trade Credit and Market Frictions 617
COMMON MISTAKE: Using *APR* Instead of *EAR* to Compute the Cost of Trade Credit 618
Managing Float 619

18.3 Receivables Management 621
Determining the Credit Policy 621
The 5 C's of Credit 621
Monitoring Accounts Receivable 623

18.4 Payables Management 625
Determining Accounts Payable Days Outstanding 625
Stretching Accounts Payable 626

18.5 Inventory Management 627
Benefits of Holding Inventory 627
Inventory Management Adds to the Bottom Line at Gap 628
Costs of Holding Inventory 628

18.6 Cash Management 629
Motivation for Holding Cash 629
Cash Balances 630
Alternative Investments 630

MyFinanceLab *Summary 632* ◗ *Review Questions 633* ◗ *Problems 634* ◗ *Data Case 637*

19 Short-Term Financial Planning 640

INTERVIEW WITH Elysse Dalla-Longa, GE Capital 641

19.1 Forecasting Short-Term Financing Needs 642
Application: Whistler Snowboards, Inc. 642
Negative Cash Flow Shocks 642
Positive Cash Flow Shocks 643
Seasonalities 644
The Cash Budget 645

19.2 The Matching Principle 647
Permanent Working Capital 647
Temporary Working Capital 647
Permanent Versus Temporary Working Capital 647
Financing Policy Choices 648

19.3 Short-Term Financing with Bank Loans 650
Single, End-of-Period-Payment Loan 650
Line of Credit 650
Bridge Loan 651
Common Loan Stipulations and Fees 651

19.4 Short-Term Financing with Commercial Paper 653

19.5 Short-Term Financing with Secured Financing 654
Accounts Receivable as Collateral 654
A 17th-Century Financing Solution 655
Inventory as Collateral 655
19.6 Putting It All Together: Creating a Short-Term Financial Plan 657
MyFinanceLab *Summary 658 Review Questions 660 Problems 661*

Part 7 Integrative Case 664

PART 8 Special Topics 669

20 Option Applications and Corporate Finance 670
INTERVIEW WITH John Lundy, Clariter Poland sp. z o.o. 671
20.1 Option Basics 672
Option Contracts 672
Stock Option Quotations 673
Options on Other Financial Securities 675
Options Are for More Than Just Stocks 676
20.2 Option Payoffs and Profits at Expiration 676
The Long Position in an Option Contract 676
The Short Position in an Option Contract 678
Profits for Holding an Option to Expiration 679
Returns for Holding an Option to Expiration 681
20.3 Factors Affecting Option Prices 683
Strike Price and Stock Price 683
Option Prices and the Exercise Date 683
Option Prices and the Risk-Free Rate 683
Option Prices and Volatility 684
20.4 The Black-Scholes Option Pricing Formula 685
20.5 Put-Call Parity 687
Portfolio Insurance 687
20.6 Options and Corporate Finance 690
MyFinanceLab *Summary 692 Review Questions 693 Problems 694 Data Case 696*

21 Risk Management 698
INTERVIEW WITH Ashlea Ochsner, Scotiabank 699
21.1 Insurance 700
The Role of Insurance: A Simplified Example 700
Insurance Pricing in a Perfect Market 701
The Value of Insurance 702
The Costs of Insurance 704
The Insurance Decision 706
21.2 Commodity Price Risk 707
Hedging with Vertical Integration and Storage 707
Hedging Strategy Leads to Promotion . . . Sometimes 708
Hedging with Long-Term Contracts 709
Hedging with Futures Contracts 711
Hedging with Options Contracts 713
Comparing Futures Hedging with Options Hedging 714
Deciding to Hedge Commodity Price Risk 717
COMMON MISTAKE: Mistakes When Hedging Risk 717
Differing Hedging Strategies at U.S. Airlines 718
21.3 Interest Rate Risk 719
Interest Rate Risk Measurement: Duration 719
Duration-Based Hedging 719
Swap-Based Hedging 720
MyFinanceLab *Summary 722 Review Questions 723 Problems 723*

22 International Corporate Finance 728
INTERVIEW WITH Dave Vogt, Albert's Controls 729
22.1 Currency Exchange Rates 730
The Foreign Exchange Market 730
Exchange Rates 732
22.2 Exchange Rate Risk 734
Exchange Rate Fluctuations 734
Hedging with Forward Contracts 736
Cash-and-Carry and the Pricing of Currency Forwards 738
Hedging Exchange Rate Risk with Options 740

22.3 Internationally Integrated Capital Markets 742

22.4 Valuation of Foreign Currency Cash Flows 744
Application: Ityesi, Inc. 745
The Law of One Price as a Robustness Check 747

22.5 Valuation and International Taxation 748
A Single Foreign Project with Immediate Repatriation of Earnings 749
Multiple Foreign Projects and Deferral of Earnings Repatriation 749

22.6 Internationally Segmented Capital Markets 750
Differential Access to Markets 750
Macro-Level Distortions 751
Implications of Internationally Segmented Capital Markets 752

22.7 Capital Budgeting with Exchange Rate Risk 753
Application: Ityesi, Inc. 754
Conclusion 755

MyFinanceLab *Summary 756* ▸ *Review Questions 758* ▸ *Problems 758* ▸ *Data Case 762*

23 Leasing 764

▸ INTERVIEW WITH Rennie Zegalski, CB Richard Ellis Manitoba 765

23.1 The Basics of Leasing 766
Examples of Lease Transactions 766
Lease Payments and Residual Values 767
Leases Versus Loans 768
▸ Calculating Auto Lease Payments 769
End-of-Term Lease Options 770
Other Lease Provisions 771

23.2 Accounting, Tax, and Legal Consequences of Leasing 772
Lease Accounting 772
The Tax Treatment of Leases 775
Leases and Bankruptcy 776
▸ Synthetic Leases 776

23.3 The Leasing Decision 777
Cash Flows for a True Tax Lease 778
Lease Versus Buy (an Unfair Comparison) 779
Lease Versus Borrow (the Right Comparison) 780
Evaluating a True Tax Lease 782
Evaluating a Non-tax Lease 783

23.4 Reasons for Leasing 784
Valid Arguments for Leasing 784
Suspect Arguments for Leasing 787

MyFinanceLab *Summary 788* ▸ *Review Questions 789* ▸ *Problems 790*

24 Mergers and Acquisitions 794

▸ INTERVIEW WITH George Yao, Morgan Stanley 795

24.1 Background and Historical Trends 796
Merger Waves 797
Types of Mergers 798

24.2 Market Reaction to a Takeover 798

24.3 Reasons to Acquire 799
Economies of Scale and Scope 800
Vertical Integration 800
Expertise 800
Monopoly Gains 801
Efficiency Gains 801
Tax Savings from Operating Losses 802
Diversification 803
Earnings Growth 804
Managerial Motives to Merge 805

24.4 The Takeover Process 806
Valuation 806
The Offer 807
Merger "Arbitrage" 809
Tax and Accounting Issues 810
Board and Shareholder Approval 811

24.5 Takeover Defences 812
Poison Pills 812
Staggered Boards 813
White Knights 814
Golden Parachutes 814
Recapitalization 814
Other Defensive Strategies 815
Regulatory Approval 815
▸ Weyerhaeuser's Hostile Bid for Willamette Industries 816

24.6 Who Gets the Value Added from a Takeover? 817
The Free Rider Problem 817
Toeholds 818
The Leveraged Buyout 818

The Leveraged Buyout of RJR Nabisco by KKR 820

The Freezeout Merger 821

PRACTITIONER INTERVIEW WITH Dan MacDonald, CEO of InNOVAcorp. 822

Competition 823

MyFinanceLab *Summary 823* ◗ *Review Questions 825* ◗ *Problems 826*

Chapter on the Web

This Online Chapter is on MyFinanceLab at www.myfinancelab.com

Chapter 25W Corporate Governance

	COMMON MISTAKE boxes alert students to frequently made mistakes stemming from misunderstanding core concepts and calculations—in the classroom and in the field.	INTERVIEWS with recent college graduates now working in the field of finance open each chapter and underscore the future payoff for success in the course.	PRACTITIONER INTERVIEWS with leaders in the field—8 in total—provide an "insider" perspective and address the effects of the financial crisis.	GENERAL INTEREST boxes highlight timely material from financial publicaions that shed light on business problems and real company practices, with a focus on the recent financial crisis and lessons learned.	USING EXCEL boxes and examples describe Excel techniques and include screenshots, formulas, and functions to serve as a guide for students using this technology.
CHAPTER 1 **Corporate Finance and the Financial Manager**		Amy Kwan, Certified Management Accountants of Ontario		Corporate Taxation Around the World	
CHAPTER 2 **Introduction to Financial Statement Analysis**	Mismatched Ratios	Fatoumata Diané, CIBC World Markets	Sue Frieden, Ernst & Young	International Financial Reporting Standards	
CHAPTER 3 **The Valuation Principle: The Foundation of Financial Decision Making**	Summing Cash Flows Across Time	Karrilyn Wilcox, Marshall & Stevens Valuation Consulting		Your Personal Financial Decisions When Competitive Market Prices Are Not Available	
CHAPTER 4 **NPV and the Time Value of Money**	Summing Cash Flows Across Time Discounting One Too Many Times	Amanda Wittick, Investors Group		Rule of 72 Using a Financial Calculator: Solving for Present and Future Values Computing NPV and IRR Historical Examples of Perpetuities	Computing NPV and IRR
CHAPTER 5 **Interest Rates**	Using the APR or EAR in the Annuity Formula Using the Annuity Formula When Discount Rates Vary	Erica Pimentel, Ernst & Young		Interest Rates, Discount Rates, and the Cost of Capital Solving for *n* Using Logarithms	
CHAPTER 6 **Bonds**		Shaun O'Malley, RBC Dominion Securities	Lisa Black, Teachers Insurance and Annuity Association	Finding Bond Prices on the Web The Credit Crisis and Bond Yields	
CHAPTER 7 **Investment Decision Rules**	IRR Versus the IRR Rule	Jeff Blake, Porter Airlines, Inc.	Dick Grannis, Qualcomm	Why Do Rules Other Than the NPV Rule Persist?	Make an NPV
CHAPTER 8 **Fundamentals of Capital Budgeting**	The Opportunity Cost of an Idle Asset The Sunk Cost Fallacy		David Holland, Sports and Entertainment Solutions		Capital Budgeting and Sensitivity Analysis
CHAPTER 9 **Valuing Stocks**		Christopher Ellis-Ferrara, AllianceBernstein	Marilyn Fedak, AllianceBernstein		
CHAPTER 10 **Risk and Return in Capital Markets**	Mistakes When Computing Standard Deviation A Fallacy of Long-Run Diversification	Manmeet Bahtia, OceanRock Investments		Arithmetic Average Returns Versus Compound Annual Returns	Computing the Standard Deviation of Historical Returns
CHAPTER 11 **Systematic Risk and the Equity Risk Premium**	Mixing Standard Deviation and Beta	Alexander Morgan, Pantheon Ventures		Index Funds Why Not Estimate Expected Returns Directly?	Calculating the Correlation Between Two Sets of Returns Calculating a Stock's Beta
CHAPTER 12 **Determining the Cost of Capital**	Using the Coupon Rate as the Cost of Debt	Elizabeth Anton, RBC			

	COMMON MISTAKE boxes alert students to frequently made mistakes stemming from misunderstanding core concepts and calculations—in the classroom and in the field.	INTERVIEWS with recent college graduates now working in the field of finance open each chapter and underscore the future payoff for success in the course.	PRACTITIONER INTERVIEWS with leaders in the field—8 in total—provide an "insider" perspective and address the effects of the financial crisis.	GENERAL INTEREST boxes highlight timely material from financial publicaions that shed light on business problems and real company practices, with a focus on the recent financial crisis and lessons learned.	USING EXCEL boxes and examples describe Excel techniques and include screenshots, formulas, and functions to serve as a guide for students using this technology.
CHAPTER 13 **Raising Equity Capital**		Zeke Purves-Smith, McMillan LLP		Google's IPO 2008–2009: A Very Cold IPO Market	
CHAPTER 14 **Debt Financing**				Debt Financing at Hertz: Bank Loans Debt Financing at Hertz: Private Placements Debt Financing at Hertz: Public Debt	
CHAPTER 15 **Capital Structure**	Capital Structure Fallacies	Eric Hassberger, Strategic Hotels & Resorts		Bankruptcy Can Be Expensive Airlines Use Financial Distress to Their Advantage Financial Distress and Rolling the Dice, *Literally*	
CHAPTER 16 **Payout Policy**	Repurchases and the Supply of Shares The Bird in the Hand Fallacy		John Connors, Microsoft (Retired)	Royal & SunAlliance's Dividend Cut Berkshire Hathaway's A and B Shares	
CHAPTER 17 **Financial Modelling and Pro Forma Analysis**	Confusing Stockholders' Equity with Retained Earnings Confusing Total and Incremental Net Working Capital				
CHAPTER 18 **Working Capital Management**	Using APR Instead of EAR to Compute the Cost of Trade Credit	Jessica Rempel, TD Commercial Banking		The 5 C's of Credit Inventory Management Adds to the Bottom Line at Gap Cash Balances	
CHAPTER 19 **Short-Term Financial Planning**		Elysse Dalla-Longa, GE Capital		A 17th-Century Financing Solution	
CHAPTER 20 **Option Applications and Corporate Finance**		John Lundy, Clariter Poland		Options Are for More Than Just Stocks	
CHAPTER 21 **Risk Management**		Ashlea Ochsner, Scotiabank			
CHAPTER 22 **International Corporate Finance**		Dave Vogt, Albert's Controls			
CHAPTER 23 **Leasing**					
CHAPTER 24 **Mergers and Acquisitions**		George Yao, Morgan Stanley	Dan MacDonald, Innovacorp	Weyerhaeuser's Hostile Bid for Willamette Industries The Leveraged Buyout of RJR-Nabisco by KKR	
CHAPTER 25 **Corporate Governance**		Greg Nicholson, Towers Watson	Lawrence E. Harris, Marshall School of Business, University of Southern California	Shareholder Activism and the *New York Times* Martha Stewart and ImClone	

About the Authors

Jonathan Berk, Peter DeMarzo, and Jarrad Harford

Jonathan Berk is the A.P. Giannini Professor of Finance at the Stanford Graduate School of Business and is a Research Associate at the National Bureau of Economic Research. Prior to Stanford he taught at the Haas School of Business at the University of California–Berkeley, where the introductory Corporate Finance course was among his assignments. Before earning his PhD from Yale University, he worked as an associate at Goldman Sachs, where his education in finance really began. Professor Berk is an Associate Editor of the *Journal of Finance*. His research has won a number of awards including the TIAA-CREF Paul A. Samuelson Award, the Smith Breeden Prize, Best Paper of the Year in The Review of Financial Studies, and the FAME Research Prize. His paper, “A Critique of Size-Related Anomalies,” was recently selected as one of the two best papers ever published in *The Review of Financial Studies*. In recognition of his influence on the practice of finance, he has received the Bernstein-Fabozzi/Jacobs Levy Award, the Graham and Dodd Award of Excellence, and the Roger F. Murray Prize. Born in Johannesburg, South Africa, Professor Berk is married, has two daughters, and is an avid skier and biker.

Peter DeMarzo is the Mizuho Financial Group Professor of Finance at the Stanford Graduate School of Business and is a Research Associate at the National Bureau of Economic Research. He received his PhD in economics from Stanford University. Currently, Professor DeMarzo teaches the “turbo” core finance course for first-year MBA students. Prior to Stanford, he taught at the Haas School of Business and the Kellogg Graduate School of Management, and he was a National Fellow at the Hoover Institution. Professor DeMarzo received the Sloan Teaching Excellence Award at Stanford and the Earl F. Cheit Outstanding Teaching Award at University of California–Berkeley. Professor DeMarzo has served as an Associate Editor for *The Review of Financial Studies, Financial Management,* and the *B.E. Journals in Economic Analysis and Policy*, as well as the Vice President of the Western Finance Association. Professor DeMarzo has received numerous awards for his research including the Western Finance Association Corporate Finance Award and the Barclays Global Investors/Michael Brennan Best Paper Award from *The Review of Financial Studies*. Professor DeMarzo was born in Whitestone, New York, is married and has three sons. He and his family enjoy hiking, biking, and skiing.

Jarrad Harford is the Marion B. Ingersoll Professor of Finance at the University of Washington. Prior to Washington, Professor Harford taught at the Lundquist College of Business at the University of Oregon. He received his PhD in Finance with a minor in Organizations and Markets from the University of Rochester. Professor Harford has taught the core undergraduate finance course, Business Finance, for eleven years, as well as an elective in Mergers and Acquisitions, and "Finance for Non-financial Executives" in the executive education program. He has won numerous awards for his teaching, including the Interfraternity Council Excellence in Teaching Award (2007 and 2008), ISMBA Excellence in Teaching Award (2006), and the Wells Fargo Faculty Award for Undergraduate Teaching (2005). He is also the Faculty Director of the UW Business School Undergraduate Honors Program. Professor Harford serves as an Associate Editor for *The Journal of Financial Economics, Journal of Financial and Quantitative Analysis,* and *Journal of Corporate Finance*. Professor Harford was born in State College, Pennsylvania, is married, and has two sons. He and his family enjoy traveling, hiking, and skiing.

Jerrod Falk and David Stangeland

David Stangeland, PhD, BComm (Distinction), CMA, did his undergraduate and graduate university education at the University of Alberta in Edmonton. In 1991 he moved to Winnipeg where he joined the Accounting & Finance Department at the I. H. Asper School of Business at the University of Manitoba. Dr. Stangeland is a Professor of Finance, was Head of the Department of Accounting & Finance for nine years, and is now the Associate Dean of the I. H. Asper School of Business responsible for general administration, the Career Development Centre, and the following programs: Undergraduate, MBA, Co-op, and International Exchange.

Professor Stangeland teaches finance courses at the University of Manitoba and in the Canadian Executive MBA program at the Warsaw School of Economics in Poland. His teaching spans undergraduate, MBA, and PhD courses in corporate finance, investment banking, and international finance.

Professor Stangeland's research interests are in the areas of corporate governance, corporate control, and corporate finance. His work is well cited and has been published in several journals including the *Journal of Financial and Quantitative Analysis,* the *Journal of Banking & Finance,* the *Journal of Corporate Finance, Financial Management,* the *Stanford Journal of Law, Business & Finance*, and numerous others.

Dr. Stangeland served on the Board of Directors of CMA Canada and he chaired CMA Canada's Pension Committee. He is a member of the Pension Committee for the University of Manitoba Pension Plans, a member of the Investment committee for the Teachers Retirement Allowance Fund, and serves on the Independent Review Committee for a mutual fund company. Professor Stangeland is a two-time recipient of the CMA Canada Academic Merit Award for Teaching and Research, a four-time winner of the University of Manitoba Teaching Services Award, and a recipient of the Associates Award for Research.

Professor Stangeland was born and raised in Edmonton, Alberta, where he learned to appreciate the outdoors including running, cycling, hiking, and skiing, and in the winter, travelling to warmer climates.

Jerrod Falk deserves special thanks as a major contributor to the First Canadian Edition. Jerrod graduated with his Bachelor of Commerce (Honours) degree at the University of Manitoba in 1992 and went on to complete his Certified Management Accountant designation (and was the Gold Medal winner) in 1997. His career in corporate finance has spanned both business and government organizations in various roles including corporate controller. Since 2000, Jerrod has been an instructor at the University of Manitoba and is a recipient of multiple teaching awards. In addition to his teaching, Jerrod is a valued member of the Asper School of Business Executive Education team. He also consults with CMA Canada on their CMA-CPFA dual designation program and has been very active in the processes for the development of the CMA Entrance and Case Examinations. Jerrod's work on the chapter revisions was invaluable, and we are honoured to have him as part of the team in the production of the First Canadian Edition.

Bridging Theory and Practice

Study Aids with a Practical Focus

To be successful, students need to master the core concepts and learn to identify and solve problems that today's practitioners face.

- The **Valuation Principle** is presented as the foundation of all financial decision making: The central idea is that a firm should take projects or make investments that increase the value of the firm. The tools of finance determine the impact of a project or investment on the firm's value by comparing the costs and benefits in equivalent terms. The Valuation Principle is first introduced in Chapter 3, revisited in the part openers, and integrated throughout the text.
- **Guided Problem Solutions (GPS)** are Examples that accompany every important concept using a consistent problem-solving methodology that breaks the solution process into three steps: Plan, Execute, and Evaluate. This approach aids student comprehension, enhances their ability to model the solution process when tackling problems on their own, and demonstrates the importance of interpreting the mathematical solution.

EXAMPLE 1.1

Taxation of Corporate Earnings

Problem

You are a shareholder in a corporation. Some of your shares are held inside your tax-free savings account (TFSA), so any earnings there are not taxed; income from shares held outside your TFSA is taxable.[1] The corporation earns $5.00 per share before taxes. After the corporation has paid taxes, it will distribute the rest of its earnings to you as a dividend. The corporate tax rate is 35% and your tax rate on dividend income outside your TFSA is 24%.[2] How much of the earnings remains after all taxes are paid?

Solution

- Plan

Corporate Information

Earnings before taxes: $5.00	Corporate tax rate: 35%

Personal Tax Rates on Dividends

From shares held inside your TFSA 0%	From shares held outside your TFSA 24%

- **Personal Finance GPS** Examples showcase the use of financial analysis in everyday life by setting problems in scenarios such as purchasing a new car or house, and saving for retirement.
- **Common Mistake** boxes alert students to frequently made mistakes stemming from misunderstanding core concepts and calculations, as well as those made in the field.

Common Mistake Mismatched Ratios

When considering valuation (and other) ratios, be sure that the items you are comparing both represent amounts related to the entire firm or that both represent amounts related solely to equity holders. For example, a firm's share price and market capitalization are values associated with the firm's equity. Thus, it makes sense to compare them to the firm's earnings per share or net income, which are amounts to equity holders after interest has been paid to debt holders. We must be careful, however, if we compare a firm's market capitalization to its revenues, operating income, or EBITDA. These amounts are related to the whole firm, and both debt and equity holders have a claim to them. Therefore, it is better to compare revenues, operating income, or EBITDA to the enterprise value of the firm, which includes both debt and equity.

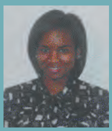
- Using Excel boxes describe Excel techniques and include screenshots to serve as a guide for students using this technology.

Applications That Reflect Real Practice

Fundamentals of Corporate Finance features actual companies and practitioners in the field.

- **Chapter-Opening Interviews** with recent university graduates now working in the business world underscore the relevance of the finance concepts to students who are encountering them for the first time.

INTERVIEW WITH **Fatoumata Diané,**
CIBC World Markets



McGill University, 2010

"We frequently use comparable companies' analysis as a valuation tool."

As an investment banking analyst for CIBC World Markets in Montreal, Quebec, Fatoumata Diané works with a team of analysts offering advisory services for large clients looking to undertake a variety of transactions, including mergers and acquisitions, and debt and equity financing deals. Financial analysis is instrumental in helping her clients make decisions.

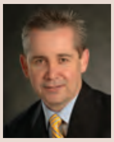
Fatoumata, who received a Bachelor of Commerce (Honours) degree in 2010 from McGill University, frequently makes use of the knowledge she gained from her finance courses. "My education has provided me with a solid base in financial statements analysis, which quickly came in handy on the job. I am responsible for doing the financial analysis that is instrumental in helping client companies in their decision making process. We frequently use comparable companies' analysis as a valuation tool."

The first step in valuing a company is assessing past performance and determining its current financial position using information contained in the publicly available financial statements. "I start by using information in the most recent financial statements to compute the enterprise value of the set of companies we are looking at. I do not limit my analysis to the summary statements. I read through notes, disclosures and management's discussion and analysis to check if significant one-time charges occurred."

Analyzing financial statements gives Fatoumata insight into a company's current financial position and its performance over time. "It is essential to develop a comprehensive understanding of the relationship between each financial statement, how they work and interact with one another, and where you can see the impact of transactions that flow through the business."

- **Practitioner Interviews** from notable professionals are featured in many chapters.

INTERVIEW WITH
Dan MacDonald



Dan MacDonald is president and CEO of InNOVAcorp. Based in Halifax, InNOVAcorp is an early-stage venture capital firm, focusing on high-potential venture-grade companies in the areas of information technology, life sciences, and clean technology.

QUESTION: ***How did you get to be where you are today in terms of your professional career?***

ANSWER: I have gotten to where I am today by being honest and having high integrity. I have been on a journey of learning as much as I can about the businesses that I have been in. I have changed careers four times: from engineering to marketing to general management and now into investments and mergers and acquisitions. I have been able to do that because I have learned as much as I possibly can about the businesses and business models I have been in.

QUESTION: ***Why does a company choose to acquire other companies?***

ANSWER: Companies acquire other companies to grow. The goal may be to gain a particular market share jump—for example, to move from being a tier three player to being tier two or tier one. Another goal is to gain instant access to an installed base of customers. A third goal might be to get a particular piece of strategic technology. In the pharmaceutical industry, one of the most famous acquisitions was Pfizer's acquisition of Warner Lambert, which allowed Pfizer to acquire a blockbuster drug named Lipitor. Companies really decide whether to build or buy, be it technology, a market base, or market share. Public companies are expected to deliver growth at a rate of 10+% per year. Sometimes that is impossible to do organically. Acquisitions make that growth possible.

QUESTION: ***Why do mergers and acquisitions fail?***

must make it clear to all those people involved that there are particular pieces of the acquired culture that they want to remain, to encourage, and to flourish.

QUESTION: ***Are there any common flaws in the negotiations component of an acquisition?***

ANSWER: Flaws usually occur when defining expectations. If one public company acquires another, that is easier because the financial information and data are already public. When acquiring a private company, much less data is available. Often there are things that the acquiring company really never gets to know truly until a year or more after the acquisition, such as the state of quality of the product, the state of satisfaction of the customers, or the satisfaction of the employees.

QUESTION: ***Can you comment on the value creation process in an acquisition?***

ANSWER: Value can be added when you find what you really need as a company. This is a little counterintuitive. If you are a company with a very well-known corporate brand, you should not be buying companies to strengthen your brand. You should be buying very specific special technologies or products that you can bring into your portfolio to leverage your brand. If you are a company trying to break into a new market segment where you do not have brand awareness, it might make sense to buy a brand that is already in that market area.

QUESTION: ***What do you look out for in an acquisition?***

ANSWER: I have been personally involved in about a dozen acquisitions. Whether I am buying or selling a company, I try to make sure that everyone agrees on the key value and focus on that.

- **General Interest boxes** highlight timely material from financial publications that shed light on business problems and real-company practices.

Google's IPO

On April 29, 2004, Google, Inc. announced plans to go public. Breaking with tradition, Google startled Wall Street by declaring its intention to rely heavily on the auction IPO mechanism for distributing its shares. Google had been profitable since 2001, so according to Google executives, access to capital was not the only motive for going public. The company also wanted to provide employees and private equity investors with liquidity.

One of the major attractions of the auction mechanism was the possibility of allocating shares to more individual investors. Google also hoped to set an accurate offer price by letting market bidders set the IPO price. After the internet stock market boom, there were many lawsuits related to the way underwriters allocated shares. Google hoped to avoid the allocation scandals by letting the auction allocate shares.

Investors who wanted to bid opened a brokerage account with one of the deal's underwriters and then placed their bids with the brokerage house. Google and its underwriters identified the highest bid that allowed the company to sell all of the shares being offered. They also had the flexibility to choose to offer shares at a lower price.

On August 18, 2004, Google sold 19.6 million shares at $85 per share. The $1.67 billion raised was easily the largest auction IPO ever. Google stock (ticker symbol: GOOG) opened trading on the NASDAQ market the next day at $100 per share. Although the Google IPO sometimes stumbled along the way, it represents the most significant example of the use of the auction mechanism as an alternative to the traditional IPO mechanism.

Sources: Kevin Delaney and Robin Sidel, "Google IPO Aims to Change the Rules," *Wall Street Journal*, April 30, 2004, p. C1; Ruth Simon and Elizabeth Weinstein, "Investors Eagerly Anticipate Google's IPO," *Wall Street Journal,* April 30, 2004, p. C1; Gregory Zuckerman, "Google Shares Prove Big Winners—for a Day," *Wall Street Journal*, August 20, 2004, p. C1.

Teaching Students to Think Finance

With consistency in presentation and an innovative set of learning aids, *Fundamentals of Corporate Finance* simultaneously meets the needs of both finance majors and non-finance business majors. This textbook truly shows every student how to "think finance."

Simplified Presentation of Mathematics

Because one of the hardest parts of learning finance is mastering the jargon, math, and non-standardized notation, Fundamentals of Corporate Finance systematically uses:

- **Notation Boxes.** Each chapter begins with a Notation box that defines the variables and the acronyms used in the chapter and serves as a 'legend' for students' reference.
- **Numbered and Labelled Equations.** The first time a full equation is given in notation form it is numbered. Key equations are titled and revisited in the summary and in end papers.
- **Financial Calculator** instructions, including a box in Chapter 4 on solving for future and present values, and appendices to Chapters 4, 6, and 14 with keystrokes for HP-10BII and TI BAII Plus Professional, highlight this problem-solving tool.
- **Spreadsheet Tables.** Select tables are available on the textbook Web site as Excel files, enabling students to change inputs and manipulate the underlying calculations.
- **Using Excel** boxes describe Excel techniques and include screenshots to serve as a guide for students using this technology.

notation

NPV	net present value	*r*	interest rate
PV	present value		

Chapter 4 APPENDIX Using a Financial Calculator

Specifying Decimal Places

Make sure you always have plenty of decimal places displayed!

HP-10BII

DISP 8

TI BAII Plus Professional

2ND • 8 ENTER

Toggling Between the Beginning and End of a Period

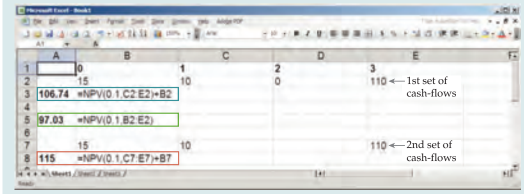
You should always make sure that your calculator is in *end-of-period* mode.

HP-10BII

MAR

TI BAII Plus Professional

2ND PMT



USING EXCEL

Computing *NPV* and *IRR*

Here we discuss how to use Microsoft® Excel to solve for *NPV* and *IRR*. We also identify some pitfalls to avoid when using Excel.

***NPV* Function: Leaving Out Date 0**

Excel's *NPV* function has the format, *NPV* (rate, value1, value2, . . .) where "rate" is the interest rate per period used to discount the cash flows, and "value1", "value2", etc., are the cash flows (or ranges of cash flows). The *NPV* function computes the present value of the cash flows *assuming the first cash flow occurs at date 1.* Therefore, if a project's first cash flow occurs at date 0, we cannot use the *NPV* function by itself to compute the *NPV.* We can use the *NPV* function to compute the present value of the cash flows from date 1 onwards, and then we must add the date 0 cash flow to that result to calculate the *NPV.* The screenshot below shows the difference. The first *NPV* calculation (outlined in blue) is correct: we used the *NPV* function for all of the cash flows occurring at time 1 and later and then added on the first cash flow occurring at time 0 since it is already in present value. The second (outlined in green) is incorrect: we used the *NPV* function for all of the cash flows, but the function assumed that the first cash flow occurs in period 1 instead of immediately.

***NPV* Function: Ignoring Blank Cells**

Another pitfall with the *NPV* function is that cash flows that are left blank are treated differently from cash flows that are equal to zero. If the cash flow is left blank, *both the cash flow and the period are ignored.* For example, the second set of cash flows below is equivalent to the first—we have simply left the cash flow for date 2 blank instead of entering a "0." However, the *NPV* function ignores the blank cell at date 2 and assumes the cash flow is 10 at date 1 and 110 at date 2, which is clearly not what is intended and produces an incorrect answer (outlined in red).

Practice Finance to Learn Finance

MyFinanceLab — Here is what you should know after reading this chapter. MyFinanceLab will help you identify what you know, and where to go when you need to practice.

Key Points and Equations	Terms	Online Practice Opportunities
1.1 Why Study Finance? ◗ Finance and financial decisions are everywhere in our daily lives. ◗ Many financial decisions are simple, but others are complex. All are tied together by the Valuation Principle—the foundation for financial decision making—which you will learn in this book.		
1.2 The Three Types of Firms ◗ There are three types of firms in Canada: sole proprietorships, partnerships, and corporations. ◗ Firms with unlimited personal liability include sole proprietorships and partnerships (for general partners). ◗ Firms with limited liability include limited partnerships (for limited partners but not for general partners) and corporations. ◗ A corporation is a legally defined artificial being (a judicial person or legal entity) that has many of the legal powers people have. It can enter into	business income trust, p. 9 corporation, p. 6 dividend payments, p. 7 energy trust, p. 9 equity, p. 7 equity holder, p. 7 flow-through entity, p. 9 general partnership, p. 6 income trust, p. 9 limited liability, p. 6 limited liability partnership, p. 6 limited partnership, p. 6	MyFinanceLab Study Plan 1.2

Working problems is the proven way to cement and demonstrate an understanding of finance.

- **Concept Check questions** at the end of each section enable students to test their understanding and target areas in which they need further review.
- **End-of-chapter problems written personally by Jonathan Berk, Peter DeMarzo, Jarrad Harford, David Stangeland, and Jerrod Falk** offer instructors the opportunity to assign first-rate materials to students for homework and practice with the confidence that the problems are consistent with the chapter content. Both the problems and solutions, which were also written by the authors, have been class-tested and accuracy checked to ensure quality.

End-of-Chapter Materials Reinforce Learning

Testing understanding of central concepts is crucial to learning finance.

- **MyFinanceLab Chapter Summary** presents the key points and conclusions from each chapter, provides a list of key terms with page numbers, and indicates online practice opportunities.
- **Data Cases** present in-depth scenarios in a business setting with questions designed to guide students' analysis. Many questions involve the use of Internet resources.
- **Integrative Cases** occur at the end of most parts and present a capstone extended problem for each part with a scenario and data for students to analyze based on that subset of chapters.

Data Case

This is your second interview with a prestigious brokerage firm for a job as an equity analyst. You survived the morning interviews with the department manager and the vice-president of equity. Everything has gone so well that they want to test your ability as an analyst. You are seated in a room with a computer and a list with the names of two companies—Caterpillar, Inc. (ticker symbol: CAT) and Microsoft (ticker symbol: MSFT). You have 90 minutes to complete the following tasks:

1. Download the annual income statements, balance sheets, and cash flow statements for the last four fiscal years from MarketWatch (www.marketwatch.com). Enter each company's ticker symbol and then go to "Financials." Export the statements to Microsoft Excel.
2. Find historical stock prices for each firm from Yahoo! Finance (http://finance.yahoo.com). Enter your ticker symbol, click on "Historical Prices" in the left column, and enter the proper date range to cover the last day of the month corresponding to the date of each financial statement. Use the closing stock prices (not the adjusted close). To calculate the firms' market capitalization at each date, we multiply the number of shares outstanding (see "Basic Weighted Shares Outstanding" on the income statement) by the firm's historic stock

Preface

When we told our friends and colleagues that we had decided to write an MBA corporate finance textbook, most of them had the same response: *Why now*? After the successful publication of our MBA textbook, the question became, "*How soon can you write an undergraduate version?*" Our sincere hope is that *Fundamentals of Corporate Finance* will shape the way students learn corporate finance for years to come.

We spent two years writing a book that stays true to the successful philosophy of the MBA book but, most importantly, is accessible to an undergraduate non-finance major. We know that countless undergraduate students have felt that corporate finance is challenging. It is tempting to make the subject more accessible by de-emphasizing the core principles and instead concentrating on the results. In our over 40 years of combined teaching experience, we have found that this approach actually makes the subject matter less accessible. The core concepts in finance are clear and intuitive. What makes the subject challenging is that it is often difficult for a novice to distinguish between these core ideas and other intuitively appealing approaches that, if used in financial decision making, will lead to incorrect decisions. Therefore, our primary motivation is to equip students with a solid grounding in the core financial concepts and tools needed to make good decisions. Such grounding will serve these students well, whether this is their only course in finance, or it is the foundation of their major.

The field of finance has undergone significant change in the last 30 years. Yet much of the empirical evidence in financial economics amassed over this time period supports the existing theory and strengthens the importance of understanding and applying corporate financial principles. Many of the problems of the recent financial crises arose because of practitioners' poor decision making when they did not understand, or chose to ignore, the core concepts that underlie finance and the pedagogy in this book. With the increasing focus on finance in the news, today's undergraduate students arrive in the classroom with a greater interest in finance than many of their predecessors. The challenge is to use that natural interest and motivation to overcome their fear of the subject and communicate these time-tested core principles. Again, we take what has worked in the classroom and apply it to the text: By providing examples involving familiar companies such as Starbucks, Air Canada, and Apple, making consistent use of real-world data, and demonstrating personal finance applications of core concepts, we strive to keep even non-finance majors engaged.

Our commitment to setting a new standard for undergraduate corporate finance textbooks extends beyond the printed page. We invite you to turn to page xxxvi to learn about MyFinanceLab, the technology breakthrough with the potential to fundamentally change the way your students learn.

Core Concepts

Fundamentals of Corporate Finance provides thorough coverage of core finance topics to provide students with a comprehensive—but manageable—introduction to the topic.

Valuation as the Unifying Framework

In our experience, students learn best when the material in a course is presented as one unified whole rather than a series of separate ideas. As such, this book presents corporate finance as an application of a subset of simple, powerful ideas. The first is that valuation drives decision making—the firm should take projects for which the value of the benefits exceeds the value of the costs. The second is that in a competitive market, market prices (rather than individual preferences) determine values. The combination of these two ideas is what we call the *Valuation Principle*, and from it we establish all of the key ideas in corporate finance, including the NPV rule, security pricing, the relation between risk and return, and the tradeoffs associated with capital structure and payout policies.

We use the Valuation Principle as a compass; it keeps financial decision makers on the right track. We introduce it in Chapter 3 along with its direct application, Net Present Value. Each part opener relates the topics in that part to the Valuation Principle running theme.

Emphasis on Application

Applying the Valuation Principle provides skills to make the types of comparisons—among loan options, investments, and projects—that will turn students into knowledgeable, confident financial consumers and managers. When students see how to apply finance to their personal lives and future careers, they grasp that finance is more than abstract, mathematically based concepts. Who better than a peer to reinforce this message? Each chapter opens with a profile of a recent university graduate putting the tools of finance to work each day in their business career (whether they work in finance or other areas of a business).

Reinforcement of the Basic Tools

Mastering the tools for discounting cash flows is central to students' success in the introductory course. As always, mastery comes with practice and by approaching complex topics in manageable units. To this end, we focus on time value of money basics in Part 2. Chapter 3 briefly introduces the time value of money for single-period investments as a critical component of the Valuation Principle. Chapter 4 then focuses on the time value of money for cash flows lasting several periods. Finally, Chapter 5 demonstrates how interest rates are quoted and determined. We present a methodical approach to the cash flows in each problem within this framework:

- Introduce timelines in Chapter 4 and stress the importance of creating timelines for every problem that involves cash flows.
- Include a timeline as the critical first step in each example involving cash flows.
- Incorporate financial calculator keystrokes and Excel techniques into the presentation.

Focus on Capital Budgeting

The capital budgeting decision is one of the most important decisions in corporate finance. We emphasize it early in the textbook, by introducing the NPV rule in Chapter 3 to weigh the costs and benefits of a decision. Building on this coverage of the NPV rule, Chapter 7 evaluates this and other investment decision rules. In Chapter 8 on capital budgeting, we examine the valuation of projects within a firm and provide a clear and systematic presentation of the difference between earnings and free cash flow. This early introduction to capital budgeting allows us to present the idea of the cost of capital conceptually, which then motivates the risk and return coverage. In Chapter 12, we calculate and use the firm's overall cost of capital with the WACC method.

New Ideas

Fundamentals of Corporate Finance carefully balances the latest advancements in research and practice with thorough coverage of core finance topics. Innovations that distinguish this textbook include the following:

- Chapter 9 on stock valuation values a firm's equity by considering its future dividends, free cash flows, or how its value compares to that of similar, publicly traded companies.
- Chapter 16 on payout policy examines the role of asymmetric information between managers and investors and how payout decisions may signal this information.
- Chapter 17 distinguishes between sustainable and value-increasing growth with a focus on determining whether "growth" will increase or decrease the value of the firm.

The Tools Your Students Need to Succeed

Pages xxvi–xxix detail the features we crafted to enhance students' ability to master the core concepts. Two areas stand out.

Problem-Solving Methodology

Guided Problem Solutions (GPS) of worked examples appear along side every important concept. Finance is about much more than the numerical solution: To be successful, students must understand the underlying intuition and interpret the mathematical solution. To foster this mindset, after the problem statement a three-step solution process—Plan, Execute, Evaluate—aids students' comprehension and models the process they should follow when tackling problems and cases on their own. We also identify the seminal errors our students have made over the years in Common Mistake boxes within each chapter.

Applied Approach

References to well-known companies, such as Apple, Air Canada, and Starbucks, add color and interest to each chapter. We even include two case-based chapters (13 and 14) that profile RealNetworks and Hertz. Chapter conclusions offer bottom-line advice on the key take-away points for financial managers. Interviews with notable professionals such as John Connors, former Microsoft CFO, support this practical perspective. We take the interviews beyond the boardroom and into the trenches with profiles of recent college graduates using the concepts in their professional lives in every chapter opener.

An applied approach also involves presenting the tools on which practitioners rely. Excel boxes and chapter-ending appendices teach students Excel techniques, while designated Spreadsheet Tables available online enable students to enter their own inputs and formulas.

New to the First Canadian Edition

A Canadian text should reflect Canadian realities and show how they fit in the bigger world picture. For instance, the institutional environment in Canada is different. While Canadian banks came out of the financial crisis with great admiration for their performance relative to banks around the world, Canada's success at corporate law enforcement (laws relating to competition, insider trading, options backdating, and other aspects of corporate governance) is sometimes criticized relative to other developed countries. The Canadian tax system also differs from the US and other countries. It would be a pity if students were only exposed to the US tax system and missed the realities of capital cost allowance, capital gains taxes, tax free savings accounts, and registered retirement savings plan accounts – all of which are very important for Canadian investors. We feel it is important for students to understand the Canadian system but to also be able to understand that other systems exist too. Other countries' institutional systems may be better or worse than what exists in Canada. We believe it is especially important to point out where other systems seem better than what exists in Canada because our students will go on to be business and political leaders and may be the instruments to push for change in Canada that will make us stronger.

David Stangeland and Jerrod Falk are also proud Canadians and we celebrate the great success stories that have emerged in Canadian business. We also recognize some stories of failure and rebirth that have taken place. As such, we feature Canadian businesses in the text when they make suitable examples. A side benefit for students of this is that they can learn about some Canadian corporate history and become more familiar with the firms that may eventually be their employers. We do not exclude non-Canadian businesses. For example, when we want to look at the dominance of the corporate form in terms of business revenue in the world, there is only one largest company, Wal-Mart, so it has its place in the text. Again, though, when appropriate, we bring in Canadian corporations and their relative position for comparative purposes. Many firms not headquartered in Canada are so familiar and important to Canadians it would be foolish to exclude them when they make good examples. Apple and Starbucks are two of such firms.

An additional advantage of a Canadian text is that because Canada is a smaller player on the world scene than the US, Canadians must think more internationally. Thus, the Canadian edition has more of an international focus than the original US edition.

Table of Contents Overview

Fundamentals of Corporate Finance offers coverage of the major topical areas for introductory-level undergraduate courses. Our focus is on financial decision making related to the corporation's choice of which investments to make or how to raise the capital required to fund an investment. We designed the book with the need for flexibility and with consideration of time pressures throughout the semester in mind.

Part 1: Introduction

Ch. 1: Corporate Finance and the Financial Manager

Ch. 2: Introduction to Financial Statement Analysis

Includes Canadian business-forms, taxes, and market information. Also an enhanced discussion of stakeholder view compared to shareholder wealth maximization view.

Introduces CCA with depreciation discussion and includes reference to SEDAR for Canadian public company filings. Includes discussion of the impact of the Sarbanes-Oxley Act, specifically how changes resulted in Canada that are different than in the U.S.

Part 2: Interest Rates and Valuing Cash Flows

Ch. 3: The Valuation Principle: The Foundation of Financial Decision Making
Ch. 4: NPV and the Time Value of Money
Ch. 5: Interest Rates
Ch. 6: Bonds

Enhanced discussion of arbitrage with reference to the economic forces of supply and demand.

Comprehensive time value coverage including growing annuities and perpetuities and why they are relevant.

Enhanced discussion of interest rate conversions. Canadian mortgages included.

Part 3: Valuation and the Firm

Ch. 7: Investment Decision Rules
Ch. 8: Fundamentals of Capital Budgeting
Ch. 9: Valuing Stocks

Integrates a hypothetical project of RIM as an example throughout the chapter. Full CCA coverage is included.

Builds on capital budgeting by valuing the claim to a firm's free cash flows. Also addresses market efficiency and behavioural finance.

Part 4: Risk and Return

Ch. 10: Risk and Return in Capital Markets
Ch. 11: Systematic Risk and the Equity Risk Premium
Ch. 12: Determining the Cost of Capital

Calculates and uses the firm's overall costs of capital and the WACC method.

Part 5: Long-Term Financing

Ch. 13: Raising Equity Capital
Ch. 14: Debt Financing

Understand private and public equity and debt financing, covenants, and repayment options.

Part 6: Capital Structure and Payout Policy

Ch. 15: Capital Structure
Ch. 16: Payout Policy

These chapters start with perfect markets and then show how market imperfections, such as agency costs and asymmetric information, can influence financial policy.

Part 7: Financial Planning and Forecasting

Ch. 17: Financial Modeling and Pro Forma analysis
Ch. 18: Working Capital Management
Ch. 19: Short-Term Financial Planning

Forecasting and managing cash needs on a short-term basis are discussed.

Part 8: Special Topics

Ch. 20: Option Applications and Corporate Finance

Both payoffs and profits of options are discussed. Option valuation and the application to corporate finance is included.

Ch. 21: Risk Management
Ch. 22: International Corporate Finance
Ch. 23: Leasing
Ch. 24: Mergers and Acquisitions

Compares and contrasts hedging with options, futures, or forwards. Also discusses insurance.

Understand exchange rates, exchange rate risk, and how to deal with projects or cash flows from other countries.

Discusses leasing in Canada from financial reporting, legal, and taxation perspectives. The lease-versus-buy decision incorporates tax effects such as CCA, emphasizing a Canadian approach.

Online Chapter

Ch. 25: Corporate Governance

Parts 1 and 2 lay the foundation for our study of corporate finance. In **Chapter 1**, we introduce the corporation and related business forms. We then examine the role of financial managers and outside investors in decision making for the firm. **Chapter 2** reviews basic corporate accounting principles and the financial statements on which the financial manager relies.

Part 2 presents the basic tools that are the cornerstones of corporate finance. **Chapter 3** introduces the Valuation Principle, which underlies all of finance and links all of the ideas throughout this book. **Chapter 4** on the time value of money analyzes cash flow streams lasting several periods. We explain how to value a series of future cash flows and derive shortcuts for computing the present value of annuities and perpetuities. We focus on how interest rates are quoted and determined in **Chapter 5**, with an emphasis on how to use market interest rates to determine the appropriate discount rate for a set of cash flows. In **Chapter 6**, we demonstrate an application of the time value of money tools using interest rates: valuing the bonds issued by corporations and governments.

Part 3 addresses the most important decision financial managers face: the choice of which investments the corporation should make, driving the value of the firm. **Chapter 7** presents the investment decision rules that guide a financial manager's decision making. In **Chapter 8** on capital budgeting, we outline estimating a project's incremental cash flows, which then become the inputs to the NPV decision rule. Capital budgeting decisions determine value creation in the firm, so **Chapter 9** turns to valuing the ownership claim in the firm—its stock. After valuing a firm's equity with various methods, we discuss market efficiency and its implications for financial managers.

Part 4 looks at the critical concept of risk and return. We explain how to measure and compare risks across investment opportunities to determine the cost of capital for each investment opportunity. **Chapter 10** introduces the key insight that investors only demand a risk premium for non-diversifiable risk. In **Chapter 11**, we quantify this idea, leading to the Capital Asset Pricing Model (CAPM). In **Chapter 12**, we apply what we've learned to estimate a company's overall weighted average cost of capital.

Part 5 shows how the firm raises the funds it needs to undertake its investments. We explain the mechanics of raising equity in **Chapter 13** and debt markets in **Chapter 14** (where we also continue the institutional overview of bond markets that began in Chapter 6). **Part 6** on capital structure builds on this foundation by examining the impact of financing choices on the value of the firm. **Chapter 15** on capital structure opens by intuitively establishing the Modigliani and Miller result and then turns to the impact of important market imperfections. Payout policy is the focus of **Chapter 16**.

Part 7 turns to the details of running the financial side of a corporation on both a long-term and day-to-day basis. **Chapter 17** develops the tools to forecast the cash flows and long-term financing needs of a firm. In **Chapter 18** we discuss how firms manage their working capital requirements, while **Chapter 19** explains how firms finance their short-term cash needs.

Part 8 addresses select special topics in corporate finance. **Chapter 20** introduces options; **Chapter 21** then focuses on the corporation's use of options, futures, forwards, insurance and other methods to manage risk. **Chapter 22** examines the issues a firm faces when making a foreign investment, including exchange rate risk, and addresses the valuation of foreign projects. **Chapter 23** introduces an alternative to long-term debt financing, leasing. By presenting leasing as a financing alternative, we apply the Law of One Price to determine that the benefits of leasing must derive from the tax differences, incentive effects, or other market imperfections. The Law of One Price continues to provide a unifying framework as we consider the topics of Mergers and Acquisitions in **Chapter 24** and Corporate Governance in **Chapter 25**.

A Complete Instructor and Student Support Package

MyFinanceLab

The moment you know.

Educators know it. Students know it. It's that inspired moment when something that was difficult to understand suddenly makes perfect sense. Our MyLab products have been designed and refined with a single purpose in mind—to help educators create that moment of understanding with their students.

MyFinanceLab delivers **proven results** in helping individual students succeed. It provides **engaging experiences** that personalize, stimulate, and measure learning for each student. And, it comes from a **trusted partner** with educational expertise and an eye on the future.

MyFinanceLab can be used by itself or linked to any learning management system. To learn more about how **MyFinanceLab** combines proven learning applications with powerful assessment, visit www.myfinancelab.com.

MyFinanceLab—the moment you know.

Videos

Video clips available in MyFinanceLab profile firms through interviews and analysis. The videos focus on core topical areas such as capital budgeting and feature well-known companies.

Technology Specialists. Pearson's Technology Specialists work with faculty and campus course designers to ensure that Pearson technology products, assessment tools, and online course materials are tailored to meet your specific needs. This highly qualified team is dedicated to helping schools take full advantage of a wide range of educational resources, by assisting in the integration of a variety of instructional materials and media formats. Your local Pearson Education sales representative can provide you with more details on this service program.

CourseSmart for Instructors. CourseSmart goes beyond traditional expectations-providing instant, online access to the textbooks and course materials you need at a lower cost for students. And even as students save money, you can save time and hassle with a digital eTextbook that allows you to search for the most relevant content at the very moment you need it. Whether it's evaluating textbooks or creating lecture notes to help students with difficult concepts, CourseSmart can make life a little easier. See how when you visit www.coursesmart.com/instructors.

CourseSmart for Students. CourseSmart goes beyond traditional expectations-providing instant, online access to the textbooks and course materials you need at an average savings of 60%. With instant access from any computer and the ability to search your text, you'll find the content you need quickly, no matter where you are. And with online tools like highlighting and note-taking, you can save time and study efficiently. See all the benefits at www.coursesmart.com/students.

Pearson eText. Pearson eText gives students access to the text whenever and wherever they have access to the Internet. eText pages look exactly like the printed text, offering powerful new functionality for students and instructors. Users can create notes, highlight text in different colours, create bookmarks, zoom, click hyperlinked words and phrases to view definitions, and view in single-page or two-page view. Pearson eText allows for quick navigation to key parts of the eText using a table of contents and provides full-text search. The eText may also offer links to associated media files, enabling users to access videos, animations, or other activities as they read the text.

The **Instructor's Resource CD-ROM [0321548728]** includes the following instructor supplements:

- The **Solutions Manual** provides students with detailed, accuracy-verified solutions to the problems in the book. The solutions, like the problems, were written by the authors themselves. Each solution has been scrutinized for accuracy and quality and is presented in the same Guided Problem Solution framework introduced in the text. Spreadsheet solutions in Excel®, which allow the student to see the effect of changes in the input variables on the outcome, are also available to instructors for designated problems on the Instructor's Resource CD-ROM. The Solutions Manual also includes solutions to the Data Cases and Integrative Cases, as well as answers to the Review Questions and Critical Thinking Questions in the textbook.
- The **PowerPoint Presentation**, authored by Anas Aboulamer at Concordia University, is available in lecture form and includes art and tables from the book and additional examples. The PowerPoint materials, including all tables and figure files, examples, key terms, and spreadsheet tables from the text are also available in a separate **Image Bank** for professors to build into their personal PowerPoint presentations.
- The **Test Bank**, authored by Ron Mackinnon at the University of British Columbia, provides a wealth of accuracy-verified testing material. Each chapter offers a wide variety of true/false, short answer, and multiple-choice questions. Questions are verified by difficulty level and skill type, and correlated to the chapter topics. very question in the Test Bank is also available in **TestGen®** software for both Windows® and Macintosh® computers. This easy-to-use testing software is a valuable test preparation tool that allows professors to view, edit, and add questions.
- The **Instructor's Manual** was written by Bill Fletcher at St. Mary's University, and contains chapter outlines and overviews, lecture launchers, further questions for class discussion, and the answers to the practitioner interview questions found in the book. The **Instructor's Manual** is included on the Instructor's Resource CD-ROM and is also be available for download as Microsoft® Word files or as Adobe® PDF files from the Instructor Resource Center.

Study on the Go.

Featured at the end of each chapter, you will find a unique barcode providing access to Study on the Go, an unprecedented mobile integration between text and online content. Students link to Pearson's unique Study on the Go content directly from their smartphones, allowing them to study whenever and wherever they wish! Go to one of the sites below to see how you can download an app to your smartphone for free. Once the app is installed, your phone will scan the code and link to a website containing Pearson's Study on the Go content, including the popular study tools Glossary Flashcards, Audio Summaries, and Quizzes, which can be accessed anytime.

ScanLife	NeoReader	QuickMark
http://getscanlife.com/	http://get.neoreader.com/	http://www.quickmark.com.tw/

Acknowledgments

Given the scope of this project, identifying the many people who made it happen is a tall order. This textbook was the product of the expertise and hard work of many talented colleagues. We are especially gratified with the work of those who developed the array of print supplements that accompany the book: Ron Mackinnon for the Test Bank; Bill Fletcher, for the Instructor's Manual; Anas Aboulamer, for the PowerPoint lecture notes; and our MyFinanceLab content development author, Therese Trainor. We're also deeply appreciative of Dennis Ng's work conducting the lively interviews with recent graduates that open each chapter.

At Pearson Education Canada, we would like to thank

- Vice President, Editorial Director, Gary Bennett
- Editor-in-Chief, Nicole Lukach
- Acquisitions Editor, Claudine O'Donnell
- Senior Marketing Manager, Leigh-Anne Graham
- Developmental Editor, Toni Chahley
- Project Managers, Sarah Lukaweski, Rachel Thompson
- Production Editor, Vasundhara Sawhney
- Designer, Anthony Leung
- Proofreader, Audrey Dorsch

We are indebted to our colleagues for the time and expertise invested as manuscript reviewers. The sound guidance from these trusted advisors throughout the writing process was truly invaluable. We strived to incorporate every contributor's input and are truly grateful for each comment and suggestion. The book has benefited enormously from this input.

Reviewers for the First Canadian Edition

Trevor Chamberlain, *McMaster University*
Bin Cheng, *University of Ontario Institute of Technology*
Kirk Collins, *St. Francis Xavier University*
Bill Fletcher, *St. Mary's University*
Yi Feng, *Ryerson University*
Merlyn Foo, *Athabasca University*
Larbi Hammabi, *McGill University*
Robert Ironside, *Kwantlen University*
Raad Jassim, *McGill University*
Garth Jensen, *Laurentian University*
Lew Johnson, *Queen's University*
Keith Christian Jensen, *Vancouver Island University*
Vic Kariappa, *Carleton University*
Dave Kennedy, *Lethbridge College*
Kai Li, *University of British Columbia*
Audrey Lowry, *Grant MacEwan*
Andras Marosi, *University of Alberta*
Eloisa Perez, *Grant MacEwan*
Ian Rakita, *Concordia University*
Shishir Singh, *University of Manitoba*
Jun Yang, *Acadia University*