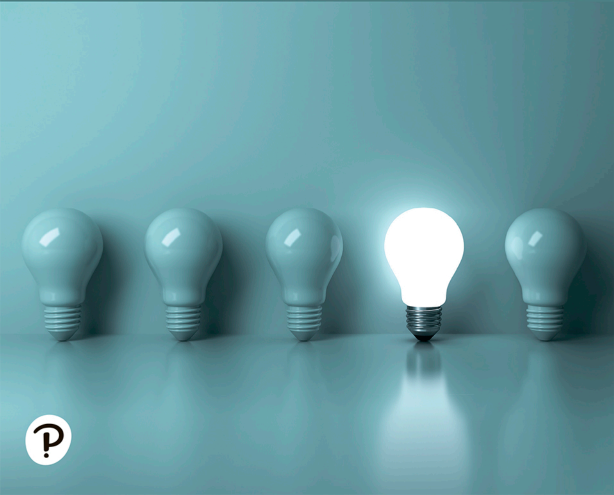
FUNDAMENTALS OF

Corporate Finance

FOURTH CANADIAN EDITION

Jonathan Berk   Peter DeMarzo   Jarrad Harford   David Stangeland   András Marosi



To my family, friends, colleagues, and God for all the love, support, and encouragement, and to our country, Canada, where we can take for granted all the freedoms that are sought after, but often denied, around the world.

—David Stangeland

To my family for all their love and support.

—András Marosi

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About the Authors

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Jonathan Berk is the A.P. Giannini Professor of Finance at the Graduate School of Business, Stanford University, and is a research associate at the National Bureau of Economic Research. Before coming to Stanford, he was the Sylvan Coleman Professor of Finance at Haas School of Business at the University of California, Berkeley. Prior to earning his PhD, he worked as an associate at Goldman Sachs (where his education in finance really began).

Professor Berk's research interests in finance include corporate valuation, capital structure, mutual funds, asset pricing, experimental economics, and labour economics. His work has won a number of research 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 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. He served two terms as an associate editor of the *Journal of Finance* and a term as a director of the American Finance Association and the Western Finance Association, and was academic director of the Financial Management Association. He is a fellow of the Financial Management Association and a member of the advisory board of the *Journal of Portfolio Management*.

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 Graduate School of Business, Stanford University. He is the current vice president of the American Finance Association and a research associate at the National Bureau of Economic Research. He teaches MBA and PhD courses in corporate finance and financial modelling. In addition to his experience at the Stanford Graduate School of Business, Professor DeMarzo has 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 U.C. 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 having been a director of the American Finance Association. He has served as vice president and president of the Western Finance Association. Professor DeMarzo's research is in the area of corporate investment and financing, asset securitization, and contracting, as well as market structure and regulation. His recent work has examined issues of the optimal design of contracts and securities, leverage dynamics and the role of bank capital regulation, and the influence of information asymmetries on stock prices and corporate investment. He has received numerous awards, 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, and is married with three boys. He and his family enjoy hiking, biking, and skiing.

Jarrad Harford is the Paul Pigott–PACCAR 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 over 19 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 UW Finance Professor of the Year (2010, 2012, 2016), Panhellenic/Interfraternity Council Business Professor of the Year Award (2011, 2013), ISMBA Excellence in Teaching Award (2006), and the Wells Fargo Faculty Award for Undergraduate Teaching (2005). Professor Harford is currently a managing editor of the *Journal of Financial and Quantitative Analysis*, and serves as an associate editor for the *Journal of Financial Economics* and the *Journal of Corporate Finance*. His main research interests are understanding the dynamics of merger and acquisition activity as well as the interaction of corporate cash management policy with governance, payout, and global tax considerations. Professor Harford was born in Pennsylvania, is married, and has two sons. He and his family enjoy travelling, hiking, and skiing.

David Stangeland, PhD, BComm (Distinction), CPA, 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 and Finance Department at the I.H. Asper School of Business at the University of Manitoba. Dr. Stangeland is a professor of finance and regularly teaches undergraduate and MBA students corporate finance. Over his career, he has held several associate dean positions that oversaw the following programs: undergraduate (Bachelor of Commerce (Honours), MBA, Master of Finance, Master of Supply Chain Management and Logistics, Co-op, and International Exchange; in addition, he fulfilled several appointments as head of the Department of Accounting and Finance.

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 and Finance*, the *Journal of Corporate Finance*, *Financial Management*, the *Stanford Journal of Law*, *Business and 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 committees and the investment committees for the two University of Manitoba pension plans and is a former member of the investment committee for the Teachers Retirement Allowances Fund (the pension fund for Manitoba teachers). He has also served on the independent review committees for two mutual fund companies. 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 through activities including running, cycling, hiking, and skiing, and in the winter travelling to warmer climates—Puerto Vallarta is his favourite warm-weather destination.

András Marosi is executive professor of finance at the University of Alberta and associate dean, undergraduate programs. He received his PhD in finance from the University of Texas at Austin and MPhil in finance from the University of Cambridge. Professor Marosi has taught introductory and elective corporate finance courses for several years to undergraduate, MBA, executive MBA, and Master of Financial Management students. He has won several teaching awards, including the MBA Association Award for Excellence in Teaching (2015 and 2016), the MBA MacKenzie Teaching Award (2014), and the undergraduate Business Student Association MacKenzie Teaching Award (2004 and 2018). Professor Marosi's research has been published in the *Journal of Finance* and the *Journal of Financial and Quantitative Analysis*, and he received the Jean Perrien Award at the 2012 Administrative Sciences Association of Canada (ASAC) Conference. Professor Marosi was born in Hungary and is married, with one daughter. He is a passionate runner and triathlete.

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Preface

Finance professors are united by their commitment to shaping future generations of financial professionals as well as instilling financial awareness and skills in non-majors. Our goal with *Fundamentals of Corporate Finance* is to provide an accessible presentation for both finance and nonfinance majors.

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 90 years of combined teaching experience, we have found that this approach actually makes the material 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 past 30 years. Yet much of the empirical evidence in financial economics amassed over this period supports the existing theory and strengthens the importance of understanding and applying corporate financial principles. The 2007–2009 financial crisis was fueled in part by many 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 this point in mind, we present finance as one unified whole based on two simple, powerful ideas: (1) valuation drives decision making—the firm should take projects for which the value of the benefits exceeds the value of the costs—and (2) in a competitive market, market prices (rather than individual preferences) determine values. We combine these two ideas with what we call the Valuation Principle, and from it we establish all the key ideas in corporate finance.

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 Air Canada, Apple, and BCE; making consistent use of real-world data; and demonstrating personal finance applications of core concepts, we strive to keep even nonfinance majors engaged.

Our commitment to setting a new standard for undergraduate corporate finance textbooks extends beyond the printed page.

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 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 direct applications. 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.

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 introduces the time value of money for single cash flows as a critical component of the Valuation Principle. Chapter 4 then focuses on the time value of money for cash flows over 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 3 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 comparing benefits and costs in Chapter 3. Building on this, we formally introduce the *NPV* rule in Chapter 8 and evaluate it with respect to other investment decision rules. In Chapter 9 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 Chapters 10 and 11. 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 7 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 13 on the pricing of options lays the foundations for important topics such as the valuation of convertible securities, the conflict of interest between equity holders and creditors, and the ability to implement risk management strategies. The early placement of the options material in the book allows options knowledge to be used in latter parts—particularly in the discussion of capital structure and the agency costs of debt.
- Chapter 17 on payout policy examines the role of asymmetric information between managers and investors and how payout decisions may signal this information.
- Chapter 18 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

Problem-Solving Methodology Guided Problem Solutions (GPS) of worked examples appear alongside 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 Air Canada, Apple, and BCE, add colour and interest to each chapter. We even include two case-based chapters (14 and 15) that profile Facebook 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.

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

Digital Content Delivery

As the world shifts to a greater reliance on digital media, it is appropriate that this resource evolve as well. This fourth Canadian edition is the first fully digital version of *Fundamentals of Corporate Finance*. Instructors and students will find that, although the medium has changed, the content is fully consistent with prior editions.

New to the Fourth Canadian Edition

A Canadian text should reflect Canadian realities and show how they fit into 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 (for 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 those in the United States and other countries. It would be a pity if students were exposed only to the U.S. 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 and also 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 András Marosi are 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 of this for students 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 by revenue, Walmart (in 2020), 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 that it would be foolish to exclude them when they make good examples. Apple and Starbucks are two such firms.

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

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.

In response to reviewers' feedback we retained the sequence of chapters first introduced in the second Canadian edition.

Chapters 3 through 13 focus on valuation and risk, and progress from relatively easier material to more difficult topics, starting with the Valuation Principle and time value of money in Chapters 3 and 4 and concluding with the challenging options topic in Chapter 13. Subsequently, Chapters 14 through 17 examine various aspects of corporate finance, from fundraising to payoff policy, and make extensive use of the lessons learned in the preceding valuation and risk chapters. In addition, by bringing forward the discussion of options we can use such knowledge in other areas of the text that can be viewed in an options context.

Part-by-Part Overview

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. **Appendix C to Chapter 6** discusses interest rate risk and duration. In **Chapter 7**, we extend the valuation framework to determining stock prices. After valuing a firm's equity with various methods, we discuss market efficiency and its implications for financial managers.

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 8** presents the investment decision rules that guide a financial manager's decision making. In **Chapter 9** on capital budgeting, we outline estimating a project's incremental cash flows, which then become the inputs to the *NPV* decision rule.

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 demand a risk premium only for nondiversifiable 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. In **Chapter 13**, we discuss options, their pricing, and what affects their value.

Part 5 shows how the firm raises the funds it needs to undertake its investments. We explain the mechanics of raising equity in **Chapter 14** and describe debt markets in **Chapter 15** (where we also continue the institutional overview of bond markets that began in **Chapter 6**). Following the discussions on equity and debt financing, we turn to capital structure and examine the impact of financing choices on the value of the firm. **Chapter 16** 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 17**.

Part 6 turns to the details of running the financial side of a corporation on both a long-term and a day-to-day basis. **Chapter 18** develops the tools to forecast the cash flows and long-term financing needs of a firm. In **Chapter 19**, we discuss how firms manage their working capital requirements, whereas **Chapter 20** explains how firms finance their short-term cash needs.

Part 7 addresses select special topics in corporate finance. **Chapter 21** 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**.

We have thoroughly updated each of the chapters in the book.

Chapter 1 Corporate Finance and the Financial Manager includes updates on Canadian taxes and corporate tax around the world. We updated the table showing the largest Canadian corporations so students have a better understanding of the big players in the Canadian economy. Information on stock exchanges has been revised and reflects where market activity is most abundant. We enhanced our discussion on corporate social responsibility and added information on Fintech and how the TSX was a pioneer, in 1977, to introduce the fully automated exchange.

Chapter 2 Introduction to Financial Statement Analysis includes discussion of the impact of the Sarbanes-Oxley Act, specifically how changes in Canada are different from those in the United States. We also discuss International Financial Reporting Standards

(IFRS) and how convergence toward IFRS has been progressing. End-of-chapter problems and the Data Case have been updated.

Chapter 3 The Valuation Principle: The Foundation of Financial Decision Making has been refined in its discussion of the Valuation Principle. We added a specific definition for simple interest, better explanations on using financial calculators or Excel to do time value calculations, and in the end-of-chapter problems we added computations of simple interest and interest on interest in addition to compound interest which was covered before.

Chapter 4 The Time Value of Money has been revised to improve clarity for students. We indicated the power of financial calculators or Excel over manual interpolation as a method for solving numerical problems. We added footnotes for the PV and FV of growing annuities explaining what is done when $r = g$. In the appendix, we added an explanation of when the IRR function must be used instead of the rate function.

Chapter 5 Interest Rates includes enhanced discussion on how to do interest rate conversions. We added a specific definition for effective interest rates in addition to effective annual rates, and we revised the box on the cost of capital. We have also updated data and figures with respect to inflation, interest rates, and yield curves. We enhanced the discussion on how interest rates are set by the forces of supply and demand for funds to include how central banks can intervene in this process by creating money and buying bonds versus issuing bonds.

Chapter 6 Bonds includes updates on Canada's national debt and how it has grown during the COVID-19 pandemic. We provided a new source for online bond data for Canada. We added discussion on quantitative easing in Canada by the Bank of Canada during the pandemic and included the pandemic period in our graph about credit spreads.

Chapter 7 Valuing Stocks includes a new opening example of a company whose shares were severely impacted at the onset of the COVID-19 pandemic, in spite of the company's good financial results. We return to this example later in the chapter in the context of informational efficiency and how information impacts security prices. A new interview was added to the chapter, in addition we added a definition regarding classes of shares and refined the explanation about the calculation of free cash flows.

We introduce *NPV, IRR,* and profitability index in **Chapter 8 Investment Decision Rules** and have included new and updated references on the use of capital budgeting techniques in Canada.

Chapter 9 Fundamentals of Capital Budgeting now includes complementary products in the discussion of incremental cash flows. Further explanations regarding capital cost allowance (CCA) asset classes are included. The discussion of expansion options, as a benefit of a project, is refined and we relate it back to the Chapter 1 example of Apple introducing the iPod.

Chapter 10 Risk and Return in Capital Markets has a new introduction featuring Open Text and Stantec as examples. Barrick Gold (ABX) has been replaced with Capital Power (CPX) throughout the chapter because it pays dividends in Canadian dollars, the dividends are substantial, and the dividend dates line up with the calendar year-end and the end of each quarter. This chapter also has a new Financial Crisis box on diversification benefits during market crashes.

Chapter 11 Systematic Risk and the Equity Risk Premium features an updated and refined Example 11.3—Computing the Volatility of a Two-Stock Portfolio. We combine Maple Leaf Foods (MFI) first with TC Energy (TRP), then with Capital Power (CPX).

The end-of-chapter problems and solutions have been updated and clarified in **Chapter 12 Determining the Cost of Capital**.

Chapter 13 Risk and the Pricing of Options features a new example at the end of the section, Option Prices and the Expiration Date.

Chapter 14 Raising Equity Capital includes a new box on special purpose acquisition companies (SPACs) and their use in Canada and the United States.

Chapter 15 Debt Financing includes standard debt coverage plus references to option features and to the options chapter to enrich the discussion of callable and convertible bonds. We updated the Hertz example that is used throughout the chapter to include the company's eventual bankruptcy and restructuring. Two end-of-chapter questions were added related to debt covenants.

Chapter 16 Capital Structure has a new introduction featuring Telus, as well as some new examples of financial distress.

Chapter 17 Payout Policy and **Chapter 18 Financial Modelling and Pro Forma Analysis** contain updates to tax rates, data, and figures throughout and more information on Canadian and U.S. companies that hold large cash balances. We updated the information on the timing of stock registration and ex-dividend dates and replaced Microsoft with Costco as a more current example. End-of-chapter problems and solutions were also updated to reflect the faster settlement of trades and registration of shares and how that impacts ex-dividend dates.

Chapter 18 Financial Modelling and Pro Forma Analysis was updated extensively with respect to forecasting financial statements using the percent of sales method. In particular, we clarified which items in a firm's financial statements will and will not likely vary as a percent of sales revenue. We added related clarifications to the end-of-chapter problems and solutions.

Chapter 19 Working Capital Management includes company and data updates. We contrasted the inventory management at Canada Goose and Walmart and discussed how COVID-19 impacted inventories at many companies at the pandemic's onset.

Chapter 21 Risk Management includes data updates and new coverage of how LIBOR is being replaced by SOFR.

Chapter 24 Mergers and Acquisitions includes new discussion of M&A risk arbitrageurs and how they can take on an activist role during M&A negotiations. We included Air Canada and Transat A.T. as a recent example of how Canada's Competition Bureau approved the acquisition but the European Commission disallowed it.

Chapter 25 Corporate Governance includes new coverage of how activist funds can influence corporate governance and how mutual fund holdings of firms' shares can reduce competition between such firms.

Features: 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 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 students' comprehension, enhances their ability to model the solution process when tackling problems on their own, and demonstrates the importance of interpreting the mathematical solution.
- **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—in the classroom and in the field.
- **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.

- **Practitioner Interviews** from notable professionals featured in many chapters highlight leaders in the field and address the effects of the financial crisis.
- **General Interest** boxes highlight timely material from financial publications that sheds light on business problems and real company practices.

Teaching Every Student to Think Finance

With consistency in presentation and an innovative set of learning aids, *Fundamentals of Corporate Finance* simultaneously meets the needs of finance majors and nonfinance business majors both. 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 nonstandardized 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 15 with keystrokes for HP-10BII and TI BAII Plus Professional, highlight this problem-solving tool.
- **Spreadsheet Tables.** Select tables are available on MyLab Finance 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.

Practise Finance to Learn Finance

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 András Marosi** 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. All end-of-chapter problems are available in MyLab Finance, the fully integrated homework and tutorial system. Both the problems and solutions, which were also written by the authors, have been

class tested and accuracy checked to ensure quality. Selected end-of-chapter problems are also accompanied by Excel spreadsheets. Where indicated, some problems are accompanied by an Excel Solution, which is found in the Instructor's Solutions Manual. Blank templates for these Excel Solutions are available for students on MyLab Finance.

End-of-Chapter Materials Reinforce Learning

Testing understanding of central concepts is crucial to learning finance.

- **MyLab Finance 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 some parts and present a capstone extended problem with a scenario and data for students to analyze based on that subset of chapters.

Features

Pearson eText

Affordable and easy to use, Pearson eText helps students keep on learning no matter where their day takes them. The mobile app lets students read and study, even when they are offline. They can also add highlights, bookmarks, and notes in their Pearson eText to study how they like.

Students can purchase Pearson eText on their own from Pearson, or you can invite them to join a Pearson eText course. Creating a course allows you to personalize your Pearson eText so students see the connection between their reading and what they learn in class—motivating them to keep reading and keep learning.

Benefits of creating an instructor-led Pearson eText course include:

- Share highlights and notes with students—Add your personal teaching style to important topics, call out need-to-know information, or clarify difficult concepts directly in the eText.
- Access reading analytics—Use the dashboard to gain insight into how students are working in their eText to plan more effective instruction in and out of class.
- Customize and schedule readings—Rearrange the Pearson eText table of contents at both the chapter and section level to match the way you teach. Add due dates so that students know exactly what to read to come to class prepared.
- Integrate with your LMS

MyLab

MyLab is the teaching and learning platform that empowers you to reach every student. By combining trusted author content with digital tools and a flexible platform, MyLab personalizes the learning experience and improves results for each student. To learn more about MyLab Finance, go to: https://mlm.pearson.com/northamerica/myfinancelab/

Excel Projects

Using proven, field-tested technology, auto-graded Excel Projects let you seamlessly integrate Microsoft® Excel® content into your course without having to manually grade spreadsheets. Students can practice important skills in Excel, helping them master key