

# PREFACE

*Fundamentals of Corporate Finance*, Sixth Canadian Edition, provides what we believe is a modern, unified treatment of financial management in Canada that is suitable for beginning students.

Rapid and extensive changes in financial markets and instruments place new burdens on the teaching of corporate finance. On the one hand, it is much more difficult to keep materials up to date. On the other, the permanent must be distinguished from the temporary to avoid following what is merely the latest fad. Our solution is to stress the modern fundamentals of finance and to make the subject come alive with contemporary Canadian examples. As we emphasize throughout this book, we view the subject of corporate finance as the working of a small number of integrated and very powerful intuitions.

There are three basic themes in *Fundamentals of Corporate Finance*.

**AN EMPHASIS ON INTUITION** We are always careful to separate and explain the principles at work on an intuitive level before launching into any specifics. The underlying ideas are discussed first in very general terms and then by way of examples that illustrate in more concrete terms how a financial manager might proceed in a given situation.

**A UNIFIED VALUATION APPROACH** We treat net present value (NPV) as the basic concept underlying corporate finance. Many texts stop well short of consistently integrating this important principle. The most basic notion, that NPV represents the excess of market value over cost, tends to get lost in an overly mechanical approach to NPV that emphasizes computation at the expense of understanding. Every subject covered in *Fundamentals of Corporate Finance* is firmly rooted in valuation, and care is taken throughout the text to explain how particular decisions have valuation effects.

**A MANAGERIAL FOCUS** Students won't lose sight of the fact that financial management concerns management. Throughout the text, the role of the financial manager as decision maker is emphasized, and the need for managerial input and judgement is stressed. "Black box" approaches to finance are consciously avoided.

These three themes work together to provide consistent treatment, a sound foundation, and a practical, workable understanding of how to evaluate financial decisions.

**NEW TO THIS EDITION** In addition to retaining the coverage that has characterized *Fundamentals of Corporate Finance* from the beginning, the Sixth Canadian Edition features enhanced Canadian content on current issues such as corporate social responsibility, as well as both positive and negative examples of corporate governance. Key updates include income trusts (Chapters 1 and 2), where we discuss their growing importance in capital markets and recent changes in taxation, IPOs (Chapter 15), and capital market history (Chapter 12), which continues the Fifth Edition's emphasis on lower market risk premiums while introducing new material on geometric mean returns.

Learning solutions have always been a critical focus and the Sixth Canadian Edition retains features from the Fifth Edition and adds new ones: Calculator Hints and Spreadsheet Strategies walk students through time value calculations; new Mini Cases at the end of each major part of the book meet the demand for more challenging assignments.

## COVERAGE

This book was designed and developed explicitly for a first course in business or corporate finance, for both finance majors and non-majors alike. In terms of background or prerequisites, the book is nearly self-contained, assuming some familiarity with basic algebra and accounting concepts, while still reviewing important accounting principles very early on. The organization of this text has been developed to give instructors the flexibility they need.

Just to get an idea of the breadth of coverage in the Sixth Canadian Edition of *Fundamentals of Corporate Finance*, the following grid presents, for each chapter, some of the most significant new features, as well as a few selected chapter highlights. Of course, in every chapter, opening vignettes, boxed features, in-chapter illustrated examples using real companies, and end-of-chapter materials have been thoroughly updated as well.

Chapters	Selected Topics of Interest	Benefits to You
<b>PART ONE OVERVIEW OF CORPORATE FINANCE</b>		
<b>Chapter 1</b> Introduction to Corporate Finance	Goal of the firm and agency problems.  Ethics, financial management, and executive compensation.	Stresses value creation as the most fundamental aspect of management and describes agency issues that can arise.  Brings in real-world issues concerning conflicts of interest and current controversies surrounding ethical conduct and management pay.
<b>Chapter 2</b> Financial Statements, Taxes, and Cash Flow	Cash flow vs. earnings.  Market values vs. book values.	Clearly defines cash flow and spells out the differences between cash flow and earnings.  Emphasizes the relevance of market values over book values.
<b>PART TWO FINANCIAL STATEMENTS AND LONG-TERM FINANCIAL PLANNING</b>		
<b>Chapter 3</b> Working with Financial Statements	Using financial statement information.	Section discusses the advantages and disadvantages of using financial statements.
<b>Chapter 4</b> Long-Term Financial Planning and Corporate Growth	<i>New material:</i> Explanation of alternative formulas for sustainable and internal growth rates.  Thorough coverage of sustainable growth as a planning tool.	Explanation of growth rate formulas clears up a common misunderstanding about these formulas and the circumstances under which alternative formulas are correct.  Provides a vehicle for examining the interrelationships between operations, financing, and growth.
<b>PART THREE VALUATION OF FUTURE CASH FLOWS</b>		
<b>Chapter 5</b> Introduction to Valuation: The Time Value of Money	First of two chapters on time value of money.	Relatively short chapter introduces just the basic ideas on time value of money to get students started on this traditionally difficult topic.
<b>Chapter 6</b> Discounted Cash Flow Valuation	Second of two chapters on time value of money.	Covers more advanced time value topics with numerous examples, calculator tips, and Excel spreadsheet exhibits. Contains many real-world examples.
<b>Chapter 7</b> Interest Rates and Bond Valuation	<i>New material:</i> “Clean” vs. “dirty” bond prices and accrued interest.  Bond ratings.	Clears up the pricing of bonds between coupon payment dates and also bond market quoting conventions.  Up-to-date discussion of bond rating agencies and ratings given to debt. Includes the latest descriptions of ratings used by the DBRS.

Chapters	Selected Topics of Interest	Benefits to You
<b>Chapter 8</b> Stock Valuation	Updated end-of-chapter Mini Case.  Stock market reporting.	Mini Case applies material presented in chapter to a real-world situation.  Up-to-date discussion of stock market reporting, using Le Chateau stock as an example.
<b>PART FOUR CAPITAL BUDGETING</b>		
<b>Chapter 9</b> Net Present Value and Other Investment Criteria	First of three chapters on capital budgeting.  NPV, IRR, payback, discounted payback, and accounting rate of return.	Relatively short chapter introduces key ideas on an intuitive level to help students with this traditionally difficult topic.  Consistent, balanced examination of advantages and disadvantages of various criteria.
<b>Chapter 10</b> Making Capital Investment Decisions	Project cash flow.  Alternative cash flow definitions.  Special cases of DCF analysis.	Thorough coverage of project cash flows and the relevant numbers for a project analysis.  Emphasizes the equivalence of various formulas, thereby removing common misunderstandings.  Considers important applications of chapter tools.
<b>Chapter 11</b> Project Analysis and Evaluation	<i>Mini Case:</i> Minor International.  Sources of value.  Scenario and sensitivity “what-if” analyses.  Break-even analysis.	This comprehensive case applies the capital budgeting concepts covered throughout Part Four.  Stresses the need to understand the economic basis for value creation in a project.  Illustrates how to actually apply and interpret these tools in a project analysis.  Covers cash, accounting, and financial break-even levels.
<b>PART FIVE RISK AND RETURN</b>		
<b>Chapter 12</b> Some Lessons from Capital Market History	<i>New section:</i> Geometric vs. arithmetic returns.  Capital market history.  Market efficiency.	Discusses calculation and interpretation of geometric returns. Clarifies common misconceptions regarding appropriate use of arithmetic vs. geometric average returns.  Extensive coverage of historical returns, volatilities, and risk premiums.  Efficient markets hypothesis discussed along with common misconceptions.
<b>Chapter 13</b> Return, Risk, and the Security Market Line	Diversification, systematic and unsystematic risk.  Beta and the security market line.	Illustrates basics of risk and return in a straight-forward fashion.  Develops the security market line with an intuitive approach that bypasses much of the usual portfolio theory and statistics.
<b>PART SIX COST OF CAPITAL AND LONG-TERM FINANCIAL POLICY</b>		
<b>Chapter 14</b> Cost of Capital	Cost of capital estimation.	Contains a complete step-by-step illustration of cost of capital for publicly traded Loblaw Companies.
<b>Chapter 15</b> Raising Capital	<i>New discussion:</i> Dutch auction IPOs.  <i>New discussion:</i> IPO “quiet periods.”  <i>New discussion:</i> Lockup agreements.  IPOs in practice.	Explains uniform price auctions using recent Google IPO as an example.  Explains the OSC’s and SEC’s quiet period rules.  Briefly discusses the importance of lockup agreements.  In-depth look at a real-world example of an IPO.
<b>Chapter 16</b> Financial Leverage and Capital Structure Policy	Basics of financial leverage.  Optimal capital structure.  Financial distress and bankruptcy.	Illustrates effect of leverage on risk and return.  Describes the basic trade-offs leading to an optimal capital structure.  Briefly surveys the bankruptcy process.

Chapters	Selected Topics of Interest	Benefits to You
<b>Chapter 17</b> Dividends and Dividend Policy	<p><i>New Mini Case:</i> Cost of Capital for Hubbard Computer, Inc.</p> <p><i>New material:</i> Very recent survey evidence on dividend policy.</p> <p><i>New material:</i> Effects of new tax laws.</p> <p>Dividends and dividend policy.</p>	<p>New case written for this edition analyzes cost of capital estimation for a non-public firm.</p> <p>New survey results show the most important (and least important) factors considered by financial managers in setting dividend policy.</p> <p>Brief discussion of the implications of newer, lower dividend rates.</p> <p>Describes dividend payments and the factors favouring higher and lower payout policies.</p>
<b>PART SEVEN SHORT-TERM FINANCIAL PLANNING AND MANAGEMENT</b>		
<b>Chapter 18</b> Short-Term Finance and Planning	<p>Operating and cash cycles.</p> <p>Short-term financial planning.</p>	<p>Stresses the importance of cash flow timing.</p> <p>Illustrates creation of cash budgets and potential need for financing.</p>
<b>Chapter 19</b> Cash and Liquidity Management	<p>Float management.</p> <p>Cash collection and disbursement.</p>	<p>Thorough coverage of float management.</p> <p>Examination of systems used by firms to handle cash inflows and outflows.</p>
<b>Chapter 20</b> Credit and Inventory Management	<p><i>New Mini Case:</i> Piepkorn Manufacturing Working Capital Management.</p> <p>Credit management.</p> <p>Inventory management.</p>	<p>New case written for this edition evaluates working capital issues for a small firm.</p> <p>Analysis of credit policy and implementation.</p> <p>Brief overview of important inventory concepts.</p>
<b>PART EIGHT TOPICS IN CORPORATE FINANCE</b>		
<b>Chapter 21</b> International Corporate Finance	<p>Foreign exchange.</p> <p>International capital budgeting.</p> <p>Exchange rate and political risk.</p>	<p>Covers essentials of exchange rates and their determination.</p> <p>Shows how to adapt basic DCF approach to handle exchange rates.</p> <p>Discusses hedging and issues surrounding sovereign risk.</p>
<b>Chapter 22</b> Leasing	<p><i>New material:</i> Synthetic leases.</p> <p>Leases and lease valuation.</p>	<p>Discusses controversial practice of custom-tailored, "off-balance-sheet" financing.</p> <p>Essentials of leasing, good and bad reasons for leasing, and NPV of leasing are examined.</p>
<b>Chapter 23</b> Mergers and Acquisitions	<p><i>New material:</i> Alternatives to mergers and acquisitions.</p> <p><i>New material:</i> Defensive tactics.</p> <p><i>New section:</i> Divestitures and restructurings.</p> <p>Mergers and acquisitions.</p>	<p>Covers strategic alliances and joint ventures and why they are important alternatives.</p> <p>Expanded discussion of anti-takeover provisions.</p> <p>Important actions such as equity carve-outs, spins-offs, and split-ups are examined.</p> <p>Develops essentials of M&amp;A analysis, including financial, tax, and accounting issues.</p>
<b>PART NINE DERIVATIVE SECURITIES AND CORPORATE FINANCE</b>		
<b>Chapter 24</b> Risk Management: An Introduction to Financial Engineering	<p>Volatility and risk.</p> <p>Hedging with forwards, options, and swaps.</p>	<p>Illustrates need to manage risk and some of the most important types of risk.</p> <p>Shows how many risks can be managed with financial derivatives.</p>
<b>Chapter 25</b> Options and Corporate Securities	<p>Put-call parity and Black-Scholes.</p> <p>Options and corporate finance.</p>	<p>Develops modern option valuation and factors influencing option values.</p> <p>Applies option valuation to a variety of corporate issues, including mergers and capital budgeting.</p>

## LEARNING SOLUTIONS

In addition to illustrating pertinent concepts and presenting up-to-date coverage, the authors of *Fundamentals of Corporate Finance* strive to present the material in a way that makes it coherent and easy to understand. To meet the varied needs of the intended audience, *Fundamentals of Corporate Finance* is rich in valuable learning tools and support.

Each feature can be categorized by the benefit to the student:


- Real Financial Decisions
- Application Tools
- Study Aids

### Real Financial Decisions

We have included key features that help students connect chapter concepts to how decision makers use this material in the real world.

CHAPTER 11

## Project Analysis and Evaluation



**I**n April 2006, a Canadian mining company, Teck Cominco, announced that it will reopen one of its mines located in the Kimberly region of Western Australia. The decision to reopen the mine was based on rising market prices of zinc.

The case of Teck Cominco illustrates that sometimes postponing a project because of unfavourable conditions pays off. With zinc prices too low and costs too

high, the strategy of closing the mine and reopening at a later date worked to the benefit of the company. Sometimes, capital budgeting decisions don't work out as well. Forecasting involves considerable risk and potential error. This chapter explores how this may happen and what companies can do to analyze (and possibly prevent) negative outcomes, as well as how companies deal with such situations when they arise.

### CHAPTER-OPENING VIGNETTES

These are from real-world events and introduce students to the chapter concepts. New chapter-opening vignettes can be found in many chapters. Questions about the chapter-opening vignettes are posed in the end-of-chapter material to ensure understanding of the concepts.

In Their Own Words . . .

Geoff Martin on Online Billing

**ELECTRONIC BILL PAYMENT** and collection is finally starting to become the “killer app” that pundits have long predicted it would be, and the Government of Canada is leading the charge.

It has placed first worldwide in online services for four years running, according to a yearly study by global technology services firm Accenture. And with the leadership of the federal Government On-Line (GOL) program (golged.gc.ca), which aims to provide a majority of Canadian government services securely and efficiently, our lead over the two countries tied for second place, Singapore and the United States, continues to widen.

Since it deals with virtually every Canadian citizen and business, the Canada Revenue Agency (CRA) is leading the way with the GOL program. Last year, 10 million Canadians filed their taxes online, but CRA expects to significantly expand its services before the next tax deadline, to entice even greater numbers.

With their acquisition of webdocks from BCE Emergis in July 2004, Canada Post's online payment service, called epost,

is also poised to become a global trail-blazer in e-billing. While epost currently offers services that allow its more than 400,000 registered users in major cities such as Calgary, Winnipeg, Toronto, and Ottawa to pay their municipal taxes and other bills online, the scheduled launch of merged services between epost and webdocks in December will connect more than one million registered customers with the services of 97 companies. In Toronto, the service will enable electronic payment for 7 of the 10 monthly bills received by an average household.

With numbers ramping upwards so sharply right across the country, it doesn't take a crystal ball to determine that e-billing is very quickly taking over in Canada. While the paperless society we've long been promised still seems like a distant fairy tale, Canadian governments and businesses seem poised to achieve one of the world's first truly cashless societies in the very near future.

This discussion is excerpted from G. Martin, “No cash please,” Summit Ottawa: Oct 2004. Vol. 7, Iss. 6, p. 11. Used with permission.

### IN THEIR OWN WORDS BOXES

A unique series of brief essays are written by distinguished scholars and by Canadian practitioners on key topics in the text. To name just a few, these include essays by Merton Miller on capital structure, Geoff Martin on the technology bubble, and Gérard Bérubé on corporate governance.

**ENHANCED! REAL-WORLD EXAMPLES** There are many current examples integrated throughout the text, tying chapter concepts to real life through illustration and reinforcing the relevance of the material. For added reinforcement, some tie into the chapter-opening vignettes.



**EXPANDED! WEB LINKS** We have added many additional website references, a key research tool directing students to websites that tie into the chapter material.

### NEW! INTEGRATIVE MINI CASES

These longer problems seek to integrate a number of topics from within the chapter. The Mini Cases allow students to test and challenge their abilities to solve real-life situations for each of the key sections of the text material.

MINI CASE

**Cost of Capital and Dividend Policy for Hubbard Computer, Inc.**

You have recently been hired by Hubbard Computer, Inc. (HCI), in its relatively new treasury management department. HCI was founded eight years ago in Edmonton, Alberta, by Bill Hubbard and currently operates 74 stores across Canada. The company is privately owned by Bill and his family; it had sales of \$97 million last year.

HCI primarily sells to customers who shop in the stores. Customers come to the store and talk with a sales representative. The sales representative assists the customer in determining the type of computer and peripherals that will meet the individual customer's computing needs. After the order is taken, the customer pays for the order immediately, and a computer is custom-made to fill the order. Delivery of the computer averages within 15 days, and it is guaranteed within 30 days.

HCI's growth to date has come from its profits. When the company had sufficient capital, it would open a new store. Other than scouting locations, relatively little formal analysis has been used in its capital budgeting process. Bill Hubbard has just read about capital budgeting techniques and has come to you for help. For starters, the company has never attempted to determine its cost of capital, and Bill would like you to perform that analysis. Since the company is privately owned, it is difficult to determine the cost of equity for the company. Bill wants you to use the pure play approach to estimating the cost of capital for HCI, and he has chosen Dell as a representative company. The following steps will enable you to calculate this estimate

- quarterly or annual report and download the form. Look on the balance sheet to find the book value of debt and the book value of equity. If you look farther down the report, you should find a section titled "Long-term Debt and Interest Rate Risk Management" that will provide a breakdown of Dell's long-term debt.
- To estimate the cost of equity for Dell, go to [finance.yahoo.com](http://finance.yahoo.com) and enter the ticker symbol DELL. Follow the links to answer the following questions: What is the most recent stock price listed for Dell? What is the market value of equity, or market capitalization? How many shares of stock does Dell have outstanding? What is the most recent annual dividend? Can you use the dividend discount model in this case? What is the beta for Dell? Now go back to [www.bankofcanada.ca](http://www.bankofcanada.ca) and follow the "Interest Rates" link. What is the yield on a 3-month Treasury bill? Using the historical market risk premium, what is the cost of equity for Dell using CAPM?
- You now need to calculate the cost of debt for Dell. Although it is much more reliable and current to use market values when calculating the cost of debt, this problem asks for the book values for simplicity. Go to [www.dell.com](http://www.dell.com) and download the most recent annual report. What is the weighted average cost of debt for Dell, using the book value?
- You now have all the necessary information to calculate the weighted average cost of capital for Dell. Calculate the weighted average cost of capital for Dell, assuming Dell has a 37 percent marginal tax rate.

**S&P PROBLEMS** At the end of each chapter there are student exercises using the **Education Version of Standard & Poor's Market Insight**. This Web-based resource, which is available with each new copy of the text, contains a wealth of current and past financial statement data plus stock price history, as well as more descriptive material from a universe of more than 1,000 firms to allow students to engage in sophisticated company and industry analysis.

#### S&P Problems



- Calculating Required Return** A drawback of the dividend growth model is the need to estimate the growth rate of dividends. One way to estimate this growth rate is to use the sustainable growth rate. Look back at Chapter 4 and find the formula for the sustainable growth rate. Using the annual income statement and balance sheet, calculate the sustainable growth rate for MDS Inc. (MDZ). Find the most recent closing monthly stock price under the "Mthly. Adj. Prices" link. Using the growth rate you calculated, the most recent dividend per share, and the most recent stock price, calculate the required return for MDS shareholders. Does this number make sense? Why or why not?
- Calculating Growth Rates** Coca-Cola (KO) is a dividend-paying company. Recently, dividends for Coca-Cola have increased at about 5.5 percent per year. Find the most recent closing monthly stock price under the "Mthly. Adj. Prices" link. Locate the most recent annual dividend for KO and calculate the dividend yield. Using your answer and the 5.5 percent dividend growth rate, what is the required return for shareholders? Suppose instead that you know that the required return is 13 percent. What price should Coca-Cola stock sell for now? What if the required return is 15 percent?



**EXPANDED! INTERNET APPLICATION QUESTIONS** Many new questions, relevant to the topic discussed in each chapter, are presented for the students to explore using the Internet. From the *Fundamentals of Corporate Finance* website [www.mcgrawhill.ca/olc/ross](http://www.mcgrawhill.ca/olc/ross), students will find direct links to the websites included in these questions.

Each chapter concludes with a short, annotated list of books and articles that the interested reader may refer to for additional information.



## Study Aids

We want students to get the most from this book and their course, and we realize that students have different learning styles and study needs. We therefore present a number of study features to appeal to as wide a range of students as possible.

**CONCEPT BUILDING** Chapter sections are intentionally kept short to promote a step-by-step, building block approach to learning. Each section is then followed by a series of short concept questions that highlight the key ideas just presented. Students use these questions to make sure they can identify and understand the most important concepts as they read.

### CONCEPT QUESTIONS

1. What are the five groups of ratios? Give two or three examples of each kind.
2. Turnover ratios all have one of two figures as numerators. What are they? What do these ratios measure? How do you interpret the results?
3. Profitability ratios all have the same figure in the numerator. What is it? What do these ratios measure? How do you interpret the results?

**NUMBERED EXAMPLES** Separate numbered and titled examples are extensively integrated into the chapters. These examples provide detailed applications and illustrations of the text material in a step-by-step format. Each example is completely self-contained so students don't have to search for additional information. Based on our classroom testing, these examples are among the most useful learning aids because they provide both detail and explanation.

### EXAMPLE 3.1: Current Events

Suppose a firm were to pay off some of its suppliers and short-term creditors. What would happen to the current ratio? Suppose a firm buys some inventory for cash. What happens in this case? What happens if a firm sells some merchandise?

The first case is a trick question. What happens is that the current ratio moves away from 1. If it is greater than 1 (the usual case), it gets bigger; but if it is less than 1, it gets smaller. To see this, suppose the firm has \$4 in current assets and \$2 in current liabilities for a current ratio of 2. If we use \$1 in cash to reduce current liabilities, then the new current ratio is

assets and \$4 in current liabilities, the current ratio would fall to 1/3 from 1/2.

The second case is not quite as tricky. Nothing happens to the current ratio because cash goes down while inventory goes up—total current assets are unaffected.

In the third case, the current ratio would usually rise because inventory is normally shown at cost and the sale would normally be at something greater than cost (the difference is the markup). The increase in either cash or receivables is therefore greater than the decrease in inventory. This

**KEY TERMS** Within each chapter, key terms are highlighted in **boldface** type the first time they appear. Key terms are defined in the text, and also in a running glossary in the margins of the text for quick reminders. For reference there is a comprehensive list of key terms at the end of each chapter and a full glossary at the back of the textbook with page references for each term.

## SUMMARY TABLES

These tables succinctly restate key principles, results, and equations. They appear whenever it is useful to emphasize and summarize a group of related concepts.

**TABLE 4.9**

Summary of internal and sustainable growth rates from Hoffman Company example

### I. INTERNAL GROWTH RATE

$$\text{Internal growth rate} = \frac{\text{ROA} \times R}{1 - \text{ROA} \times R} = \frac{.132 \times 2/3}{1 - .132 \times 2/3} = 9.65\%$$

where

$$\text{ROA} = \text{Return on assets} = \text{Net income/Total assets} = 13.2\%$$

$$R = \text{Plowback (retention) ratio} = 2/3$$

$$= \text{Addition to retained earnings/Net income}$$

The internal growth rate is the maximum growth rate that can be achieved with no external financing of any kind.

### II. SUSTAINABLE GROWTH RATE

$$\text{Sustainable growth rate} = \frac{\text{ROE} \times R}{1 - \text{ROE} \times R} = \frac{0.264 \times (2/3)}{1 - 0.264 \times (2/3)} = 21.3\%$$

where

$$\text{ROE} = \text{Return on equity} = \text{Net income/Total equity} = 26.4\%$$

$$R = \text{Plowback (retention) ratio} = 2/3$$

$$= \text{Addition to retained earnings/Net income}$$

The sustainable growth rate is the maximum growth rate that can be achieved with no external equity financing while maintaining a constant debt/equity ratio.

**KEY EQUATIONS** These are called out in the text and identified by equation number. An Equation Index is available at the end of the book and a Formula Sheet can be found on the Ross Online Learning Centre at [www.mcgrawhill.ca/olc/ross](http://www.mcgrawhill.ca/olc/ross).

**CHAPTER SUMMARY AND CONCLUSION** These paragraphs review the chapter’s key points and provide closure to the chapter.

**CHAPTER REVIEW PROBLEMS AND SELF-TEST** Appearing after the Summary and Conclusions and Key Terms, each chapter includes Chapter Review Problems and a Self-Test section. These questions and answers allow students to test their abilities in solving key problems related to the chapter content and provide instant reinforcement.

**Concepts Review and Critical Thinking Questions**

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| <ol style="list-style-type: none"> <li>1. Why do you think most long-term financial planning begins with sales forecasts? Put differently, why are future sales the key input?</li> <li>2. Would long-range financial planning be more important for a capital intensive company, such as a heavy equipment manufacturer, or an import-export business? Why?</li> <li>3. Testaburger, Ltd., uses no external financing and maintains a positive retention ratio. When sales grow by 15 percent, the firm has a negative projected EFN. What does this tell you about the firm’s internal growth rate? How about the sustainable growth rate? At this same level of sales growth, what will happen to the projected EFN if the retention ratio is increased? What if the retention ratio is decreased? What happens to the projected EFN if the firm pays out all of its earnings in the form of dividends?</li> <li>4. Broslofski Co. maintains a positive retention ratio and keeps its debt-equity ratio constant every year. When sales grow by 20 percent, the firm has a negative projected EFN. What does this tell you about the firm’s sustainable growth rate? Do you know, with certainty, if the internal growth rate is greater than or less than 20 percent? Why? What happens to the projected EFN if the retention ratio is increased? What if the retention ratio is decreased? What if the retention ratio is zero?<br/>Use the following information to answer the next six questions: A small business called The Grandmother Calendar Company began selling personalized photo calendar kits in 1992. The kits were a hit, and sales soon sharply exceeded forecasts. The rush of orders created a huge backlog, so the company leased</li> </ol> | <p>more space and expanded capacity, but it still could not keep up with demand. Equipment failed from overuse and quality suffered. Working capital was drained to expand production, and, at the same time, payments from customers were often delayed until the product was shipped. Unable to deliver on orders, the company became so strapped for cash that employee paycheques began to bounce. Finally, out of cash, the company ceased operations entirely in January 1995.</p> <ol style="list-style-type: none"> <li>5. Do you think the company would have suffered the same fate if its product had been less popular? Why or why not?</li> <li>6. The Grandmother Calendar Company clearly had a cash flow problem. In the context of the cash flow analysis we developed in Chapter 2, what was the impact of customers not paying until orders were shipped?</li> <li>7. The firm actually priced its product to be about 20 percent less than that of competitors, even though the Grandmother calendar was more detailed. In retrospect, was this a wise choice?</li> <li>8. If the firm was so successful at selling, why wouldn’t a bank or some other lender step in and provide it with the cash it needed to continue?</li> <li>9. Which is the biggest culprit here: too many orders, too little cash, or too little production capacity?</li> <li>10. What are some of the actions that a small company like The Grandmother Calendar Company can take if it finds itself in a situation in which growth in sales outstrips production capacity and available financial resources? What other options (besides expansion of capacity) are available to a company when orders exceed capacity?</li> </ol> |
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**CONCEPTS REVIEW AND CRITICAL THINKING QUESTIONS**

This section facilitates students’ knowledge of key principles, and their intuitive understanding of chapter concepts. A number of the questions relate to the chapter-opening vignette—reinforcing students’ critical-thinking skills and the learning of chapter material.

**QUESTIONS AND PROBLEMS** We have found that many students learn better when they have plenty of opportunity to practice; therefore, we provide extensive end-of-chapter questions and problems. The end-of-chapter support greatly exceeds what is typical in an introductory textbook. The questions and problems are labelled by topic and are separated into three learning levels: Basic, Intermediate, and Challenge. Throughout the text, we have worked to supply interesting problems that illustrate real-world applications of chapter material. Answers to selected end-of-chapter material appear in Appendix B.

As described earlier in this Preface (see page xxii), students’ learning and understanding of the chapter content is further supported by the following end-of-chapter materials:

- **S&P Problems**
- **Internet Application Questions**
- **Mini Cases**
- **Suggested Readings**

## TECHNOLOGY SOLUTIONS

### LYRYX FOR FINANCE

Lyryx Assessment for Finance is a leading-edge online assessment system, designed to support both students and instructors. The assessment takes the form of a homework assignment called a Lab. The assessments are algorithmically generated and automatically graded so that students get instant grades and feedback. New Labs are randomly generated each time, providing the student with unlimited opportunities to try a type of question. After they submit a Lab for marking, students receive extensive feedback on their work, thus promoting their learning experience.

**Lyryx** for the student offers algorithmically generated and automatically graded assignments. Students get instant grades and instant feedback—no need to wait until the next class to find out how well they did! Grades are instantly recorded in a grade book that the student can view.

Students are motivated to do their Labs for two reasons: first because the results can be tied to assessment, and second, because they can try the Lab as many times as they wish prior to the due date, with only their best grade being recorded.

Instructors know from experience that if students do their finance homework, they will be successful in the course. Recent research regarding the use of Lyryx has shown that when Labs are tied to assessment, even if worth only a small percentage of the total grade of the course, students **WILL** do their homework—and **MORE THAN ONCE!**

Please contact your *i*Learning Sales Specialist for additional information on the Lyryx Assessment Finance system. Visit <http://lyryx.com>.



### *i*STUDY

PREPARED BY KURT LOESCHER, UNIVERSITY OF SASKATCHEWAN

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BY MARK A. WHITE

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Through the development of this edition, we have taken great care to discover and eliminate errors. Our goal is to provide the best Canadian textbook available on the subject. Forward your comments to: Professor Gordon S. Roberts, Schulich School of Business, York University, 4700 Keele Street, Toronto, Ontario M3J 1P3. Or, email your comments to [groberts@schulich.yorku.ca](mailto:groberts@schulich.yorku.ca).

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