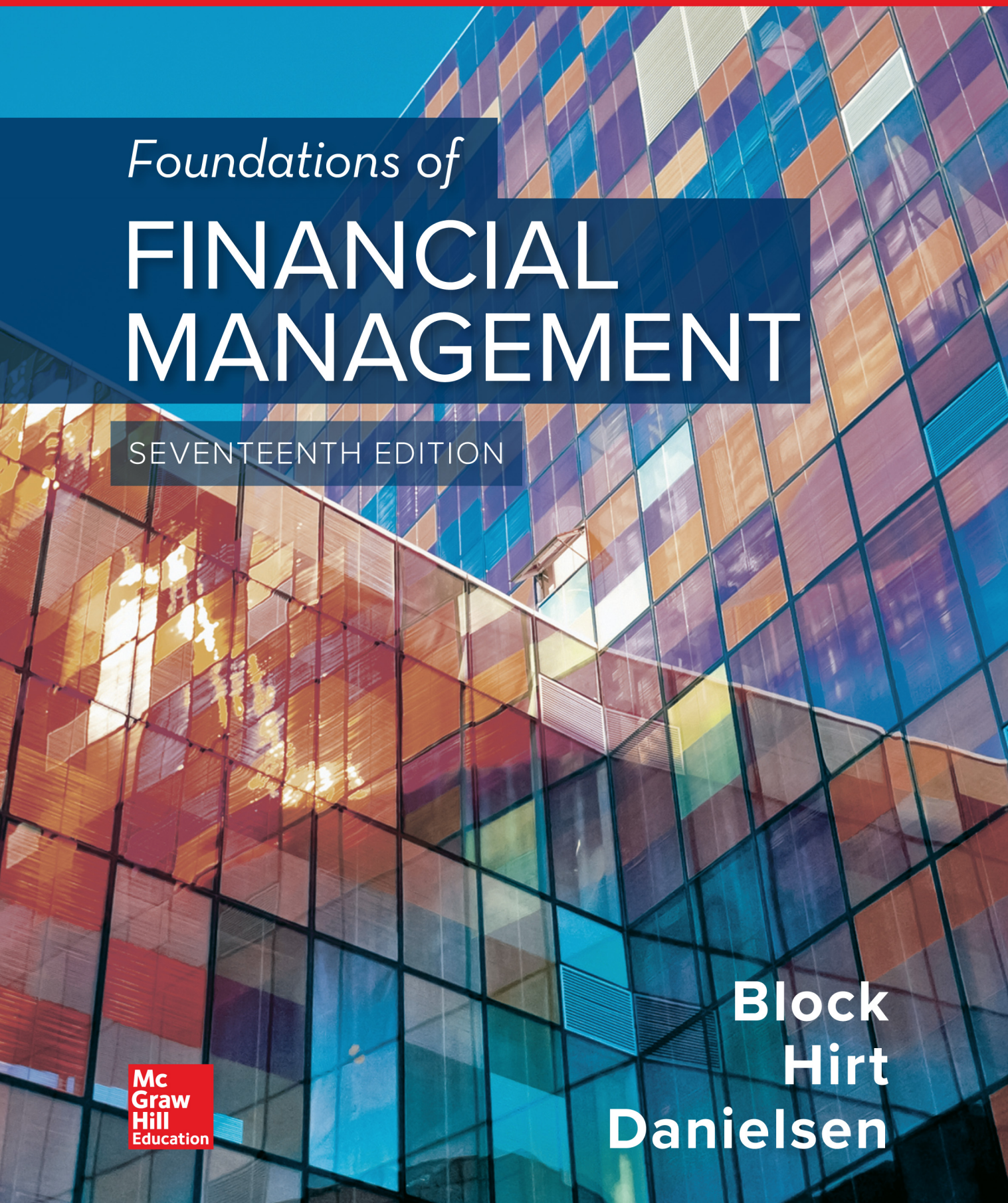
Includes Coverage of the Tax Cuts and Jobs Act



Foundations of FINANCIAL MANAGEMENT

SEVENTEENTH EDITION

Block
Hirt
Danielsen

Mc Graw Hill Education

Foundations of
Financial Management

SEVENTEENTH EDITION

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Preface

Forty-two years have passed since we began writing the first edition of this text, and many things have changed during that time including the author team.

First of all, the field of finance has become much more analytical, with the emphasis on decision-oriented approaches to problems rather than the old, descriptive approach. We have increased the use of analytical approaches to financial problems in virtually every chapter of the book. But we also have stayed with our basic mission of making sure students are able to follow us in our discussions throughout the text. While the 17th edition is considerably more sophisticated than the initial edition, it is still extremely "reader friendly." As the analytical skills demanded of students have increased, so has the authors' care in presenting the material.

Using computers and calculators has become considerably more important over the last quarter century, and this is also reflected in the 17th edition where we have added Excel tables and calculator keystroke solutions within key chapters. We offer Web Exercises at the end of every chapter, URL citations throughout the text, a library of course materials for students and faculty, computerized testing software and PowerPoint® for the faculty, *Connect*, an online assignment and assessment solution, and LearnSmart with SmartBook, a truly innovative adaptive study tool and eBook.

Throughout the past 42 years, this text has been a leader in bringing the real world into the classroom, and this has never been more apparent than in the 17th edition. Each chapter opens with a real-world vignette, and the Finance in Action boxes (found in virtually every chapter) describe real-world activities and decisions made by actual businesses. We are also up-to-date on the latest tax and financial reporting legislation including the 2017 Tax Cuts and Jobs Act.

The international world of finance has become much more important and the text has expanded its international coverage tenfold since the first edition. Where there is an international application for a financial issue, you are very likely to find it in this text.

Furthermore, the 17th edition continues to give modest coverage to the recession and liquidity crisis that has engulfed the U.S. and world economies in the latter part of the 2000–2009 decade (and into the current decade). Special attention is given to the banking sector and the critical need for funding that almost all businesses face. The issue of changing regulations is also covered.

However, there is one thing that has not changed over the last 42 years—we still write the entire book and all of the problems ourselves! We believe

our devotion of time, energy, and commitment over these years is the reason for our reputation for having produced a high-quality and successful text—edition after edition.

Reinforcing Prerequisite Knowledge

Employers of business graduates report that the most successful analysts, planners, and executives are both effective and confident in their financial skills. We concur. One of the best ways to increase your facility in finance is to integrate your knowledge from prerequisite courses. Therefore, the text is designed to build on your basic knowledge from courses in accounting and economics. By applying tools learned in these courses, you can develop a conceptual and analytical understanding of financial management.

We realize, however, that for some students time has passed since you have completed your accounting courses. Therefore, we have included Chapter 2, a thorough review of accounting principles, finance terminology, and financial statements. With a working knowledge of Chapter 2, you will have a more complete understanding of the impact of business decisions on financial statements. Furthermore, as you are about to begin your career you will be much better prepared when called upon to apply financial concepts.

Content Improvements

In general, tables and figures with real-world numbers have been updated or replaced, and the discussions concerning those tables and figures have been rewritten accordingly.

Chapter-by-Chapter Changes

Chapter 1 Coverage of behavioral finance has been enhanced with the inclusion of Richard Thaler's Nobel Prize in Economic Sciences as well as Eugene Fama's Nobel Prize for his work on the efficient market hypothesis. The section "Forms of Organization" includes the impact of the 2017 Tax Cuts and Jobs Act on all types of organizations, including C corporations, S corporations, and all forms of pass-through structures such as sole proprietorships, partnerships, and limited liability companies. Both the Finance in Action box on endangered public companies and the FIA box on 3M were revised. The Web Exercise was also revised to make it consistent with the current website.

Chapter 2 All of the tables have been updated or revised. The discussion of how depreciation, taxes, and cash flows are linked has been clarified. The Finance in Action box describing corporate "tax inversions" has been significantly revised with reference to the 2017 Tax Cuts and Jobs Act and includes a graphic of worldwide corporate tax rates from the OECD. The section "Income Tax Considerations" includes an updated discussion of the 2017 Tax Cuts and Jobs Act, including its impact on the cost of a tax-deductible expense, depreciation as a tax shield, and the resultant cash flow. The PepsiCo Web Exercise has been updated.

Chapter 3 The introduction comparing Colgate-Palmolive with Procter & Gamble has been revised and updated. Tables 3-4, 3-5, 3-6, and 3-8 have been revised

to be more consistent with the new corporate tax rates. Abercrombie & Fitch has been replaced with Target in the Du Pont model and in the comparison to Walmart Stores Inc. The discussion of liquidity ratios has been revised. The Apple and IBM ratio comparisons have been updated with new numbers. The discussion on deflation has been revised to bring it up to date with the current economic environment. The IBM Web Exercise has been revised.

Chapter 4 The introduction has been updated as well as the Finance in Action box describing the interaction of Tesla's marketing and financial forecasting activities. The section "Percentage-of-Sales Method" has been slightly revised to bring more clarity to the discussion. The Web Exercise on Barnes & Noble has been updated and revised.

Chapter 5 The introduction discussing the airline industry and the cost of oil has been updated with new data. The discussion of the degree of operating leverage replaces Dow Chemical with American Airlines. A new Finance in Action box using Apple to demonstrate leverage replaces the old FIA box on the Intel Corporation. The Web Exercise on United Airlines has been updated and revised.

Chapter 6 The FIA box on RFID technology has been updated. Figure 6-2 featuring Briggs & Stratton has been revised with new data and the discussion describing the cyclicality has been modified. Figure 6-3 comparing seasonal sales and earnings per share of Macy's and Target has been updated with new data and the analysis is revised to be consistent with the new figure. Figures 6-9, 6-10, and 6-11 and all of the data and discussion about yield curves, interest rates, working capital, and current ratios have been updated, including the Web Exercise at the end of the problem set.

Chapter 7 The FIA box on working capital has been updated. The section discussing a lockbox system has been expanded. Figure 7-4 and the discussion of SWIFT have been revised. Table 7-1 has been updated with 2018 data. For a change of pace and a little fun, a new FIA box features the inventory control system in the International Space Station. The Web Exercise has been revised to work with the new website at the B2B company Perfect Commerce.

Chapter 8 The chapter introduction featuring Yum! Brands credit agreements has been updated to reflect new agreements. Figures 8-1 and 8-2 as well as Table 8-1 have been revised with new data and discussion of interest rates and commercial paper. The Finance in Action box on the LIBOR price-fixing scandal has been revised, as has the FIA box on LendingClub's initial public offering. The Web Exercise on General Electric Capital has been significantly revised, given GE's exit from many of its previous activities.

Chapter 9 The calculator appendix previously found at the end of Chapter 10 has been moved to Chapter 9 and is Appendix 9C. The FIA box has been rewritten to include the August 2017 Powerball jackpot winner of $758 million.

Chapter 10 The introduction to the chapter featuring Coca-Cola has been revised. Table 10-4 has been updated and the discussion describing the table has been revised. The Web Exercise featuring ExxonMobil has been revised to coincide with changes to the website.

Chapter 11 Table 11-2 and the corresponding financial calculator example on yield to maturity has been revised with new numbers using the Goal Seek function in Excel's RATE function. The information in Table 11-3 has been replaced with new data. And the cost of debt capital example has been changed to be more consistent with a lower tax rate. Table 11-4 on long-term debt has been updated. The numbers in the cost of common equity have changed. The practice problems and most of the homework problems have been revised to reflect 25 percent and 21 percent tax rates. The Web Exercise has been changed to be consistent with changes in Intel's website.

Chapter 12 The section on accounting versus cash flows has been updated to reflect the impact of lower tax rates. The section on the rules of depreciation is new with a discussion of how the 2017 Tax Cuts and Jobs Act modified the rules. The section "The Tax Rate" is new and includes the impact of the 2017 Tax Cuts and Jobs Act and how state tax rates can affect the average tax rate. Table 12-14 on cash flow related to the purchase of machinery has been revised as well as Table 12-15 on net present value. The whole section on the replacement decision now reflects lower tax rates and has been comprehensively revised, including all tables. The section on elective expensing has been rewritten to reflect the new 2018 tax code. The practice problem sets and many of the homework problems have been updated with lower tax rates. The Web Exercise featuring Texas Instruments has been updated.

Chapter 13 The introduction on Apache Corp. has been updated. Table 13-2 has been updated with new information and the Web Exercise is changed to be consistent with Alcoa's website.

Chapter 14 The entire section on international capital markets has been rewritten and updated with Figure 14-1 being new and Table 14-1 updated. Figure 14-2 now has two panels analyzing internally generated funds and the relationship between earnings, dividends, retained earnings, and depreciation. Modest updates were made on the U.S. markets and Table 14-2 covering foreign stock exchanges now examines markets by geographical regions.The Web Exercise has been revised to coincide with changes to the NYSE website.

Chapter 15 The introduction has been rewritten and Table 15-1 is populated with new IPO data from 2014 through January 2018. Table 15-1 includes IPOs from Saudi Arabia, Italy, Hong Kong, India, Brazil, and the United States. The global ranking of investment bankers has been updated to include 2016 versus 2017. Table 15-3 now focuses on the leading investment banker by fees generated rather than revenue generated and is current through 2017. It also ranks the leaders by category, by regions, and by industries. Table 15-4 has been added and focuses on fees and number of deals by the four areas of M&A, equity offerings, bond offerings, and loans for the four quarters in 2017. Table 15-7 updates the information of debt and equity capital markets book-runner rankings. The Web Exercise has been updated.

Chapter 16 All tables and real-world examples have been updated. Material linking the time series of Walmart's leverage levels and times-interest-earned ratios to changes in long-term interest rates over the last two decades has been updated.

Figure 16-3 has been updated to include the last three years of data. A new Finance in Action box featuring bonds issued by Inter Milan has replaced the old box on Alibaba bonds. Perhaps the most significant change to the chapter is an entirely new section, "Leasing as a Form of Debt," that was driven by the 2017 Tax Cuts and Jobs Act. Appendix 16B on lease-versus-purchase has been deleted. As in the other chapters, the Web Exercise has been updated.

Chapter 17 The introductory example of TowerJazz has been updated and modified and the name changed to Tower Semiconductor. All the information in Table 17-1 has been updated. The Finance in Action box on Hewlett-Packard has been replaced with a new FIA box on Facebook with a focus on corporate governance and a comparison of Facebook with Apple and 3M on stewardship, environment, social, and governance. Table 17-2 on rights offerings has been updated with new data. Table 17-3 has been replaced with new data and expanded to include deposit receipts by major world markets. Finally, the impact of the 2017 Tax Cuts and Jobs Act on preferred stock has been included, as it significantly changes the tax treatment by corporations owning preferred stock of other companies. The Web Exercise on 3M has been revised.

Chapter 18 The introduction has been amended to include the purchase of SAB-Miller by Anheuser-Busch. Table 18-1 has been updated with new numbers, as has the Finance in Action box on dividend aristocrats. Figure 18-2 now features the Standard & Poors 500 Index for dividends, retained earnings, and total profit, and the text describing Figure 18-2 has been significantly revised. The new tax rates for the Tax Cuts and Jobs Act of 2017 are now presented in Table 18-3. The impact of the new tax law on capital gains and dividends is discussed. Because the 2017 Tax Cuts and Jobs Act will allow companies to repatriate over $1 trillion of cash held overseas, Table 18-8 features companies announcing stock repurchases in December of 2017 after the tax act was passed. The amount totals over $100 billion. An entirely new Facebook Web Exercise is presented.

Chapter 19 The introduction replaces AAR Corp. with BioMarin Pharmaceutical. Tables 19-1, 19-2, 19-3, and 19-5 have all been revised with new companies and data. The discussions pertaining to each table have been modified to focus on the impact of the new data. The Web Exercise has been revised to coincide with the CBOE website.

Chapter 20 The introduction includes an update on Berkshire Hathaway's purchase of Pilot Flying J. Table 20-1 has been updated to present the largest mergers from 2010 to 2018. Figure 20-1 presents mergers and acquisitions in North America from 1985 to 2017. Information on tax inversions has been changed to recognize that the 2017 Tax Cuts and Jobs Act makes tax inversions unnecessary. The example of a tax loss carry-forward has been modified to reflect a lower corporate tax rate. The section on hostile merger takeover activities uses the Broadcom attack on Qualcomm as an example and Figure 20-3 shows the decline in hostile merger and acquisition activity between 1985 and 2017. The Web Exercise on Berkshire Hathaway has been modified.

Chapter 21 International financial management tables and figures of exchange rates and currency cross rates have been updated with current data. The hedging examples using forward and futures contracts have been updated with the text reflecting the new data found in the currency cross rates Table 21-2. The Finance in Action box on how Coca-Cola manages currency risk has been updated. The impact of the 2017 tax law on the deferral of taxes on foreign earnings is discussed. The Finance in Action box on political risk in Argentina has been updated.

Successful improvements from the previous editions that we have built on in the 17th edition include:

Functional Integration We have taken care to include examples that are not just applicable to finance students but also to marketing, management, and accounting majors.

Small Business Since over two-thirds of the jobs created in the U.S. economy are from small businesses, we have continued to note when specific financial techniques are performed differently by large and small businesses.

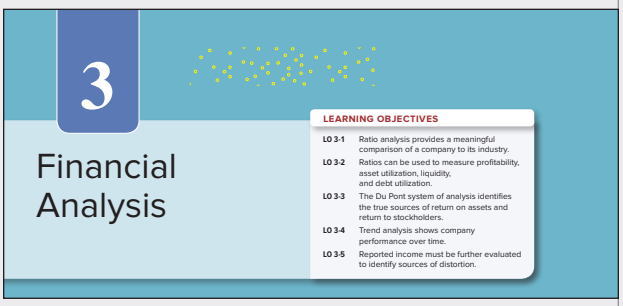
Comprehensive International Coverage We have updated and expanded coverage of international companies, markets, and events throughout the text.

Contemporary Coverage The 17th edition continues to provide updated real-world examples, using companies easily recognized by students to illustrate financial concepts presented in the text.

Chapter Features

Integration of Learning Objectives to Discussion Questions and Problems

The Learning Objectives (LOs) presented at the beginning of each chapter serve as a quick introduction to the material students will learn and should understand fully before moving to the next chapter. Every discussion question and problem at the end of each chapter refers back to the learning objective to which it applies. This allows instructors to easily emphasize the Learning Objective(s) as they choose.



3

Financial Analysis

LEARNING OBJECTIVES

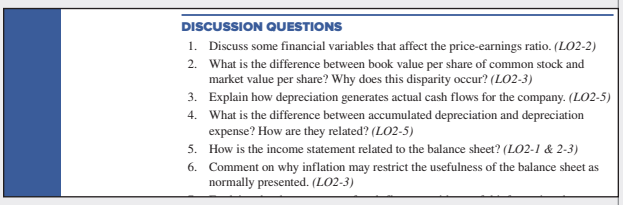
LO 3-1 Ratio analysis provides a meaningful comparison of a company to its industry.

LO 3-2 Ratios can be used to measure profitability, asset utilization, liquidity, and debt utilization.

LO 3-3 The Du Pont system of analysis identifies the true sources of return on assets and return to stockholders.

LO 3-4 Trend analysis shows company performance over time.

LO 3-5 Reported income must be further evaluated to identify sources of distortion.

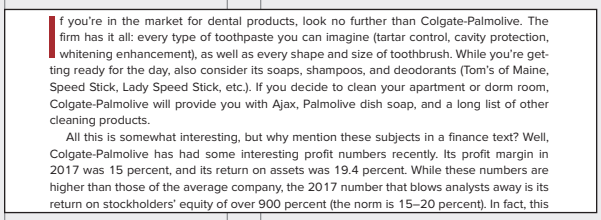


DISCUSSION QUESTIONS

1. Discuss some financial variables that affect the price-earnings ratio. *(LO2-2)*
2. What is the difference between book value per share of common stock and market value per share? Why does this disparity occur? *(LO2-3)*
3. Explain how depreciation generates actual cash flows for the company. *(LO2-5)*
4. What is the difference between accumulated depreciation and depreciation expense? How are they related? *(LO2-5)*
5. How is the income statement related to the balance sheet? *(LO2-1 & 2-3)*
6. Comment on why inflation may restrict the usefulness of the balance sheet as normally presented. *(LO2-3)*

Chapter Opening Vignettes

We bring in current events (such as business-to-business online ventures and competition among air carriers) as chapter openers to illustrate the material to be learned in the upcoming chapter.

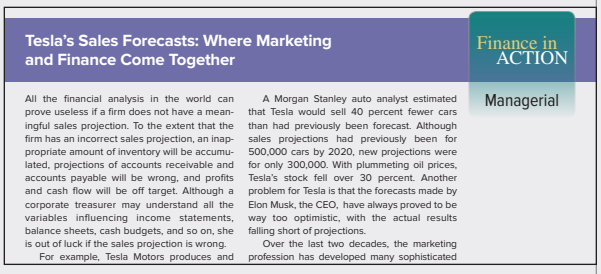


If you're in the market for dental products, look no further than Colgate-Palmolive. The firm has it all: every type of toothpaste you can imagine (tartar control, cavity protection, whitening enhancement), as well as every shape and size of toothbrush. While you're getting ready for the day, also consider its soaps, shampoos, and deodorants (Tom's of Maine, Speed Stick, Lady Speed Stick, etc.). If you decide to clean your apartment or dorm room, Colgate-Palmolive will provide you with Ajax, Palmolive dish soap, and a long list of other cleaning products.

All this is somewhat interesting, but why mention these subjects in a finance text? Well, Colgate-Palmolive has had some interesting profit numbers recently. Its profit margin in 2017 was 15 percent, and its return on assets was 19.4 percent. While these numbers are higher than those of the average company, the 2017 number that blows analysts away is its return on stockholders' equity of over 900 percent (the norm is 15–20 percent). In fact, this

Expanded! Finance in Action Boxes

These boxed readings highlight specific topics of interest that relate to four main areas: managerial decisions, global situations, technology issues, and ethics. The inclusion of ethics is relevant given the many recent corporate scandals and the resulting governance issues. Web addresses are included in applicable boxes for easy access to more information on that topic or company.



Tesla's Sales Forecasts: Where Marketing and Finance Come Together

Finance in ACTION

Managerial

All the financial analysis in the world can prove useless if a firm does not have a meaningful sales projection. To the extent that the firm has an incorrect sales projection, an inappropriate amount of inventory will be accumulated, projections of accounts receivable and accounts payable will be wrong, and profits and cash flow will be off target. Although a corporate treasurer may understand all the variables influencing income statements, balance sheets, cash budgets, and so on, she is out of luck if the sales projection is wrong.

For example, Tesla Motors produces and

A Morgan Stanley auto analyst estimated that Tesla would sell 40 percent fewer cars than had previously been forecast. Although sales projections had previously been for 500,000 cars by 2020, new projections were for only 300,000. With plummeting oil prices, Tesla's stock fell over 30 percent. Another problem for Tesla is that the forecasts made by Elon Musk, the CEO, have always proved to be way too optimistic, with the actual results falling short of projections.

Over the last two decades, the marketing profession has developed many sophisticated

$$FV_A = \$1{,}000\left[\frac{(1+0.10)^4-1}{0.10}\right] = \$4{,}641$$

Because this problem involves an annuity rather than a single payment, when solving with a financial calculator, the value that we enter for the PMT key is −$1,000. Now we enter a zero for the PV key. As we computed earlier using the future value of an annuity equation, we find that when the interest rate is 10%, the future value of a 4-year, $1,000 annuity is $4,641.

Excel's **FV** function can also produce the future value of an annuity stream. The **FV** function assumes that each payment is at the end of a period as shown in the previous timeline. The annuity amount is entered as the **pmt** argument. The function in cell D1 uses cell references for the arguments in cells B1 to B4. The function in cell D5 uses hard-coded values. The values produced by the **FV** function are identical to the calculator solution, but hardcoded solutions should be avoided in preference to cell referenced solutions.

FINANCIAL CALCULATOR

FV of Annuity

Enter	*Function*
4	N
10	I/Y
−1000	PMT
0	PV
Function	*Solution*
CPT	
FV	4,641.00

	A	B	C	D	E	F
1	rate	10.00%		=FV(B1,B2,B3,B4)		
2	nper	4.00		FV(rate, nper, pmt, [pv], [type])		
3	pmt	−1000		$4,641.00		
4	pv	0				
5				=+FV(0.1,4,−1000,0)		
6				FV(rate, nper, pmt, [pv], [type])		
7				$4,641.00		

Excel, Calculator Solutions, and Formulas

In Chapters 9, 10, and 12, the authors have included discussions on how the examples are solved using Excel, financial calculators, and formulas. Newly formatted spreadsheet tables and screen captures detail the step-by-step method to solve the examples. The financial calculator keystrokes in the margins give instructors and students additional flexibility. The material can be presented using traditional methods without loss of clarity because the margin content supplements the prior content, which has been retained. The book and solutions manual provide Excel, calculator, and formula explanations for these very important calculations.

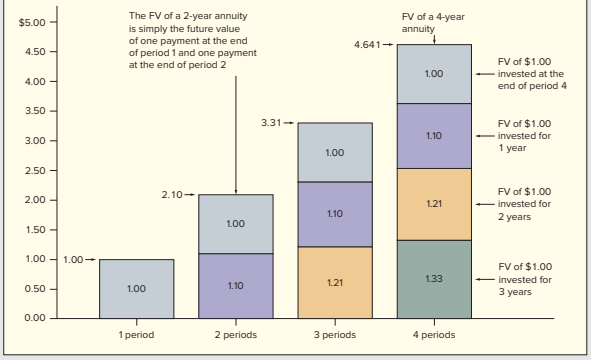
Table 5-3 Volume-cost-profit analysis: Conservative firm

Units Sold	Total Variable Costs	Fixed Costs	Total Costs	Total Revenue	Operating Income (Loss)
0	$ 0	$12,000	$ 12,000	$ 0	$(12,000)
20,000	32,000	12,000	44,000	40,000	(4,000)
30,000	48,000	12,000	60,000	60,000	0
40,000	64,000	12,000	76,000	80,000	4,000
60,000	96,000	12,000	108,000	120,000	12,000
80,000	128,000	12,000	140,000	160,000	20,000
100,000	160,000	12,000	172,000	200,000	28,000

Pulling It Together with Color

Throughout the 17th edition, the authors make color an integral part of the presentation of finance concepts. Color is applied consistently across illustrations, text, and examples in order to enhance the learning experience. We hope that the color in this edition assists your understanding and retention of the concepts discussed.

Figure 9-6 Future value of $1.00 at 10%



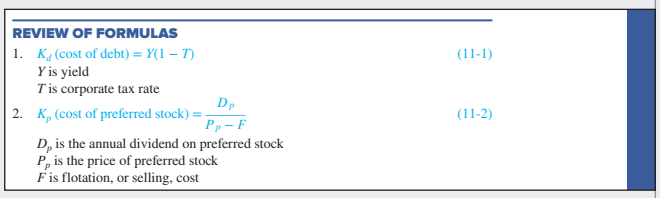
Digital Illustrations of Time Value of Money (Chapter 9)

The concept of the "time value of money" is one of the most difficult topics in any financial management course for professors to communicate to students. We think we have created a visual method for teaching future value and present value of money that will help you understand the concept simply and quickly. The 17th edition includes new interactive digital illustrations of four key figures in the text that visually relate future values and present values. We hope you agree that this visual presentation helps those students who are less comfortable with the math.

End-of-Chapter Features

Review of Formulas

At the end of every chapter that includes formulas, we provide a list for easy reviewing purposes.

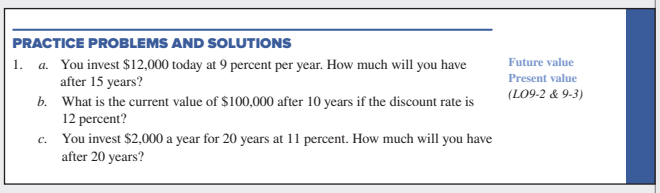


REVIEW OF FORMULAS

1. K_d (cost of debt) $= Y(1 - T)$ (11-1)
   Y is yield
   T is corporate tax rate
2. K_p (cost of preferred stock) $= \dfrac{D_p}{P_p - F}$ (11-2)
   D_p is the annual dividend on preferred stock
   P_p is the price of preferred stock
   F is flotation, or selling, cost

Practice Problems and Solutions

Two practice problems are featured at the end of each chapter. They review concepts illustrated within the chapter and enable the student to determine whether the material has been understood prior to completion of the problem sets. Detailed solutions to the practice problems are found immediately following each problem.



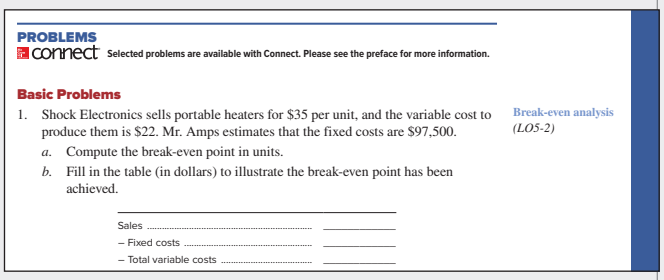
PRACTICE PROBLEMS AND SOLUTIONS

1. *a.* You invest $12,000 today at 9 percent per year. How much will you have after 15 years?
   b. What is the current value of $100,000 after 10 years if the discount rate is 12 percent?
   c. You invest $2,000 a year for 20 years at 11 percent. How much will you have after 20 years?

Future value
Present value
(LO9-2 & 9-3)

Labeled Discussion Questions and Problems

The material in the text is supported by over 250 questions and 475 problems in this edition, to reinforce and test your understanding of each chapter. Care has been taken to make the questions and problems consistent with the chapter material, and each problem is labeled with its topic, learning objective, and level of difficulty to facilitate that link. Every problem and solution has been written by the authors, and all of the quantitative problems are assignable in *Connect*.



PROBLEMS

connect Selected problems are available with Connect. Please see the preface for more information.

Basic Problems

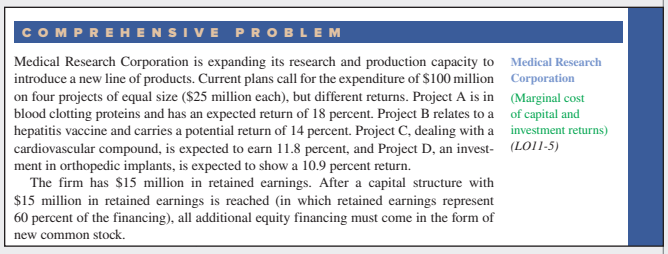
1. Shock Electronics sells portable heaters for $35 per unit, and the variable cost to produce them is $22. Mr. Amps estimates that the fixed costs are $97,500.
   a. Compute the break-even point in units.
   b. Fill in the table (in dollars) to illustrate the break-even point has been achieved.

Sales	
– Fixed costs	
– Total variable costs	

Break-even analysis
(LO5-2)

Comprehensive Problems

Several chapters have comprehensive problems that integrate and require the application of several financial concepts into one problem. Additional comprehensive problems are included in the Instructor's Manual for select chapters.

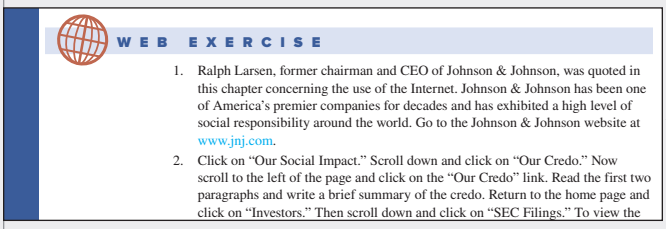


COMPREHENSIVE PROBLEM

Medical Research Corporation is expanding its research and production capacity to introduce a new line of products. Current plans call for the expenditure of $100 million on four projects of equal size ($25 million each), but different returns. Project A is in blood clotting proteins and has an expected return of 18 percent. Project B relates to a hepatitis vaccine and carries a potential return of 14 percent. Project C, dealing with a cardiovascular compound, is expected to earn 11.8 percent, and Project D, an investment in orthopedic implants, is expected to show a 10.9 percent return.

The firm has $15 million in retained earnings. After a capital structure with $15 million in retained earnings is reached (in which retained earnings represent 60 percent of the financing), all additional equity financing must come in the form of new common stock.

Medical Research Corporation
(Marginal cost of capital and investment returns)
(LO11-5)



WEB EXERCISE

1. Ralph Larsen, former chairman and CEO of Johnson & Johnson, was quoted in this chapter concerning the use of the Internet. Johnson & Johnson has been one of America's premier companies for decades and has exhibited a high level of social responsibility around the world. Go to the Johnson & Johnson website at www.jnj.com.
2. Click on "Our Social Impact." Scroll down and click on "Our Credo." Now scroll to the left of the page and click on the "Our Credo" link. Read the first two paragraphs and write a brief summary of the credo. Return to the home page and click on "Investors." Then scroll down and click on "SEC Filings." To view the

Web Exercises

Each chapter includes at least one Web exercise to help pull more relevant real-world material into the classroom. The exercises ask students to go to a specific website of a company and make a complete analysis similar to that demonstrated in the chapter. These exercises provide a strong link between learning chapter concepts and applying them to the actual decision-making process.

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- **Instructor's Manual** Revised by author Geoff Hirt, the manual helps instructors integrate the graphs, tables, perspectives, and problems into a lecture format. Each chapter opens with a brief overview and a review of key chapter concepts. The chapter is then outlined in an annotated format to be used as an in-class reference guide by the instructor.
- **Solutions Manual** Updated by author Bart Danielsen, the manual includes detailed solutions to all of the questions and problems, set in a larger type font to facilitate their reproduction in the classroom. Calculator, Excel, and formula solutions are included for all relevant problems.
- **Test Bank** This question bank includes over 1,500 multiple-choice and true/false questions, with revisions and updates made by Katie Landgraf, University of Hawaii. Updates to the questions correspond to the revisions in the 17th edition. Also included are short answer questions and matching quizzes. The test bank is assignable in *Connect* and EZ Test Online and available as Word files.
- **PowerPoint Presentations** These slides, updated by Leslie Rush, University of Hawaii, contain lecture outlines and selected exhibits from the book in a four-color, electronic format that you can customize for your own lectures.

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- Provides instant practice material and study questions, easily accessible on the go.

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- Applies an intelligent concept engine to identify the relationships between concepts and to serve new concepts to each student only when he or she is ready.
- Adapts automatically to each student, so students spend less time on the topics they understand and practice more those they have yet to master.
- Provides continual reinforcement and remediation but gives only as much guidance as students need.

- Integrates diagnostics as part of the learning experience.
- Enables instructors to assess which concepts students have efficiently learned on their own, thus freeing class time for more applications and discussion.

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1

The Goals and Activities of Financial Management

LEARNING OBJECTIVES

- **LO 1-1** The field of finance integrates concepts from economics, accounting, and a number of other areas.
- **LO 1-2** A firm can have many different forms of organization.
- **LO 1-3** The relationship of risk to return is a central focus of finance.
- **LO 1-4** The primary goal of financial managers is to maximize the wealth of the shareholders.
- **LO 1-5** Financial managers attempt to achieve wealth maximization through daily activities such as credit and inventory management and through longer-term decisions related to raising funds.
- **LO 1-6** The financial turmoil that roiled the markets between 2001 and 2012 resulted in more regulatory oversight of the financial markets.

3M is one of those companies that is more adept than others at creating products, marketing those products, and being financially astute. 3M is the world leader in optical films, industrial and office tapes, and nonwoven fabrics. Consumers may recognize 3M as the maker of Post-it notes, Scotch tape, and sponges, in addition to thousands of other diverse products such as overhead projectors and roofing granules. The company has always been known for its ability to create new products and markets, and, at times, as much as 35 percent of its sales have been generated from products developed in the previous five years. To accomplish these goals, 3M's research and development has to be financed, the design and production functions funded, and the products marketed and sold worldwide. This process involves all the functions of business.

Did you ever stop to think about the importance of the finance function for a $32 billion multinational company like 3M where 60 percent of sales are international? Someone has to manage the international cash flow, bank relationships, payroll, purchases of plant and equipment, and acquisition of capital. Financial decisions must be made concerning the feasibility and profitability of the continuous stream of new products developed through 3M's very creative research and development efforts. The financial manager needs to keep his or her pulse on interest rates, exchange rates, and the tone of the money and capital markets.

To have a competitive multinational company, the financial manager must manage 3M's global affairs and react quickly to changes in financial markets and exchange rate fluctuations. The board of directors and chief executive officer rely on the financial division to provide a precious resource—capital—and to manage it efficiently and profitably. If you would like to do some research on 3M, you can access its home page at www.3m.com. If you would like to understand more about how companies make financial decisions, keep reading.

The Field of Finance

The field of finance is closely related to economics and accounting, and financial managers need to understand the relationships between these fields. Economics provides a structure for decision making in such areas as risk analysis, pricing theory through supply and demand relationships, comparative return analysis, and many other important areas. Economics also provides the broad picture of the economic environment in which corporations must continually make decisions. A financial manager must understand the institutional structure of the Federal Reserve System, the commercial banking system, and the interrelationships between the various sectors of the economy. Economic variables, such as gross domestic product, industrial production, disposable income, unemployment, inflation, interest rates, and taxes (to name a few), must fit into the financial manager's decision model and be applied correctly. These terms will be presented throughout the text and integrated into the financial process.

Accounting is sometimes said to be the language of finance because it provides financial data through income statements, balance sheets, and the statement of cash flows. The financial manager must know how to interpret and use these statements in allocating the firm's financial resources to generate the best return possible in the long run. Finance links economic theory with the numbers of accounting, and all corporate managers—whether in production, sales, research, marketing, management, or long-run strategic planning—must know what it means to assess the financial performance of the firm.

Many students approaching the field of finance for the first time might wonder what career opportunities exist. For those who develop the necessary skills and training, jobs include corporate financial officer, banker, stockbroker, financial analyst, portfolio manager, investment banker, financial consultant, or personal financial planner. As we progress through the text, you will become increasingly familiar with the important role of the various participants in the financial decision-making process. A financial manager addresses such varied issues as decisions on plant location, the raising of capital, or simply how to get the highest return on x million dollars between five o'clock this afternoon and eight o'clock tomorrow morning.

Evolution of the Field of Finance

Like any discipline, the field of finance has developed and changed over time. At the turn of the 20th century, finance emerged as a field separate from economics when large industrial corporations in oil, steel, chemicals, and railroads were created by early industrialists such as Rockefeller, Carnegie, Du Pont, and Vanderbilt. In these early days, a student of finance would spend time learning about the financial instruments that were essential to mergers and acquisitions. By the 1930s, the country was in its worst depression ever, and financial practice revolved around such topics as the preservation of capital, maintenance of liquidity, reorganization of financially troubled corporations, and bankruptcy process. By the mid-1950s, finance moved away from its descriptive and definitional nature and became more analytical. One of the major advances was the decision-oriented process of allocating **financial capital** (money) for the purchase of **real capital** (long-term plant and equipment). The enthusiasm for

more detailed analysis spread to other decision-making areas of the firm—such as cash and inventory management, capital structure theory, and dividend policy. The emphasis also shifted from that of the outsider looking in at the firm to that of the financial manager making tough day-to-day decisions that would affect the firm's performance.

Modern Issues in Finance

Modern financial management has focused on risk-return relationships and the maximization of return for a given level of risk. The award of the 1990 Nobel Prize in Economics to Professors Harry Markowitz and William Sharpe for their contributions to the financial theories of risk-return and portfolio management demonstrates the importance of these concepts. In addition, Professor Merton Miller received the Nobel Prize in Economics for his work in the area of **capital structure theory** (the study of the relative importance of debt and equity). These three scholars were the first professors of finance to win Nobel Prizes in Economics, and their work has been very influential in the field of finance over the last 50 years. Since then, others have followed. In 2013 Eugene Fama won the Nobel Prize in Economics for his work in the area of the efficient market hypothesis (EMH).

Finance continues to become more analytical and mathematical. New financial products with a focus on hedging are being widely used by financial managers to reduce some of the risk caused by changing interest rates and foreign currency exchange rates. As a counterbalance to more quantitative analysis, the psychology of financial decision making, called behavioral finance, has become more widely taught in the classroom. Amos Tversky and Daniel Kahneman were pioneers in the psychology of cognitive bias in the handling of risk. The risk-return trade-off decision is an important concept in finance and economics. Tversky died in 1996, but Kahneman received the Nobel Prize in Economics in 2002 for his work with Tversky. The 2017 Nobel Prize was won by Richard Thaler, who, like Tversky and Kahneman, was a pioneer in behavioral finance. His research is focused on human irrationality and conflicts with the normal economic theory that people make rational decisions, especially when it comes to risk-return trade-offs.

While increasing prices, or **inflation**, have always been a key variable in financial decisions, it was not very important from the 1930s to about 1965 when it averaged about 1 percent per year. However, after 1965 the annual rate of price increases began to accelerate and became quite significant in the 1970s when inflation reached double-digit levels during several years. Inflation remained relatively high until 1982 when the U.S. economy entered a phase of **disinflation** (a slowing down of price increases). The effects of inflation and disinflation on financial forecasting, the required rates of return for capital budgeting decisions, and the cost of capital are quite significant to financial managers and have become more important in their decision making.

Risk Management and a Review of the Financial Crisis

The impact of the financial crisis that started in 2008 lingered into 2013 and early 2014, but by the end of 2017 the U.S. economy was growing at close to 2.5 percent real GDP, and many expected 2018 to grow over 3 percent because of tax reform enacted by Congress at the end of 2017. This crisis resulted in government intervention to save

the banking system, followed by legislation (and new regulations) to reduce banks' willingness to take on too much risk. In this brief introduction, we want to emphasize risk management issues. Risk management will continue to have a strong focus in the future until people forget the financial crisis that began with the housing bubble in the early part of the new millennium. The unwillingness to enforce risk management controls at most financial institutions allowed the extension of credit to borrowers who had high-risk profiles and, in too many cases, no chance of paying back their loans. In addition to the poor credit screening of borrowers, quantitative financial engineers created portfolios of mortgage-backed securities that included many of these risky loans. The rating agencies gave these products high credit ratings (AAA), so investors, including sophisticated institutional investors, thought the assets were safe. As the economy went into a recession and borrowers stopped making their loan payments, these mortgage-backed securities fell dramatically in value, and many financial institutions had huge losses on their balance sheets, which they were forced to write off with mark-to-market accounting standards. In some cases, the write-offs reduced bank capital to precarious levels or even below the minimum required level, forcing the banks to raise more capital.

To make matters more complicated, new unregulated products called **credit default swaps (CDS)** were created as insurance against borrowers defaulting on their loans. These credit default swaps were backed by some of the same financial institutions that lacked enough capital to support the insurance that they guaranteed. Liquidity dried up, markets stopped working, and eventually the government stepped into the breach by forcing mergers and infusing capital into the financial institutions.

By fall 2008, Bear Stearns, the fifth-largest investment bank, was forced to merge with JPMorgan Chase, a strong bank. By September 15, 2009, Lehman Brothers, the fourth-largest investment bank, declared bankruptcy, and even Merrill Lynch had to be saved by merging with Bank of America. The Federal Deposit Insurance Corporation seized Washington Mutual on September 25, and again JPMorgan Chase was called on to take over the operations of the biggest bank failure in U.S. history. As the markets continued to disintegrate, the Federal Reserve provided $540 billion to help money market funds meet their redemptions. The crisis continued into 2009, and by February Congress agreed on a $789 billion stimulus package to help keep the economy afloat. Both Chrysler (in April) and General Motors (in June) filed for bankruptcy, and by September 2009, with the help of the Federal Reserve, money and capital markets became more stable and began to function properly.

This crisis created the longest recession since the Great Depression and forced financial institutions to pay more attention to their risk controls. Money became tight and hard to find unless a borrower had a very high credit rating. Chief executives who had previously ignored the warnings of their risk management teams now gave risk managers more control over financial transactions that might cause a repeat of the calamity.

The Dodd–Frank Act

In response to the financial crisis, Congress passed the **Dodd–Frank Act**, officially known as the Wall Street Reform and Consumer Protection Act of 2010. The act purports to promote financial stability by improving accountability and transparency

in the overall financial system, protecting taxpayers by improving the stability of large, diversified financial institutions, and protecting consumers from abusive practices in the financial services industry. Dodd–Frank is the first major financial regulatory change in the United State since the Great Depression.

Dodd–Frank has many different sections, and rather than listing each section by title, we provide an overview of the law and its areas of impact. The act created the Financial Stability Oversight Council and the Office of Financial Research within the Treasury Department. These offices are intended to identify systematic risks, reduce moral hazard, and maintain the stability of the U.S. financial system. The law provides for the orderly liquidation or bankruptcy of nonbank financial companies, including broker-dealers and insurance companies. It also consolidates different regulators into fewer federal entities so that it is more difficult for financial firms to pick the least burdensome regulator. Hedge funds and other investment advisors are now required to register with the Securities and Exchange Commission (SEC).

Dodd–Frank also established the Federal Insurance Office within the Treasury Department to oversee the insurance industry and streamline state-based insurance regulation. The act contains the controversial Volcker Rule, which limits the amount of speculative investing a regulated and federally insured depository institution can engage in. This limits large financial institutions from having proprietary, in-house hedge funds and private equity investments. Because much of the financial crisis was blamed on derivative securities, especially credit default swaps, the law requires that over-the-counter derivatives such as credit default swaps be cleared through formal exchanges and regulated either by the SEC or the CFTC (Commodity Futures Trading Commission).

A large part of Dodd–Frank deals with consumer protection and the powers of the Bureau of Consumer Financial Protection. The oversight given to the bureau allows it to dictate the fees that banks charge and the types of products they offer. This power in the hands of a regulator has been widely criticized in the banking community as an attack on free markets.

Several issues have arisen since the act was signed into law. While Dodd–Frank outlines several broad goals and assigns regulatory responsibility, the actual rule-making and implementation have been largely left to the different agencies charged with enforcement. The actual agency-level rulemaking has been delayed as the different regulators attempt to design regulations that conform to the letter of the law. Further, there is a large gray area in the actual activities that are treated as distinct by Dodd–Frank. For instance, the limits on proprietary trading by federally insured financial institutions, also known as the Volcker Rule, assumes that there is a clear distinction between market-making activities and proprietary trading when this is not always the case. New laws often have unintended consequences and are amended or fine-tuned many years later. Many banks and financial institutions have complained that the Volcker Rule has reduced market liquidity to the point that some securities (especially bonds) don't have enough buyers and sellers to create prices. The Republican Congress and President Trump have promised to fix some of the unintended consequences, and they continue to revise and eliminate some of the regulations.

The Impact of Information Technology

The Internet has been around for a long time, but only in the 1990s did it start to be applied to commercial ventures as companies tried to get a return on their previous technology investments.

The rapid development of computer technology, both software and hardware, turned the Internet into a dynamic force in the economy and has affected the way business is conducted. The rapid expansion of the Internet has allowed the creation of many new business models and companies such as Amazon.com, eBay, Facebook, Netflix, Twitter, and Google. It has also enabled the acceleration of e-commerce solutions for "old economy" companies. These e-commerce solutions include different ways to reach customers—the business to consumer model (B2C)—and more efficient ways to interact with suppliers—the business to business model (B2B).

Ralph S. Larsen, former chairman and CEO of Johnson & Johnson, said in 1999, "The Internet is going to turn the way we do business upside down—and for the better. From the most straightforward administrative functions, to operations, to marketing and sales, to supply chain relationships, to finance, to research and development, to customer relationships—no part of our business will remain untouched by this technological revolution."[1] Twenty years later his predictions have been on the spot.

For a financial manager, e-commerce impacts financial management because it affects the pattern and speed with which cash flows through the firm. In the Internet's business to business model (B2B), orders can be placed, inventory can be managed, and bids to supply product can be accepted, all online. The B2B model can help companies lower the cost of managing inventory, accounts receivable, and cash. Where applicable we have included examples throughout the book to highlight the impact of e-commerce and the Internet on the finance function.

Activities of Financial Management

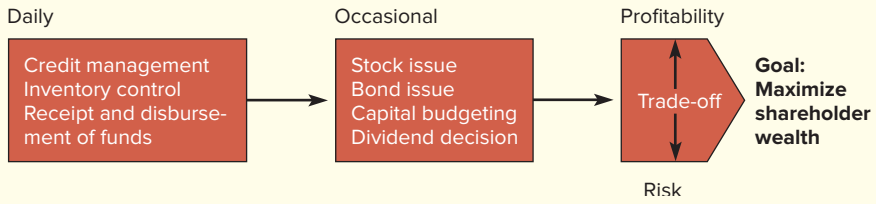
Having examined the field of finance and some of its more recent developments, let us turn our attention to the activities financial managers must perform. It is the responsibility of financial management to allocate funds to current and fixed assets, to obtain the best mix of financing alternatives, and to develop an appropriate dividend policy within the context of the firm's objectives. These functions are performed on a day-to-day basis as well as through infrequent use of the capital markets to acquire new funds. The daily activities of financial management include credit management, inventory control, and the receipt and disbursement of funds. Less routine functions encompass the sale of stocks and bonds and the establishment of capital budgeting and dividend plans.

As indicated in Figure 1-1, all these functions are carried out while balancing the profitability and risk components of the firm.

The appropriate risk-return trade-off must be determined to maximize the market value of the firm for its shareholders. The risk-return decision will influence

[1]Johnson & Johnson *1999 Annual Report*, p. 4.

Figure 1-1 Functions of the financial manager



not only the operational side of the business (capital versus labor or Product A versus Product B) but also the financing mix (stocks versus bonds versus retained earnings).

Forms of Organization

The finance function may be carried out within a number of different forms of organizations. Of primary interest are the sole proprietorship, the partnership, and the corporation. There are many reasons to choose one of these forms of organizations. The number of people in the organization is one factor. The liability of the owners is another. Other reasons are the complexity involved with state and federal regulations and how these organizations are taxed. This is borne out by the 2017 Tax Cuts and Jobs Act, which significantly modified taxation for all these forms of organizations.

Impact of 2017 Tax Cuts and Jobs Act on Organizations Since all forms of organizations are impacted by the Tax Cuts and Jobs Act, we present a brief summary of the issues involved. The most significant change is that the corporate tax rate goes from 35 percent to 21 percent, which puts U.S. companies on competitive footing with other countries.

Sole proprietorships, partnerships, and limited liability partnerships are considered pass-through forms of organizations because the income passes through to the owners and is taxed at the owner's individual rate. To reduce the burden on small firms, the government established a 20 percent deduction of qualified business income from pass-through businesses. The 20 percent deduction reduces taxable income, and combining this with lower individual tax rates will allow businesses meeting the requirements to pay less in taxes than under the tax law that prevailed in 2017.

Sole Proprietorship The **sole proprietorship** form of organization represents single-person ownership and offers the advantages of simplicity of decision making and low organizational and operating costs. Most small businesses with 1 to 10 employees are sole proprietorships. The major drawback of the sole proprietorship is that there is unlimited liability to the owner. In settlement of the firm's debts, the owner can lose not only the capital that has been invested in the business but also personal assets. This drawback can be serious, and you should realize that few lenders are willing to advance funds to a small business without a personal liability commitment.

The profits or losses of a sole proprietorship are taxed as though they belong to the individual owner. Thus if a sole proprietorship makes $50,000, the owner will claim the profits on his or her tax return. (In the corporate form of organization, the

The Endangered Public Company

An article in *The Economist* describes the decline of the public company in the United States. It states that the number of public companies in the United States has fallen 38 percent since 1997 and 48 percent in Britain. In addition, the number of initial public offerings (IPOs) in America declined from an average of 311 per year in the 1980–2000 period to 99 per year in the 2001–2011 period, with only 81 in 2011.

However, recent statistics show that IPOs have rebounded. IPO data are lumpy and dependent on the economy and the tone of the stock market. In 2013, 157 companies went public and another 206 in 2014. During the 2017 bull market there were 108 IPOs and the average from 2012 to 2017 was 126. So perhaps the public company is not dead yet. *The Economist* points out that Mark Zuckerberg of Facebook didn't really want to take his firm public, but because of U.S. law, his hand was forced in a sense. If a U.S. company has more than 500 shareholders, it is required to publish quarterly financial reports just as if it were a publicly listed company. So while Zuckerberg took Facebook public, he structured the company so that he kept most of the voting rights. This is not unusual with family-owned companies. The Ford family has managed to maintain control of Ford Motor Company with a 40 percent controlling vote.

The burdens of regulation have grown heavier for public companies. Corporate executives complain that it is impossible to focus on the long term when institutional investors and shareholders seem to value short-term results. The result is that privately held companies are increasing in number. Companies like McGraw-Hill Education, the publisher of this text, are privately held.

Other types of business organizations have arisen. For example, one-third of America's tax reporting businesses now classify themselves as partnerships. These partnerships can come in various forms such as limited liability limited partnerships (LLLPs), publicly traded partnerships (PTPs), real estate investment trusts (REITs), and private partnerships such as those of most private equity partnerships that own whole companies that are not publicly traded. The authors attribute the rise of private companies during this time period to the Sarbanes–Oxley Act of 2002, which put a heavy financial burden on smaller companies.

In emerging market foreign countries, state-owned enterprises (SOEs) are quite common as these countries emerge from controlled economies to more open economies. For example, SOEs make up 80 percent of China's companies, 62 percent of Russia's companies, and 38 percent of Brazil's companies. State-owned enterprises are politically protected and often are central to a country's economy. One such example is Gazprom in Russia, the biggest natural gas company.

The question for the future is will these new forms of businesses continue to multiply while publicly held companies continue to decline, or is this just a reaction to the financial crisis and the slow growth period of 2000 to 2012.

Sources: "The Endangered Public Company: The Big Engine That Couldn't," *The Economist,* May 19, 2012, pp. 27–30; Initial Public Offerings: Updated Statistics Jay R. Ritter, Cordell Professor of Finance, University of Florida, January 3, 2018.

corporation pays a tax on profits, and then the owners of the corporation pay a tax on any distributed profits.) Approximately 72 percent of the 30 million business firms in this country are organized as sole proprietorships.

Partnership The second form of organization is the **partnership**, which is similar to a sole proprietorship except there are two or more owners. Multiple ownership makes it possible to raise more capital and to share ownership responsibilities. Most partnerships are formed through an agreement between the participants, known as the

articles of partnership, which specify the ownership interest, the methods for distributing profits, and the means for withdrawing from the partnership. For taxing purposes, partnership profits or losses are allocated directly to the partners, and there is no double taxation as there is in the corporate form.

Like the sole proprietorship, the partnership arrangement carries unlimited liability for the owners. While the partnership offers the advantage of *sharing* possible losses, it presents the problem of owners with unequal wealth having to absorb losses. If three people form a partnership with a $10,000 contribution each and the business loses $100,000, one wealthy partner may have to bear a disproportionate share of the losses if the other two partners do not have sufficient personal assets.

To circumvent this shared unlimited liability feature, a special form of partnership, called a **limited liability partnership**, can be utilized. Under this arrangement, one or more partners are designated general partners and have unlimited liability for the debts of the firm; other partners are designated limited partners and are liable only for their initial contribution. The limited partners are normally prohibited from being active in the management of the firm. You may have heard of limited partnerships in real estate syndications in which a number of limited partners are doctors, lawyers, and CPAs and there is one general partner who is a real estate professional. Not all financial institutions will extend funds to a limited partnership.

Corporation In terms of revenue and profits produced, the corporation is by far the most important type of economic unit. While only about 20 percent of U.S. business firms are corporations, they are dominated by large corporations like Apple, Microsoft, Amazon, Exxon, and Walmart. Approximately 80 percent of sales and 70 percent of profits can be attributed to the corporate form of organization. The **corporation** is unique—it is a legal entity unto itself. Thus the corporation may sue or be sued, engage in contracts, and acquire property. A corporation is formed through **articles of incorporation**, which specify the rights and limitations of the entity.

A corporation is owned by shareholders who enjoy the privilege of limited liability, meaning their liability exposure is generally no greater than their initial investment.[2] A corporation also has a continual life and is not dependent on any one shareholder for maintaining its legal existence.

A key feature of the corporation is the easy divisibility of the ownership interest by issuing shares of stock. While it would be nearly impossible to have more than 10,000 or 20,000 partners in most businesses, a corporation may have several hundred thousand shareholders. For example, General Electric has 8.7 billion shares of common stock outstanding with 57.3 percent institutional ownership (pension funds, mutual funds, etc.), while Microsoft with 7.7 billion shares outstanding has 75.5 percent institutional ownership.

The shareholders' interests are ultimately managed by the corporation's board of directors. The directors may include key management personnel of the firm as well as directors from outside the firm. Directors serve in a fiduciary capacity for the shareholders and may be liable for the mismanagement of the firm. After the collapse of

[2]An exception to this rule is made if shareholders buy their stock at less than par value. Then they would be liable for up to the par value.

corporations such as Enron and WorldCom due to fraud, the role of outside directors became much more important, and corporations were motivated to comply with more stringent corporate governance laws mandated by Congress. Outside directors may make from $5,000 per year for serving on the board of small companies, but directors serving on the boards of S&P 500 companies earn fees of more than $250,000 per year, on average. Directors serving on the audit and compensation committees are frequently paid additional fees.

Because the corporation is a separate legal entity, it reports and pays taxes on its *own* income. As previously mentioned, any remaining income that is paid to the shareholders in the form of dividends will require the payment of a second tax by the shareholders. One of the key disadvantages to the corporate form of organization is this potential double taxation of earnings. The company pays taxes on its income and, when stockholders receive their dividends, they pay a second tax. This tax on dividends ranges from 0 percent for low-income individuals to 15 percent and finally 23.8 percent for people in the highest tax bracket.

There is, however, one way to completely circumvent the double taxation of a normal corporation, and that is through formation of an S corporation. With an **S corporation**, the income is taxed as direct income to the stockholders and thus is taxed only once as normal income, similar to a partnership. Nevertheless, the shareholders receive all the organizational benefits of a corporation, including limited liability. The S corporation designation can apply to domestic corporations that have up to 100 stockholders and have only one class of stock with allowable shareholders being individuals, estates, and certain trusts.

The **limited liability company (LLC)** has become a popular vehicle for conducting business because of its highly flexible structure. An LLC is not technically a corporation, but like a corporation it provides limited liability for the owners. LLCs can be taxed as sole proprietorships, partnerships, corporations, or S corporations, depending upon elections made by the owners.

While the proprietorship, traditional partnership, and various forms of limited partnerships are all important, the corporation is given primary emphasis in this text. Because of the all-pervasive impact of the corporation on our economy, and because most growing businesses eventually become corporations, the effects of most decisions in this text are often considered from the corporate viewpoint.

Corporate Governance

As we learned in the previous section, the corporation is governed by the board of directors, led by the chairman of the board. In many companies, the chairman of the board is also the CEO, or chief executive officer. During the stock market collapse of 2000–2002, many companies went bankrupt due to mismanagement or, in some cases, financial statements that did not accurately reflect the financial condition of the firm because of deception as well as outright fraud. Companies such as WorldCom reported over $9 billion of incorrect or fraudulent financial entries on their income statements.

Enron also declared bankruptcy after it became known that its accountants kept many financing transactions “off the books.” The company had more debt than most

of its investors and lenders knew about. Many of these accounting manipulations were too sophisticated for the average analyst, banker, or board member to understand. In the Enron case, the U.S. government indicted its auditor, Arthur Andersen, and because of the indictment, the Andersen firm was dissolved. Because of these accounting scandals, there was a public outcry for corporate accountability, ethics reform, and an explanation of why the corporate governance system had failed.

Again, in the financial crisis in 2007–2009 it appeared that boards of directors didn't understand the risk that their management had taken in extending mortgages to high credit risks. Even senior management didn't understand the risk embodied in some of the mortgage-backed securities that their organizations had bought for investments. This total lack of risk management oversight continued to put a focus on corporate governance issues. With these two events coming so close together, many questioned the ability of large companies and financial institutions to regulate themselves. Why didn't the boards of directors know what was going on and stop it? Why didn't they fire members of management and clean house? Why did they allow such huge bonuses and executive compensation when companies were performing so poorly? One result was the passing of the Wall Street Reform and Consumer Protection Act of 2010 (Dodd–Frank), as discussed earlier in the chapter.

The issues of corporate governance are really agency problems. **Agency theory** examines the relationship between the owners and the managers of the firm. In privately owned firms, management and owners are usually the same people. Management operates the firm to satisfy its own goals, needs, financial requirements, and the like. However, as a company moves from private to public ownership, management now represents all the owners. This places management in the agency position of making decisions that will be in the best interests of all shareholders. Because of diversified ownership interests, conflicts between managers and shareholders can arise that impact the financial decisions of the firm. When the chairman of the board is also the chief executive of the firm, stockholders recognize that the executive may act in his or her own best interests rather than those of the stockholders of the firm. In the prior bankruptcy examples, that is exactly what happened. Management filled their own pockets and left the stockholders with little or no value in the company's stock. In the WorldCom case, a share of common stock fell from the $60 range to eventually being worthless, and Bernie Ebbers, the CEO and chairman of the board, ended up in jail. Because of these potential conflicts of interest, many hold the view that the chairman of the board of directors should be from outside a company rather than an executive of the firm.

Because **institutional investors** such as pension funds and mutual funds own a large percentage of stock in major U.S. companies, these investors are having more to say about the way publicly owned corporations are managed. As a group they have the ability to vote large blocks of shares for the election of a board of directors. The threat of their being able to replace poorly performing boards of directors makes institutional investors quite influential. Since pension funds and mutual funds represent individual workers and investors, they have a responsibility to see that firms are managed in an efficient and ethical way.

The Sarbanes–Oxley Act

Because corporate fraud during the Internet bubble had taken place at some very large and high-profile companies, Congress decided that it needed to do something to control corrupt corporate behavior. The major accounting firms had failed to detect fraud in their accounting audits, and outside directors were often not provided with the kind of information that would allow them to detect fraud and mismanagement. Because many outside directors were friends of management and had been nominated by management, there was a question about their willingness to act independently in carrying out their fiduciary responsibility to shareholders.

The **Sarbanes–Oxley Act** of 2002 set up a five-member Public Company Accounting Oversight Board with the responsibility for establishing auditing standards within companies, controlling the quality of audits, and setting rules and standards for the independence of the auditors. It also puts great responsibility on the internal audit committee of each publicly traded company to enforce compliance with the act. The major focus of the act is to make sure that publicly traded corporations accurately present their assets, liabilities, and equity and income on their financial statements. Originally, there were complaints about the cost of implementing the act and concerns about its effectiveness. After getting systems in place to monitor activity, many companies found the results to be more positive than negative.

Goals of Financial Management

Let us look at several alternative goals for the financial manager as well as the other managers of the firm. One may suggest that the most important goal for financial management is to "earn the highest possible profit for the firm." Under this criterion, each decision would be evaluated on the basis of its overall contribution to the firm's earnings. While this seems to be a desirable approach, there are some serious drawbacks to profit maximization as the primary goal of the firm.

First, a change in profit may also represent a change in risk. A conservative firm that earned $1.25 per share may be a less desirable investment if its earnings per share increase to $1.50, but the risk inherent in the operation increases even more.

A second possible drawback to the goal of maximizing profit is that it fails to consider the timing of the benefits. For example, if we could choose between the following two alternatives, we might be indifferent if our emphasis were solely on maximizing earnings.

	Earnings per Share		
	Period One	Period Two	Total
Alternative A	$1.50	$2.00	$3.50
Alternative B	2.00	1.50	3.50

Both investments would provide $3.50 in total earnings, but Alternative B is clearly superior because the larger benefits occur earlier. We could reinvest the difference in earnings for Alternative B one period sooner.

Finally, the goal of maximizing profit suffers from the almost impossible task of accurately measuring the key variable in this case: profit. As you will observe throughout the text, there are many different economic and accounting definitions of profit, each open to its own set of interpretations. Furthermore, problems related to inflation and international currency transactions complicate the issue. Constantly improving methods of financial reporting offer some hope in this regard, but many problems remain.

A Valuation Approach

While there is no question that profits are important, the key issue is how to use them in setting a goal for the firm. The ultimate measure of performance is not what the firm earns but how the earnings are *valued* by the investor. In analyzing the firm, the investor will also consider the risk inherent in the firm's operation, the time pattern over which the firm's earnings increase or decrease, the quality and reliability of reported earnings, and many other factors. The financial manager, in turn, must be sensitive to all of these considerations. He or she must question the impact of each decision on the firm's overall valuation. If a decision maintains or increases the firm's overall value, it is acceptable from a financial viewpoint; otherwise, it should be rejected. This principle is demonstrated throughout the text.

Maximizing Shareholder Wealth

The broad goal of the firm can be brought into focus if we say the financial manager should attempt to *maximize the wealth of the firm's shareholders* through achieving the highest possible value for the firm. **Shareholder wealth maximization** is not a simple task because the financial manager cannot directly control the firm's stock price but can only act in a way that is consistent with the desires of the shareholders. Since stock prices are affected by expectations of the future as well as by the current economic environment, much of what affects stock prices is beyond management's direct control. Even firms with good earnings and favorable financial trends do not always perform well in a declining stock market over the short term.

The concern is not so much with daily fluctuations in stock value as with long-term wealth maximization. This can be difficult in light of changing investor expectations. In the 1950s and 1960s, the investor emphasis was on maintaining rapid rates of earnings growth. In the 1970s and 1980s, investors became more conservative, putting a premium on lower risk and, at times, high current dividend payments.

In the early and mid-1990s, investors emphasized lean, efficient, well-capitalized companies able to compete effectively in the global environment. But by the late 1990s, there were hundreds of high-tech Internet companies raising capital through initial public offerings of their common stock. Many of these companies had dreams but little revenue and no earnings, yet their stock sold at extremely high prices. Some in the financial community said that the old valuation models were dead, didn't work, and were out of date; earnings and cash flow didn't matter anymore. Alan Greenspan,

then chairman of the Federal Reserve Board, made the now famous remark that the high-priced stock market was suffering from "irrational exuberance." By late 2000, many of these companies turned out to be short-term wonders. A few years later, hundreds were out of business. The same scenario played out with the housing bubble of 2001–2006, which collapsed in 2007. The financial problems that followed carried on into 2012, and while stock prices recovered from their bottom in 2009, valuations stayed depressed and did not hit new all-time highs until April 2015. New highs continued to be set monthly into 2018. This is the result of global economic growth and the optimism that the Tax Cuts and Jobs Act of 2017 was expected to have on companies' earnings.

Management and Stockholder Wealth

Does modern corporate management always follow the goal of maximizing shareholder wealth? Under certain circumstances, management may be more interested in maintaining its own tenure and protecting "private spheres of influence" than in maximizing stockholder wealth. For example, suppose the management of a corporation receives a tender offer to merge the corporation into a second firm; while this offer might be attractive to shareholders, it might be quite unpleasant to present management. Historically, management may have been willing to maintain the status quo rather than to maximize stockholder wealth.

As mentioned earlier, this is now changing. First, in most cases "enlightened management" is aware that the only way to maintain its position over the long run is to be sensitive to shareholder concerns. Poor stock price performance relative to other companies often leads to undesirable takeovers and proxy fights for control. Second, management often has sufficient stock option incentives that will motivate it to achieve market value maximization for its own benefit. Third, powerful institutional investors are making management more responsive to shareholders.

Social Responsibility and Ethical Behavior

Is our goal of shareholder wealth maximization consistent with a concern for social responsibility for the firm? In most instances the answer is yes. By adopting policies that maximize values in the market, the firm can attract capital, provide employment, and offer benefits to its community. This is the basic strength of the private enterprise system.

Nevertheless, certain socially desirable actions such as pollution control, equitable hiring practices, and fair pricing standards may at times be inconsistent with earning the highest possible profit or achieving maximum valuation in the market. For example, pollution control projects frequently offer a negative return. Does this mean firms should not exercise social responsibility in regard to pollution control? The answer is no—but certain cost-increasing activities may have to be mandatory rather than voluntary, at least initially, to ensure that the burden falls equally over all business firms. However, there is evidence that socially responsible behavior can be profitable. For example, 3M estimates that its Pollution Prevention Pays (3P) program has had financial benefits as well as social benefits. This program has been in place for over 34 years and during this time has prevented the release of more than 3.8 billion pounds

Finance in ACTION

Managerial

3M Company—Good Corporate Citizen

Given that stock market investors emphasize financial results and the maximization of shareholder value, does it makes sense for a company to be socially responsible? Can companies be socially responsible and oriented toward shareholder wealth at the same time? We think so, and while the results of social responsibility are hard to measure, the results of creating goodwill and high employee morale can often create cost savings and a motivated and highly productive workforce.

3M is a manufacturing company and therefore uses large quantities of raw material and has tons of waste from its production processes. How it deals with these issues says a lot about the company's social responsibility. The company has the following programs in place to deal with sustainability issues: Eco-Efficiency Management, Climate Change & Energy Management, Pollution Prevention, Water Management, and Reducing Waste. For 17 years 3M has been a leading company in the Dow Jones Sustainability Index and in May 2007 was awarded the first annual Clean Air Excellence Gregg Cooke Visionary Program Award by the U.S. Environmental Protection Agency.

The company has focused on the environment and social responsibility since 1960. 3M has pursued a series of five-year plans, and between 2000 and 2010, it either met or exceeded its goals. For example, one goal was to reduce volatile air emissions indexed to net sales by 25 percent, and it achieved a reduction of 58 percent. A goal to reduce waste to net sales by 25 percent was also exceeded. 3M has further reduced worldwide greenhouse gas emissions between 1990 and 2011 by 95 percent.

3M continues to win awards for its social behavior. In 2017 it was on the list of the "World's Most Ethical Companies" for the fourth year in a row. Forbes included 3M on its 2017 list of the "World's Most Reputable Companies" and it was listed in first place among companies that millennials want to work for, edging out Apple, Google, and Amazon. We can only speculate that the reason it is on top is its social reputation for work life excellence and diversity.

While sustainability and environmental issues are important issues for social responsibility, other activities are also important. 3M promotes community involvement and has traditionally given more than 2 percent of its pretax profits to well-defined programs related to the environment, education, arts and culture, and health and human services.

The management of 3M has many sustainability goals and programs in place to measure the progress in meeting those goals. Its goals for 2025 are all indexed to sales. Here is a list of goals:

1. Improve energy efficiency by 30 percent.
2. Reduce global water use by 10 percent.
3. Reduce greenhouse gas emissions by 50 percent below 2002 benchmark.
4. Help customers reduce greenhouse gas emissions by 250 million tons by use of 3M products.
5. Reduce global manufacturing waste by 10 percent.

You can view 3M's goals in detail for 2025 at www.3m.com/3M/en_US/sustainability-us/goals-progress/.

www.3m.com

of pollutants and saved over $1.7 billion. See the nearby box for more about how 3M is a socially responsible citizen.

Unethical and illegal financial practices on Wall Street by corporate financial "dealmakers" have made news headlines from the late 1980s until the present, and insider trading is a good example of both. **Insider trading** occurs when someone uses information that is not available to the public to profit from trading in a company's publicly traded securities. This practice is illegal and is protected against by the Securities and Exchange Commission (SEC). Sometimes the insider is a company manager; other times it is the company's lawyer, its investment banker, or even the printer of the company's financial statements. Anyone who has knowledge before

public dissemination of that information stands to benefit from either good news or bad news. Trading on private information serves no beneficial economic or financial purpose to the public. It could be argued that insider trading hurts the average shareholder's interests because it destroys confidence in the securities markets by making the playing field uneven for investors. If participants feel the markets are unfair, it could destroy firms' ability to raise capital or maximize shareholder value. The penalties for insider trading can be severe—there is a long history of insider traders who have gone to prison.

Since 2010, hedge funds have been under attack by the U.S. government. Several funds have been indicted for insider trading. An article in *The Wall Street Journal* stated, "Some legal specialists say authorities appear to be seeking to criminalize typical market behavior, such as hedge funds vying to gain an edge by gathering intelligence on a company from a wide range of sources. The issue is blurry because insider trading isn't defined by statute. The dividing line between criminal and legitimate behavior has evolved in cases stretching back decades, as courts interpreted the antifraud provisions of securities law enacted after the 1929 stock market crash."[3]

Ethics and social responsibility can take many different forms. Ethical behavior for a person or company should be important to everyone because it creates an invaluable reputation. However, once that reputation is lost because of unethical behavior, it is very difficult to get back. Proof of this comes from insider trading cases against hedge funds that proved not to stand up in court, but nevertheless, the hedge funds went out of business because just the whiff of bad behavior forced them to close their doors. Some companies are more visible than others in their pursuit of these ethical goals, and most companies that do a good job in this area are profitable, save money, and are good citizens in the communities where they operate.

The Role of the Financial Markets

You may wonder how a financial manager knows whether he or she is maximizing shareholder value and how ethical (or unethical) behavior may affect the value of the company. This information is provided daily to financial managers through price changes determined in the financial markets. But what are the financial markets? **Financial markets** are the meeting place for people, corporations, and institutions that either need money or have money to lend or invest. In a broad context, the financial markets exist as a vast global network of individuals and financial institutions that may be lenders, borrowers, or owners of public companies worldwide. Participants in the financial markets also include national, state, and local governments that are primarily borrowers of funds for highways, education, welfare, and other public activities; their markets are referred to as **public financial markets**. Corporations such as Coca-Cola, Nike, and Ford, on the other hand, raise funds in the **corporate financial markets**.

[3] *Source:* Pulliam, S., Rothfield, M., and Strasburg, J. "The Hedge Funds Raided in Probe," *The Wall Street Journal*, November 22, 2010.

Structure and Functions of the Financial Markets

Financial markets can be broken into many distinct parts. Some divisions such as domestic and international markets, or corporate and government markets, are self-explanatory. Others such as money and capital markets need some explanation. **Money markets** are markets dealing with short-term securities that have a life of one year or less. Securities in these markets include commercial paper sold by corporations to finance their daily operations and certificates of deposit with maturities of less than one year sold by banks. Examples of money market securities are presented more fully in Chapter 7.

Capital markets are generally defined as markets where securities have a life of more than one year. Although capital markets are long-term markets, as opposed to short-term money markets, it is common to break down the capital markets into intermediate markets (1 to 10 years) and long-term markets (greater than 10 years). The capital markets include securities such as common stock, preferred stock, and corporate and government bonds. Capital markets are fully presented in Chapter 14. Now that you have a basic understanding of the makeup of the financial markets, you need to understand how these markets affect corporate managers.

Allocation of Capital

A corporation relies on financial markets to provide funds for short-term operations and for new plant and equipment. A firm may go to the markets and raise financial capital either by borrowing money through a debt offering of corporate bonds or short-term notes, or by selling ownership in the company through an issue of common stock. When a corporation uses financial markets to raise new funds, called an initial public offering, or IPO, the sale of securities is said to be made in the **primary market** by way of a new issue. After the securities are sold to the public (institutions and individuals), they are traded in the **secondary market** between investors. It is in the secondary market that prices are continually changing as investors buy and sell securities based on their expectations of a corporation's prospects. It is also in the secondary market that financial managers are given feedback about their firms' performance.

How does the market allocate capital to the thousands of firms that are continually in need of money? Let us assume that you graduate from college as a finance major and are hired to manage money for a wealthy family like the Rockefellers. You are given $250 million to manage and you can choose to invest the money anywhere in the world. For example, you could buy common stock in Microsoft, the American software company, or in Nestlé, the Swiss food company, or in Cemex, the Mexican cement company; you could choose to lend money to the U.S. or Japanese government by purchasing its bonds; or you could lend money to ExxonMobil or BP. Of course, these are only some of the endless choices you would have.

How do you decide to allocate the $250 million so that you will maximize your return and minimize your risk? Some investors will choose a risk level that meets their objective and maximize return for that given level of risk. By seeking this risk-return objective, you will bid up the prices of securities that seem underpriced

and have potential for high returns and you will avoid securities of equal risk that, in your judgment, seem overpriced. Since all market participants play the same risk-return game, the financial markets become the playing field, and price movements become the winning or losing score. Let us look at only the corporate sector of the market and 100 companies of equal risk. Companies with expectations for high return will have higher relative common stock prices than companies with poor expectations. Since the securities' prices in the market reflect the combined judgment of all the players, price movements provide feedback to corporate managers and let them know whether the market thinks they are winning or losing against the competition.

Those companies that perform well and are rewarded by the market with high-priced securities have an easier time raising new funds in the money and capital markets than their competitors. They are also able to raise funds at a lower cost. Go back to that $250 million you are managing. If ExxonMobil wants to borrow money from you at 5 percent and Chevron is also willing to pay 5 percent but is riskier, to which company will you lend money? If you chose ExxonMobil, you are on your way to understanding finance. The competition between the two firms for your funds will eventually cause Chevron to offer higher returns than ExxonMobil, or it will have to go without funds. In this way, the money and capital markets allocate funds to the highest-quality companies at the lowest cost and to the lowest-quality companies at the highest cost. In other words, firms pay a penalty for failing to perform competitively.

Institutional Pressure on Public Companies to Restructure

Sometimes an additional penalty for poor performance is a forced restructuring by institutional investors seeking to maximize a firm's shareholder value. As mentioned earlier, institutional investors have begun to flex their combined power, and their influence with corporate boards of directors has become very visible. Nowhere has this power been more evident than in the area of corporate restructuring. **Restructuring** can result in changes in the capital structure (liabilities and equity on the balance sheet). It can also result in the selling of low-profit-margin divisions with the proceeds of the sale reinvested in better investment opportunities. Sometimes restructuring results in the removal of the current management team or large reductions in the workforce. Restructuring also has included mergers and acquisitions of gigantic proportions unheard of in earlier decades. Rather than seeking risk reduction through diversification, firms are now acquiring greater market shares, brand name products, hidden assets values, or technology—or they are simply looking for size to help them compete in an international arena.

The restructuring and management changes at Hewlett-Packard, McGraw-Hill, and Tribune Corporation during the last decade were a direct result of institutional investors affecting change by influencing the boards of directors to exercise control over all facets of the companies' activities. Without their attempt to maximize the value of their investments, many of the above-mentioned restructuring deals would not have taken place. And without the financial markets placing a value on publicly held companies, the restructuring would have been much more difficult

to achieve. Some companies, like Starbucks, restructured because the founder and large stockholder came back and refocused the company after a dramatic drop in the stock price. Others, like American Airlines, were forced to restructure because of bankruptcy.

Internationalization of the Financial Markets

International trade is a growing trend that is likely to continue. Global companies are becoming more common, and international brand names like Sony, Coca-Cola, Nestlé, and Mercedes-Benz are known the world over. McDonald's hamburgers are eaten throughout the world, and McDonald's raises funds on most major international money and capital markets. The growth of the global company has led to the growth of global fund raising as companies search for low-priced sources of funds.

In a recent annual report, Coca-Cola stated that it conducted business in 200 countries and 73 different currencies and borrowed money in yen, euros, and other international currencies.

This discussion demonstrates that the allocation of capital and the search for low-cost sources of financing are now an international game for multinational companies. As an exclamation point, consider all the non-U.S. companies who want to raise money in the United States. More and more foreign companies have listed their shares on the New York Stock Exchange, and hundreds of foreign companies have stock traded in the United States through American Depository Receipts (ADRs).

We live in a world where international events affect economies of all industrial countries and where capital moves from country to country faster than was ever thought possible. Computers interact in a vast international financial network, and markets are more vulnerable to the emotions of investors than they have been in the past. The corporate financial manager has an increasing number of external impacts to consider. Future financial managers will need sophistication to understand international capital flows, computerized electronic funds transfer systems, foreign currency hedging strategies, and many other functions.

Information Technology and Changes in the Capital Markets

Technology has significantly impacted capital markets. In particular, trading costs for securities have been driven down. Firms and exchanges at the front of the technology curve have created tremendous competitive pressures on organizations that initially resisted change. As a result, many stock markets and brokerage firms have merged, often across international borders, in an attempt to remain viable.

In the late 1990s and early 2000s, advances in computer technology stimulated the creation of electronic communications networks (ECNs). These electronic markets had speed and cost advantages over traditional markets and took market share away from the New York Stock Exchange. If you can't beat them, join them, so the New York Stock Exchange merged with Archipelago, the second-largest ECN. The NASDAQ stock market, which was already an electronic market, bought Instinet, the largest ECN, from Reuters and merged their technology platforms.

Additionally, the cost pressures and the need for capital caused the major markets to become for-profit, publicly traded companies. The first to go public was the Chicago Mercantile Exchange, followed by NASDAQ, the NYSE, and the Chicago Board of Trade. Once these exchanges became publicly traded, they were able to use their shares for mergers and acquisitions. In 2007, the New York Stock Exchange merged with EuroNext, a large European exchange, and became a global market. In 2012 the NYSE/EuroNext was bought by ICE, the Intercontinental Exchange. ICE was a young but very successful electronic exchange specializing in derivative products and commodities. NASDAQ merged with the OMX, a Nordic stock exchange. Because the OMX is considered a leader in trading technology, it has over 35 stock exchanges worldwide using its technology. In 2007, the Chicago Board of Trade and the Chicago Mercantile Exchange merged, and so the trend to bigger and more global markets with low-cost structures continues. The future will likely bring an increased emphasis on globalization of markets through technology.

Another area where the Internet has played its role is in the area of retail stock trading. Firms like Charles Schwab, E*TRADE, TD Ameritrade, and other discount brokerage firms allow customers to trade using the Internet and have created a competitive problem for full-service brokers such as Merrill Lynch and Morgan Stanley. These discount firms have forced the full-service retail brokers to offer Internet trading to their customers, even though Internet trading is not as profitable for them as trading through their brokers.

Algorithmic trading that relies on mathematical programs designed to take advantage of price trends, volatility, or technical indicators has gained in popularity. This would not be possible without current computer power. These issues and others will be developed more fully in the capital market section of the text.

Format of the Text

The material in this text is covered under six major headings. We will progress from the development of basic analytical skills in accounting and finance to the utilization of decision-making techniques in working capital management, capital budgeting, long-term financing, and other related areas. A total length of 21 chapters should make the text appropriate for one-semester coverage.

We aim to present a thorough grounding in financial theory in a highly palatable and comprehensive fashion—with careful attention to definitions, symbols, and formulas. The intent is to enable students to develop a thorough understanding of the basic concepts in finance.

Parts

1. Introduction This section examines the goals and objectives of financial management. The emphasis on decision making, and risk management is stressed, with an update of significant events influencing the study of finance.

2. Financial Analysis and Planning First, we have the opportunity to review the basic principles of accounting as they relate to finance (financial statements and funds flow are emphasized). Understanding the material in Chapter 2 is a requirement for understanding the topics of working capital management, capital structure, cost of capital, and capital budgeting.

Additional material in this part includes a thorough study of ratio analysis, budget construction techniques, and development of comprehensive pro forma statements. The effect of heavy fixed commitments, in the form of either debt or plant and equipment, is examined in a discussion of leverage.

3. Working Capital Management The techniques for managing the short-term assets of the firm and the associated liabilities are examined. The material is introduced in the context of risk-return analysis. The financial manager must constantly choose between liquid, low-return assets (perhaps marketable securities) and more profitable, less liquid assets (such as inventory). Sources of short-term financing are also considered.

4. The Capital Budgeting Process The decision on capital outlays is among the most significant a firm will have to make. In terms of study procedure, we attempt to carefully lock down "time value of money" calculations, then proceed to the valuation of bonds and stocks, emphasizing present value techniques. The valuation chapter develops the traditional dividend valuation model and examines bond price sensitivity in response to discount rates and inflation. An appendix presents the supernormal dividend growth model, or what is sometimes called the "two-stage" dividend model. After careful grounding in valuation practice and theory, we examine the cost of capital and capital structure. The text then moves to the actual capital budgeting decision, making generous use of previously learned material and employing the concept of marginal analysis. The concluding chapter in this part covers risk-return analysis in capital budgeting, with a brief exposure to portfolio theory and a consideration of market value maximization.

5. Long-Term Financing Here we introduce you to U.S. financial markets as they relate to corporate financial management. We consider the sources and uses of funds in the capital markets—with warrants and convertibles covered, as well as the more conventional methods of financing. The guiding role of the investment banker in the distribution of securities is also analyzed. Furthermore, we encourage you to think of leasing as a form of debt.

6. Expanding the Perspective of Corporate Finance A chapter on corporate mergers considers external growth strategy and serves as an integrative tool to bring together such topics as profit management, capital budgeting, portfolio considerations, and valuation concepts. A second chapter on international financial management describes the growth of the international financial markets, the rise of multinational business, and the related effects on corporate financial management. The issues discussed in these two chapters highlight corporate diversification and risk reduction.