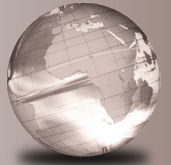


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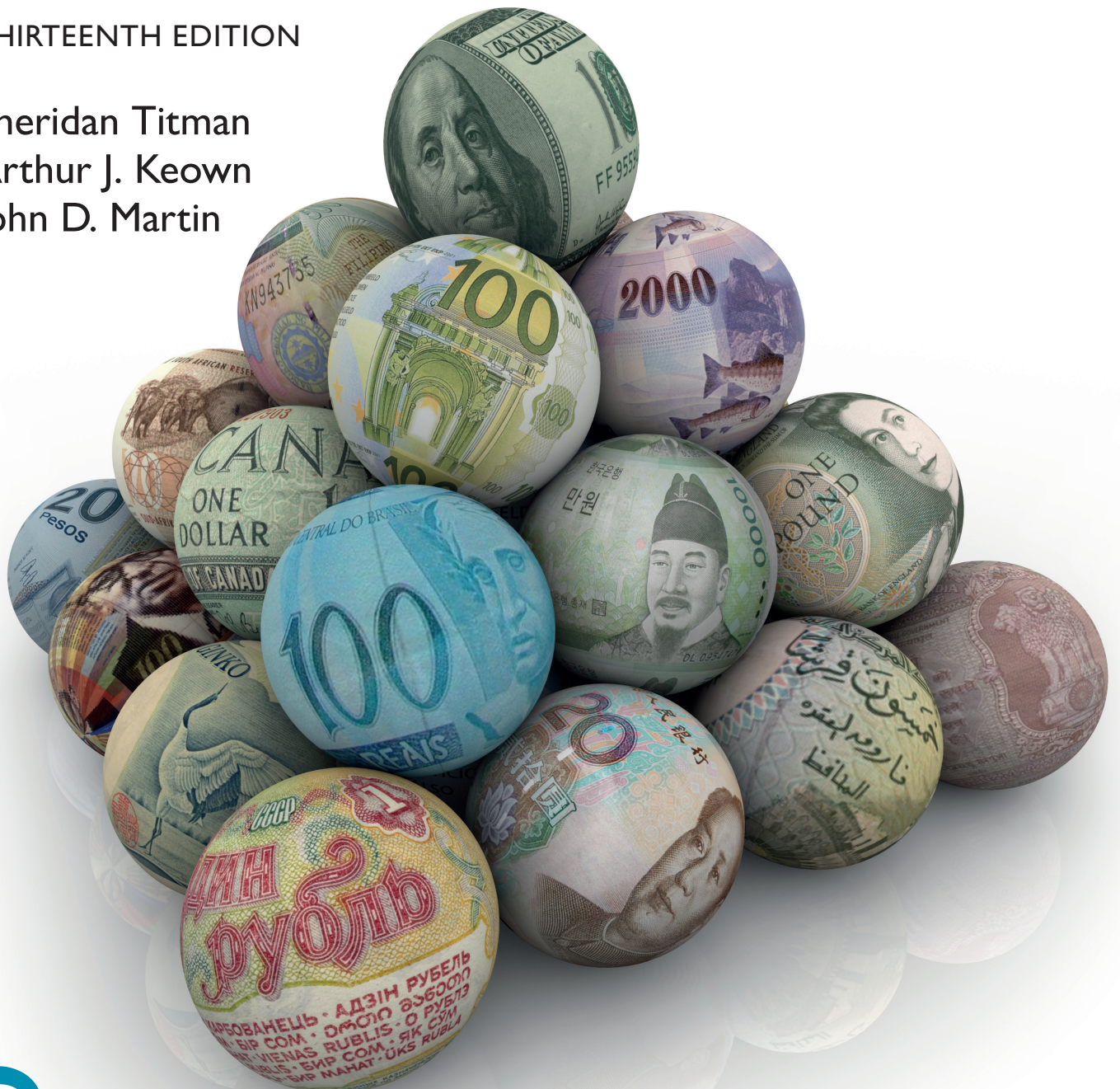


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Principles and Applications

THIRTEENTH EDITION

Sheridan Titman
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The thirteenth edition of *Financial Management: Principles and Applications* is dedicated to our families—the ones who love us the most.

To my parents, wife (Meg), and sons (Trevor, Elliot, and Gordon)
Sheridan Titman

Barb, Emily, and Artie
Arthur J. Keown

To the Martin women (my wife, Sally, and daughter-in-law Mel), men (sons David and Jess), and boys (grandsons Luke and Burke)
John D. Martin

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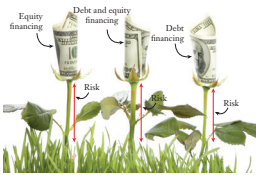
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Teaching Students the Logic of Finance

The Five Principles of Finance

Many finance books show students only the mechanics of finance problem solving, but students learn better when given the intuition behind complex concepts. *Financial Management* shows students the reasoning behind financial decisions and connects all topics in the book to five key principles—the **Five Principles of Finance**. **P** Principle 1, **P** Principle 2, **P** Principle 3, **P** Principle 4, **P** Principle 5

Principles **1**, **2**, **3**, **4**, and **5** Applied
 This book examines a wide range of financial decisions that people make in their business lives as well as in their personal lives. In this chapter, we lay a foundation for the entire book by describing the boundaries of the study of finance, the different ways that businesses are organized, and the role that the financial manager plays within the firm. We also address some of the ethical dilemmas that the financial manager must face daily.

Finally, we take an in-depth look at the five principles of finance that underlie all financial decisions: **1** **Money Has a Time Value**, **2** **There Is a Risk-Return Tradeoff**, **3** **Cash Flows Are the Source of Value**, **4** **Market Prices Reflect Information**, and **5** **Individuals Respond to Incentives**.

Each chapter opens with a helpful preview of those **Principles of Finance** that are illustrated in the coming chapter so students see the underlying and connecting themes and learn to recognize patterns. Principles are color-coded for quick recognition.



On any given day, Apple, Inc. (AAPL), will sell thousands of iPhones, iPods, iPads, and personal computers. In addition to making a myriad of production and pricing decisions, Apple must evaluate potential new products, make personnel choices, and consider new locations for Apple retail stores. Because each of these decisions affects the risk and timing of Apple's operations as well as the cash they generate, we can view all of them as financial decisions. Like Apple, you face financial decisions in your personal life. Whether evaluating the terms of credit card offers or weighing whether to go to graduate school right after graduation or to work full-time for a year or two, you will find that the same fundamental principles that guide business decisions are useful to you in making personal financial decisions.

The chapter-opening vignette provides a **real-world example** of the Principles of Finance applied in the chapter, many times reinforcing them by showing how "forgetting" a principle might lead to financial troubles.

The **Summaries** that conclude each chapter review the Principles of Finance in context, promoting deeper understanding and greater retention of chapter concepts.

Within the chapter, the authors draw on the Five Principles of Finance to illustrate concepts and explain the rationale behind financial decision making. Look for **P**, **P**, **P**, **P**, **P**

- P** Principle 1: **Money Has a Time Value**
- P** Principle 2: **There Is a Risk-Return Tradeoff**
- P** Principle 3: **Cash Flows Are the Source of Value**
- P** Principle 4: **Market Prices Reflect Information**
- P** Principle 5: **Individuals Respond to Incentives**

Applying the Principles of Finance to Chapter 17

1 Principle 2: **There Is a Risk-Return Tradeoff** arises in the financial planning process because planning enables the firm to prepare for alternate possible levels of firm sales and correspondingly different financing requirements. By being prepared, the firm reduces the risk to its shareholders and increases the value of its common stock.

Chapter Summaries

17.1 Understand the goals of financial planning. (ppgs. 586–587)
SUMMARY: The goal of financial planning is the development of a plan that a firm can use as a guide to the future. Such a plan provides the firm with estimates of its financing requirements. However, financial planning has a second and more subtle goal. The very fact that the firm's management team goes through a careful and thoughtful planning exercise is useful in itself. That is, the very act of thinking systematically about the future helps the firm's management develop an understanding of what may happen, and this is in itself a valuable exercise.

KEY TERMS

- Cash budget, page 587** A plan for a future period that details the sources of cash a firm anticipates receiving and the amounts and timing of cash it plans to spend.
- Long-term financial plan, page 587** A detailed estimate of a firm's sources and uses of financing for a period that extends three to five years into the future.
- Short-term financial plan, page 587** A forecast of a firm's sources of cash and planned uses of cash spanning the next 12 months or less.
- Strategic plan, page 586** A general description of the firm, its products and services, and how it plans to compete with other firms in order to sell those products and services.

Concept Check | 17.1
 1. What are the fundamental benefits of financial planning?
 2. Distinguish among a firm's short-term financial plan, long-term financial plan, and strategic plan.

17.2 Use the percent-of-sales method to forecast the financing requirements of a firm, including its discretionary financing needs. (ppgs. 587–590)

SUMMARY: The most common technique for forecasting a firm's pro forma financial statements, including both income statements and balance sheets, is the percent-of-sales method, which is used to make the forecast can come from the most recent financial statements, from an average compiled over several years, from the judgment of the analyst, or from some combination of these methods.

The primary objective of forecasting a firm's financing needs is to identify the amount of new financing that the firm will need to seek from discretionary sources. By discretionary sources, we mean those sources of financing that require the firm's management to make a conscious decision to use them. These sources contrast with spontaneous sources to make a conscious decision (able), which arise naturally in the course of doing business. (such as accounts payable and accounts receivable) that increase the firm's accounts payable is not a discretionary source of financing.

KEY TERMS

- Discretionary financing needs (DFN), page 590** The total amount of financing a firm estimates it will need for a future period that will not be funded by the retention of earnings or accrued expenses.
- Discretionary sources of financing, page 590** Sources of financing that require explicit action by the firm's management. For example, the decision to borrow money from a bank is an example of discretionary financing, whereas the automatic financing of inventory purchases from an existing supplier that increases the firm's accounts payable is not a discretionary source of financing.
- Percent-of-sales method, page 588** A financial forecasting technique that uses the proportion of the item being forecast (e.g., accounts

Tools for Developing Study Skills

To be successful, finance students need hands-on opportunities to apply what they have learned in ways that go beyond rote memorization of formulas. By focusing on basic principles of finance, students develop the skills needed to extend their understanding of finance tools beyond formulas and canned answers. The authors' objective is to equip students, no matter what their major or business responsibility might be, to contribute to an analysis of the financial implications of practical business decisions.

Checkpoints provide a consistent problem-solving technique that walks through each problem in five steps, including an analysis of the solution reached. Each Checkpoint concludes with an additional practice problem and its solution on the same topic so students can test their mastery of the problem-solving approach. Then students can put their knowledge to the test by completing the linked end-of-chapter Study Problem(s).

Checkpoint 11.1 CHAPTER 11 | Investment Decision Criteria 367

Calculating the Net Present Value for Project Long

Project Long requires an initial investment of \$100,000 and is expected to generate cash flows of \$70,000 in Year 1, \$30,000 per year in Years 2 and 3, \$25,000 in Year 4, and \$10,000 in Year 5. The discount rate (k) appropriate for calculating the NPV of Project Long is 17 percent. Is Project Long a good investment opportunity?

STEP 1: Picture the problem
Project Long requires an initial investment of \$100,000 and is expected to produce the following cash flows over the next five years:

Time Period	0	1	2	3	4	5
Cash Flow	-\$100,000	\$70,000	\$30,000	\$30,000	\$25,000	\$10,000

STEP 2: Decide on a solution strategy
Our strategy for analyzing whether this is a good investment opportunity involves first calculating the present value of the cash inflows and then comparing them to the amount of money invested, the initial cash outflow, to see if the difference of the NPV is positive. The NPV for Project Long is equal to the present value of the project's expected cash flows for Years 1 through 5 minus the initial cash outlay (CF₀). We can use Equation (11-1) to solve this problem. Thus, the first step in the solution is to calculate the present value of the future cash flows by discounting the cash flows using $k = 17\%$. Then, from the quantity we subtract the initial cash outlay of \$100,000. We can calculate this present value using the mathematics of discounted cash flow, a financial calculator, or a spreadsheet. We demonstrate all three methods here.

STEP 3: Solve
Using the Mathematical Formulas. Using Equation (11-1),

$$NPV = -\$100,000 + \frac{\$70,000}{(1 + .17)^1} + \frac{\$30,000}{(1 + .17)^2} + \frac{\$30,000}{(1 + .17)^3} + \frac{\$25,000}{(1 + .17)^4} + \frac{\$10,000}{(1 + .17)^5}$$

Solving the equation, we get

$$NPV = -\$100,000 + \$59,829 + \$21,915 + \$18,731 + \$13,341 + \$4,561 = -\$100,000 + \$118,378 = \$18,378$$

Using a Financial Calculator. Before using the CF button, make sure you clear your calculator by inputting CF, 2nd, C/CLC.

Data and Key Input	Display
CF ₀ : -100,000; ENTER	CF0 = -100,000.00
↓; 70,000; ENTER	CF1 = 70,000.00
↓; 1; ENTER	F01 = 1.00
↓; 30,000; ENTER	CF2 = 30,000.00
↓; 2; ENTER	F02 = 2.00
↓; 25,000; ENTER	CF3 = 25,000.00
↓; 1; ENTER	F03 = 1.00
↓; 10,000; ENTER	CF4 = 10,000.00
↓; 1; ENTER	F04 = 1.00
NPV; 17; ENTER	I = 17
↓; CPT	NPV = 18,378

Table 15.1 Financial and Capital Structures for Selected Firms (Year-End 2015)

The debt ratio equals the ratio of the firm's total liabilities to its total assets. Total liabilities equal the sum of current and long-term liabilities, including both interest-bearing debt and non-interest-bearing liabilities such as accounts payable and accrued expenses. The debt-to-enterprise-value ratio equals the ratio of the firm's short- and long-term interest-bearing debt plus excess cash and marketable securities to its enterprise value. The times interest earned ratio equals the ratio of the firm's net operating income or earnings before interest and taxes (EBIT) to its interest expense. The first two ratios measure the proportion of the firm's investments financed by borrowing, whereas the third ratio measures the ability of the firm to make the interest payments required to support its debt.

	Debt Ratio Total Liabilities Total Assets	Debt-to-Enterprise-Value Ratio Net Debt Enterprise Value	Times Interest Earned Net Operating Income or EBIT Interest Expense
American Airlines (AAL)	95.4%	28.2%	4.79
American Electric Power (AEP)	71.8%	40.6%	3.65
Emerson Electric (EMR)	35.3%	11.6%	19.26
Ford (F)	87.9%	65.2%	4.32
General Electric (GE)	80.2%	19.1%	2.82
Wal-Mart (WMT)	60.0%	16.8%	11.03
Average			
Maximum	67.1%	30.7%	8.21
Minimum	87.9%	65.2%	19.26
	35.3%	11.6%	2.82

For the set of firms in Table 15.1, the average ratio of operating income to interest expense is 8.21, which indicates that the firms' operating earnings, on average, cover their interest expense by more than eight times. This would surely make lenders feel more confident they will be paid their interest in a timely manner than if this ratio were closer to 1 or less.¹

We now have the following financial decision tools to evaluate the firm's capital structure.

Name of Tool	Formula	What It Tells You
Debt ratio	$\frac{\text{Total Liabilities}}{\text{Total Assets}}$	<ul style="list-style-type: none"> Measures the extent to which the firm has used borrowed money to finance its assets. A higher ratio indicates a greater reliance on non-owner financing or financial leverage and more financial risk taken on by the firm.
Debt-to-enterprise-value ratio	$\frac{\text{Book Value of Interest-Bearing Debt} + \text{Excess Cash}}{(\text{Book Value of Interest-Bearing Debt} + \text{Excess Cash}) + \text{Market Value of Equity}}$	<ul style="list-style-type: none"> A version of the debt ratio that uses current market values of equity as opposed to book values. The higher the debt-to-enterprise-value ratio, the more financial risk the firm is assuming.
Times interest earned	$\frac{\text{Net Operating Income or EBIT}}{\text{Interest Expense}}$	<ul style="list-style-type: none"> Measures the firm's ability to pay its interest expense from operating income. A higher ratio indicates a greater capability of the firm to pay its interest expense in a timely manner.

¹Some firms actually have negative net debt. That is, they have larger excess cash and marketable securities balances than they have interest-bearing debt outstanding. This is fairly common for high-tech firms like Apple (AAPL) that maintain very large cash balances as a reserve source of funding for investments in new technologies that are difficult to finance in the public markets.

"Tools of Financial Analysis" feature boxes provide the students with a quick reference source for the decision tools used in financial analysis. This feature appears throughout the book and names each calculation or formula, displays it in equation form, and summarizes what it tells you.

Preface

The thirteenth edition of *Financial Management: Principles and Applications* updates our materials and further refines our pedagogical approach in ways that make the material much more engaging to all undergraduate students, regardless of their major.

Our Approach to Financial Management

First-time students of finance will find that financial management builds on both economics and accounting. Economics provides much of the theory that underlies our techniques, whereas accounting provides the input or data on which decision making is based. Unfortunately, it is all too easy for students to lose sight of the logic that drives finance and to focus instead on memorizing formulas and procedures. As a result, they have a difficult time understanding how the various topics covered in an introductory course tie together, and they do not appreciate how the financial insights may be useful for them personally. More importantly, later in life when students encounter problems that do not fit neatly into the textbook presentation, they may not be able to apply what they have learned.

Our book is designed to overcome these problems. The opening chapter presents five basic principles of finance that are woven throughout the book, creating a text tightly bound around these guiding principles. In essence, students are presented with a cohesive, interrelated subject they can use when approaching future, as yet unknown, problems. We also recognize that most students taking introductory financial management are not finance majors, and we include two features that help keep them engaged. At the beginning of each chapter, we include a “Regardless of Your Major” feature box that explains why the issues raised in the chapter are relevant to those students who are not finance majors. In addition, throughout the book we have “Finance for Life” feature boxes that address issues like whether to buy or lease a car and illustrate how students will be using the tools of financial analysis for personal decisions throughout their lives.

Teaching an introductory finance class while faced with an ever-expanding discipline puts additional pressures on the instructor. What to cover, what to omit, and how to make these decisions while maintaining a cohesive presentation are inescapable questions. In dealing with these questions, we have attempted to present the chapters in a stand-alone fashion so that they can easily be rearranged to fit almost any desired course structure and course length. Because the principles are woven into every chapter, the presentation of the text remains tight, regardless of whether or not the chapters are rearranged. Again, our goal is to provide an enduring understanding of the basic tools and fundamental principles on which finance is based. This foundation will give students beginning their studies in finance a strong base on which to build future studies, and it will give students who take only one finance class a lasting understanding of the basics of finance.

Although historical developments, like the 2008 financial crisis, influence the topics that are included in the introductory finance class, the underlying principles that guide financial analysis remain the same. These principles are presented in an intuitively appealing manner in Chapter 1 and thereafter are tied to all that follows. With a focus on these principles, we provide an introduction to financial decision making rooted in financial theory. This focus can be seen in a number of ways, perhaps the most obvious being the attention paid both to valuation and to the capital markets as well as their influence on corporate financial decisions. What results is an introductory treatment of a discipline rather than the treatment of a series of isolated finance problems. Our goal is to go beyond teaching the tools of financial analysis and help students gain a complete understanding of the subject so they will be able to apply what they have learned to new and unforeseen problems—in short, to educate students in finance.

New to This Edition

The thirteenth edition includes the following key updates:

- A Guided Solution Video for each Checkpoint in the text
- “Finance for Life” feature boxes that analyze the text discussion of financial management using real-world examples
- Updated end-of-chapter Study Problem sets
- Examples that use actual companies and reflect current conditions
- Expanded coverage of the impact of changes in exchange rates
- Data and current events updates throughout

A Total Learning Package

Financial Management is not simply another introductory finance text. It is a total learning package that reflects the vitality of an ever-expanding discipline. Specifically, the thirteenth edition of *Financial Management: Principles and Applications* was revised to include features with benefits designed to address the seven key criteria outlined on the next page.

Learning Aids in the Text

The Five Principles of Finance Together, the five principles, Money Has a Time Value, There Is a Risk-Return Tradeoff, Cash Flows Are the Source of Value, Market Prices Reflect Information, and Individuals Respond to Incentives, represent the economic theory that makes up the foundation of financial decision making and are woven throughout the chapters of the book, providing the basis for focusing students on understanding the economic intuition rather than just the mechanics of solving problems. They are integrated throughout the text in the following ways:

- The five principles are introduced in Chapter 1 using examples that students can relate to personally.
- They are revisited in the chapter openers with reference to their application to each chapter’s content.
- Specific reference is made throughout the text where the principles come to bear on the discussion.

A Focus on Valuation Although many instructors make valuation the central theme of their course, students often lose sight of this focus when reading their text. We have revised this edition to reinforce this focus in the content and organization of our text in some very concrete ways:

- First, as we mentioned earlier, we have built our discussion around five finance principles that provide the foundation for the valuation of any investment.
- Second, we have introduced new topics in the context of “What is the value proposition?” and “How is the value of the enterprise affected?”

NEW! Guided Solutions Videos These videos, which are available in MyLab Finance, have been prepared for each of the Checkpoint examples in the text. They walk students through the solution to each example exercise and allow them to stop and rewatch as many times as needed to grasp the problem solution.

“Finance for Life” A new feature box has been introduced that provides students with analysis parallel to the text discussion of financial management but using examples they will likely experience in their personal lives. Once again, this pedagogical tool is designed to make the study of finance relevant to all students, regardless of their major.

NEW! Expanded Study Problem Sets Focusing on chapters with high problem usage, the end-of-chapter Study Problem sets have been strategically expanded to provide better

Challenge	Solution
1. Finance books often show the mechanics of finance but do not present the intuition.	<ul style="list-style-type: none"> The thirteenth edition utilizes five key principles to help students understand financial management so that they can focus on the intuition behind the mechanics of solving problems.
2. Students learn best when they are actively engaged.	<ul style="list-style-type: none"> A five-step problem-solving technique is used in fully worked-out examples called Checkpoints. These Checkpoints give students an opportunity to pause and test their comprehension of the key quantitative concepts as they are presented. In the fifth step (“Check Yourself”), students are given a practice problem similar to the preceding example to attempt on their own. In addition, the “Check Yourself” steps are presented in Lecture Capture Videos that are available on MyLab Finance. These videos walk students through each practice problem, clearing up any questions they might have.
3. Student understanding and motivation are improved when concepts are applied to topics that have relevance to their lives.	<ul style="list-style-type: none"> The feature box “Finance for Life” links important finance concepts to personal finance decisions that will be relevant throughout students’ lives. The feature box “Regardless of Your Major” illustrates that financial decision making often requires a team that includes not only financial analysts but also engineers, operations people, marketing people, and accountants. Just like finance majors need to know more than just finance, students pursuing these other majors need to know basic financial management to serve effectively on these teams. The feature box “Finance in a Flat World” highlights international examples of financial management concepts. End-of-chapter Study Questions are linked to these feature boxes to ensure that students have the opportunity to actively engage with the ideas presented.
4. An undergraduate textbook should provide meaningful pedagogical aids to ensure student comprehension and retention.	<ul style="list-style-type: none"> “Tools of Financial Analysis” feature boxes are provided throughout the text; they name the tool being studied, provide its formula, and then explain what it tells students. Each pedagogical feature in the chapter has significance and relevance to the chapter topics, and students are held accountable for the information therein. Designated end-of-chapter Study Questions key off the in-chapter feature boxes. Company scenarios used in chapter-opening vignettes are woven into the chapter body itself. The end-of-chapter Study Problems are labeled by major chapter section heads to guide students to the relevant chapter content.
5. Students often struggle with the mathematical rigor of the introductory finance course and need an accessible presentation of the mathematics.	<ul style="list-style-type: none"> The “Tools of Financial Analysis” feature boxes provide students with clearly stated descriptions of what the essential equations or formulas tell them. We minimize the use of formulas when we can spell things out in plain English. We use a five-step procedure in our problem examples (called Checkpoints) that begins by visualizing the problem graphically, describes a solution methodology, lays out all the necessary steps in the solution, and then interprets the solution by analyzing the underlying content of the problem situation. In addition, the practice problems in the “Check Yourself” steps are presented in Lecture Capture Videos that are available on MyLab Finance. These videos walk students through each practice problem, clearing up any questions they might have. Financial management is a problem-solving course, so we provide lots of worked-out examples and have sorted the end-of-chapter materials by major chapter sections to guide students to the relevant segment of the chapter. Figures are enhanced with notes and “talking boxes” that step students through the graphs and highlight key points.
6. Instructors find assigning and grading homework too time-consuming.	<ul style="list-style-type: none"> MyLab Finance allows instructors to create and assign tests, quizzes, or graded assignments with ease. MyLab Finance handles the grading.
7. Students often miss the big picture, viewing finance as a presentation of several loosely connected topics.	<ul style="list-style-type: none"> The opening chapter presents five underlying principles of finance that serve as a springboard for the chapters and topics that follow. In essence, students are presented with a cohesive, interrelated perspective from which future problems can be approached. The core of finance involves trying to assess the valuation consequences of business decisions in a wide variety of situations. Unfortunately, students often become so enmeshed in the details of a business problem that they have difficulty identifying the valuation consequences of its choices. To give students a context for their analysis, we use five guiding principles that underlie the valuation of any investment. With a focus on the big picture, we provide an introduction to financial decision making rooted in current financial theory and in the current state of world economic conditions. What results is an introductory treatment of a discipline rather than the treatment of a series of isolated problems that face the financial manager. The goal of this text is not merely to teach the tools of a discipline or trade but also to enable students to apply what is learned to new and as yet unforeseen problems—in short, to educate students in finance.

problem choices for the instructor. As in the previous edition, all Study Problem sets are organized by chapter section so that both instructors and students can readily align text and problem materials. Where actual company examples are used, problems have been updated to reflect current conditions.

Real-World Examples To enhance the relevance of the topics discussed, we have made extensive use of real-world examples. We provide ticker symbols in parentheses following the names of real companies throughout the text. This makes it possible for students to easily recognize examples that deal with actual companies.

NEW! Expanded Coverage of the Impact of Changes in Exchange Rates A new section titled “What a Change in the Exchange Rate Means for Business” examines how exchange rate changes impact imports and exports and the profitability of multinational firms.

A Multistep Approach to Problem Solving and Analysis As anyone who has taught the core undergraduate finance course knows, students vary across a wide range in terms of their math comprehension and skills. Students who do not have the math skills needed to master the subject end up memorizing formulas rather than focusing on the analysis of business decisions using math as a tool. We address this problem in terms of both text content and pedagogy.

- First, we present math only as a tool to help us analyze problems—and only when necessary. We do not present math for its own sake.
- Second, finance is an analytical subject and requires that students be able to solve problems. To help with this process, numbered chapter examples called Checkpoints appear throughout the book. Each of these examples follows a very detailed, multistep approach to problem solving that helps students develop their own problem-solving skills.
 1. **Step 1: Picture the problem.** For example, if the problem involves a cash flow, we will first sketch the timeline. This step also entails writing down everything we know about the problem, which includes any relationships such as what fraction of the cash flow is to be distributed to each of the parties involved and when it is to be received or paid.
 2. **Step 2: Decide on a solution strategy.** For example, what is the appropriate formula to apply? How can a calculator or spreadsheet be used to “crunch the numbers”?
 3. **Step 3: Solve.** Here we provide a completely worked-out, step-by-step solution. We first present a description of the solution in prose and then provide a corresponding mathematical implementation.
 4. **Step 4: Analyze.** We end each solution with an analysis of what the solution means. This emphasizes the point that problem solving is about analysis and decision making. Moreover, at this step we emphasize the fact that decisions are often based on incomplete information, which requires the exercise of managerial judgment, a fact of life that is often learned on the job.
 5. **Step 5: Check yourself.** Immediately following the presentation of each new problem type, we include a practice problem that gives students the opportunity to practice the type of calculation used in the example. For students wanting more help, the solutions to these “Check Yourself” problems are available as Lecture Capture Videos in MyLab Finance.

Content-Enriched Tables and Figures Students today are visual learners. They are used to scanning Internet sites to learn at a glance without the need to ferret out the meaning of a printed page. Rather than seeing this as a negative, we think, instead, that students (and we) are all the beneficiaries of a media revolution that allows us to learn quickly and easily using graphic design and interactive software. Textbooks have been slow to respond to this new way of absorbing information. In this text, the key elements of each chapter in the book can quite literally be gleaned (reviewed) from the chapter tables, figures, and examples. This means that all tables and figures are “content-enriched.” They are captioned, labeled in detail, and carefully linked so as to make them useful as a stand-alone tool for reviewing the chapter content.

“Finance for Life” These feature boxes apply the chapter concepts to personal financial problems that students encounter in their daily lives.

“Finance in a Flat World” These feature boxes demonstrate how the chapter content applies to international business.

Figure Call-Outs Many figures include floating call-outs with descriptive annotations designed to highlight key points in the figures and facilitate student learning.

Figure and Table Captions Detailed captions describe the objective of each figure or table and provide necessary background information so that its content can be easily understood. This allows students to review the chapter content by scanning the figures and tables directly.

Equations Equations are written out in plain English with minimal use of acronyms and abbreviations. In addition, “Tools of Financial Analysis” feature boxes are used throughout the book to provide a quick review and reference guide for critical equations used to support financial decision making.

Financial Spreadsheets and Calculators The use of financial spreadsheets and calculators has been integrated throughout the text. Thus, students have access to both methods of problem solving. An appendix is provided that guides students through the use of both the HP and the TI financial calculators. Excel files are available for worked-out examples and end-of-chapter solutions.

Chapter Summaries The Chapter Summaries have been rewritten and are organized around the chapter objectives.

Study Questions These end-of-chapter questions review the main concepts in the chapter and are presented in the order in which these concepts were discussed in the chapter for easy student reference.

Content Updating

In response to the continued development of financial thought, reviewer comments, and the recent economic crisis, changes have been made in the text. The following list highlights some of the important changes that were made in each of the book’s 20 chapters:

Chapter 1

GETTING STARTED—PRINCIPLES OF FINANCE

- The discussion of the five principles of finance has been revised, increasing its currency.
- This chapter has been updated and revised to make it as intuitive as possible.
- New examples—including GM’s partnership with Lyft, Disney’s Star Wars franchise, Fitbit, Netflix, and Chesapeake Energy—have been added.

Chapter 2

FIRMS AND THE FINANCIAL MARKETS

- This chapter has been revised to reflect the recent changes in interest rates and in the financial markets.
- The discussion of how securities markets bring corporations and investors together has been revised to reflect the current financial markets.
- The Study Questions have been updated and revised.

Chapter 3

UNDERSTANDING FINANCIAL STATEMENTS

- Lecture Capture Videos have been prepared for each of the Checkpoint examples in the chapter.

- Chapter Checkpoint example content has been updated to include current data and rewritten to reflect changing financial conditions.
- Company examples used in the problem exercises have been updated to reflect current information.

Chapter 4

FINANCIAL ANALYSIS—SIZING UP FIRM PERFORMANCE

- Lecture Capture Videos have been prepared for each of the Checkpoint examples in the chapter.
- Chapter Checkpoint example content has been updated to include current data and rewritten to reflect changing conditions.

Chapter 5

THE TIME VALUE OF MONEY—THE BASICS

- The coverage of payday loans and the coverage of the equivalent annual return have been updated, reflecting an example from Advance America in 2016.
- This chapter has been revised with an eye toward making it more accessible to math-phobic students.
- The Study Questions have been updated and revised.

Chapter 6

THE TIME VALUE OF MONEY—ANNUITIES AND OTHER TOPICS

- The chapter discussion has been reworked to make it more accessible to those students who are math-phobic.

Chapter 7

AN INTRODUCTION TO RISK AND RETURN—HISTORY OF FINANCIAL MARKET RETURNS

- Lecture Capture Videos have been prepared for each of the Checkpoint examples in the chapter.
- All tables and figures have been updated to reflect historical rates of return that investors have earned for different types of security investments.
- The discussion of the geometric and arithmetic means has been revised to make the importance of the type of mean used in our analysis of historical returns more transparent.
- Selected Study Problems have been revised.

Chapter 8

RISK AND RETURN—CAPITAL MARKET THEORY

- Lecture Capture Videos have been prepared for each of the Checkpoint examples in the chapter.
- The discussion of beta and its estimation from historical return data has been revised. The example company used for this discussion is now Home Depot.
- Selected Study Problems have been revised.

Chapter 9

DEBT VALUATION AND INTEREST RATES

- The examples have been updated and revised to reflect the current level of interest rates with new examples of borrowing by GE, Disney, and AT&T.
- This chapter has been revised to incorporate the very low interest rate levels in the financial markets.
- The discussion of the bond valuation relationship has been revised.

Chapter 10

STOCK VALUATION

- The discussion of the stock market, which is also covered in Chapter 2, has been dropped due to its redundancy.
- The Study Questions have been updated and revised.

Chapter 11

INVESTMENT DECISION CRITERIA

- Lecture Capture Videos have been prepared for each of the Checkpoint examples in the chapter.
- The modified internal rate of return (MIRR) discussion has been revised to focus on the origins of the situations in which the analyst will find the MIRR helpful in making an investment decision.
- The Study Problem set has been substantially revised.

Chapter 12

ANALYZING PROJECT CASH FLOWS

- Lecture Capture Videos have been prepared for each of the Checkpoint examples in the chapter.
- The Quick Reference tool for free cash flow was replaced with an expanded “Tools of Financial Analysis” feature box.
- The Study Problem set has been substantially revised.

Chapter 13

RISK ANALYSIS AND PROJECT EVALUATION

- Lecture Capture Videos have been prepared for each of the Checkpoint examples in the chapter.
- The Study Problem set has been substantially revised.

Chapter 14

THE COST OF CAPITAL

- Lecture Capture Videos have been prepared for each of the Checkpoint examples in the chapter.
- The Study Problem set has been substantially revised.

Chapter 15

CAPITAL STRUCTURE POLICY

- Lecture Capture Videos have been prepared for each of the Checkpoint examples in the chapter.
- The Study Problem set has been substantially revised.

Chapter 16

DIVIDEND AND SHARE REPURCHASE POLICY

- Figure 16.1, which looks at corporate earnings, cash dividends, and share repurchases for a broad cross-section of U.S. firms, has been updated and now covers the period between 2009 and 2015.
- A number of the chapter’s Study Problems have been revised.

Chapter 17

FINANCIAL FORECASTING AND PLANNING

- Lecture Capture Videos have been prepared for each of the Checkpoint examples in the chapter.
- The Study Problem set has been substantially revised.
- Six Study Problems have been revised.

Chapter 18

WORKING-CAPITAL MANAGEMENT

- Lecture Capture Videos have been prepared for each of the Checkpoint examples in the chapter.
- The Study Problem set has been substantially revised.

Chapter 19

INTERNATIONAL BUSINESS FINANCE

- This chapter has been revised and updated to reflect dramatic changes in exchange rates and in the global financial markets in general.
- A new section titled “What a Change in the Exchange Rate Means for Business” has been added.

Chapter 20

CORPORATE RISK MANAGEMENT

- This chapter has been revised to reflect changes in the area of corporate risk management and to allow for a more intuitive presentation.

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Test Bank The Test Bank provides multiple-choice, true/false, and short-answer questions with complete and detailed answers. As an additional resource, the Test Bank indicates questions that map to the standards set by the Association to Advance Collegiate Schools of Business so that instructors can track students' mastery of these standards. Every question in the Test Bank is also available in the TestGen software for both Windows and Macintosh computers. This easy-to-use testing software is a valuable test preparation tool that allows instructors to view, edit, and add questions. The Test Bank is available for download from the Instructor Resource Center accessible from www.pearsonglobaleditions.com/titman, and all questions can be assigned via MyLab Finance.

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