

Foundations of Finance

The Logic and Practice of Financial Management

Tenth Edition



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To my parents, from whom I learned the most.
Arthur J. Keown

*To the Martin women—wife Sally and daughter-in-law Mel, the
Martin men—sons Dave and Jess, and the Martin boys—grandsons
Luke and Burke.*
John D. Martin

*To Carter and Greg, who are great husbands to our lovely daughters,
Krista and Kate, and the fathers of our five wonderful
grandchildren—Ashley, Cameron, Erin, John, and Mackenzie.
We feel their constant love and friendship.*
J. William Petty

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Arthur J. Keown is the Department Head and R. B. Pamplin Professor of Finance at Virginia Polytechnic Institute and State University. He received his bachelor's degree from Ohio Wesleyan University, his M.B.A. from the University of Michigan, and his doctorate from Indiana University. An award-winning teacher, he is a member of the Academy of Teaching Excellence; has received five Certificates of Teaching Excellence at Virginia Tech, the W. E. Wine Award for Teaching Excellence, and the Alumni Teaching Excellence Award; and in 1999 received the Outstanding Faculty Award from the State of Virginia. Professor Keown is widely published in academic journals. His work has appeared in the *Journal of Finance*, *Journal of Financial Economics*, *Journal of Financial and Quantitative Analysis*, *Journal of Financial Research*, *Journal of Banking and Finance*, *Financial Management*, *Journal of Portfolio Management*, and many others. In addition to *Foundations of Finance*, two others of his books are widely used in college finance classes all over the country—*Basic Financial Management* and *Personal Finance: Turning Money into Wealth*. Professor Keown is a Fellow of the Decision Sciences Institute, was a member of the Board of Directors of the Financial Management Association, and is the head of the finance department at Virginia Tech. In addition, he served as the co-editor of *the Journal of Financial Research* for 6 ½ years and as the co-editor of the Financial Management Association's *Survey and Synthesis* series for 6 years. He lives with his wife in Blacksburg, Virginia, where he collects original art from *Mad Magazine*.

John D. Martin retired from Baylor University where he was the Carr P. Collins Chair of Finance after having retired earlier from the University of Texas at Austin where he held the Margaret and Eugene McDermott Professorship in Finance. He now lives on a small ranch near Crawford, TX where he and his wife raise Braunvieh-Angus cross cattle, bale a little hay and enjoy life. In his prior life as professor of finance, John taught for almost a half century earning a number of teaching awards, published over 50 articles in the leading finance journals, and coauthored ten books including *Financial Management: Principles and Practice* (13th edition, Pearson), *Foundations of Finance* (10th edition Pearson), *Valuation: The Art and Science of Corporate Investment Decisions* (3rd edition, Pearson) and *Value Based Management with Social Responsibility* (2nd edition, Oxford University Press). When not involved in farming and ranching, John feeds his learning habit by remaining an active researcher and writer. His current research interests focus on America's energy dependence problem as it relates to the economics of unconventional energy sources, educating entrepreneurs concerning the true cost of venture funding, and investigating the economic factors underlying differences in the costs of capital among emerging economies. Finally, John's abiding passion is to create a series of digital books that will meet the evolving needs of the next generation of college students.

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Preface

The study of finance focuses on making decisions that enhance the value of the firm. This is done by providing customers with the best products and services in a cost-effective way. In a sense we, the authors of *Foundations of Finance*, share the same purpose. We have tried to create a product that provides value to our customers—both students and instructors who use the text. It was this priority that led us to write *Foundations of Finance: The Logic and Practice of Financial Management*, which was the first “shortened book” of financial management when it was originally published. This text launched a trend that has since been followed by all the major competing texts in this market. The text broke new ground not only by reducing the breadth of materials covered but also by employing a more intuitive approach to presenting new material. From that first edition, the text has met with success beyond our expectations for nine editions. For that success, we are eternally grateful to the multitude of finance instructors who have chosen to use the text in their classrooms.

New to the Tenth Edition

Many of the changes in the 10th edition stem from comments and suggestions made by adopters, and we thank them for all they have done to improve this edition. Other changes were inspired by the passage of the Tax Cuts and Jobs Act of 2017. This new law brought sweeping changes to corporate taxes. Some of the tax changes that will impact corporate finance decisions include a dramatic reduction in the corporate tax rate, the ability to depreciate the full purchase price of capital investments in the year the investment is put into service, a limitation on the tax deductibility of interest payments, and a change in the taxation of foreign profits. Needless to say, the impact of these tax changes ripple throughout the book. For example, corporate decision making, with respect to new investments in new projects and how those projects are financed, are impacted by the new tax law.

In addition to the integration of the new tax law throughout the book, we have made some chapter-by-chapter updates in response to the continued development of financial thought and reviewer comments. By chapter, some of these changes include:

Chapter 1

An Introduction to the Foundations of Financial Management

- ◆ Revised and updated chapter introduction
- ◆ Revised and updated section on the Organizational Form and Taxes to include changes resulting from the new tax laws and changes to pass-through entities

Chapter 2

The Financial Markets and Interest Rates

- ◆ Revised and updated chapter introduction
- ◆ Revised coverage to include recent changes in the financial markets
- ◆ Updated coverage of the term structure of interest rates to address the very low rates that characterize today's markets

Chapter 3**Understanding Financial Statements and Cash Flows**

- ◆ Streamlined bullet point presentations that can be reviewed by the reader to quickly grasp new concepts
- ◆ Updated to illustrate the principles of financial statements, using a company that will be of interest to students—Walmart
- ◆ Rather than merely present Walmart's financial statements in isolation, background material is provided about Walmart that will give context to the company's financials

Chapter 4**Evaluating a Firm's Financial Performance**

- ◆ Streamlined chapter presentation makes it easier for the reader to review the process used in conducting the analysis
- ◆ Comparative financial performance analysis provided using retail giants Walmart and Target

Chapter 5**The Time Value of Money**

- ◆ Revised to make the subject matter more accessible to all students regardless of their level of mathematical skill
- ◆ Expanded problem set

Chapter 6**The Meaning and Measurement of Risk and Return**

- ◆ Updated to show an illustration of the large differences in returns over the time periods of 2007–2009, 2009–2018, and 2007–2018
- ◆ Provides an examination of average rates of return and the variability of the returns for different types of securities, such as government bonds, corporate bonds and stock for 90 years, from 1926 to 2016
- ◆ Updated to show examples of firms like Nike and eBay, which clearly illustrate the chapter concepts.
- ◆ Includes a new mini-case highlighting Walmart and Target

Chapter 7**The Valuation and Characteristics of Bonds**

- ◆ Provides additional real-world examples
- ◆ A new *Finance at Work* feature describes a bond issued by Apple called a *green bond*

Chapter 8**The Valuation and Characteristics of Stock**

- ◆ Revised to describe the events leading to Netflix becoming one of the most highly valued stocks in the marketplace
- ◆ The *Finance at Work* box has been revised on reading stock quotes in the *Wall Street Journal*
- ◆ Includes updated chapter examples

Chapter 9**The Cost of Capital**

- ◆ All illustrative examples have been updated to reflect changed financial conditions
- ◆ Includes an updated discussion of tax considerations to reflect the 2017 revision to the U. S. tax code, which imposes a maximum corporate tax rate of 21 percent

- ◆ New *Finance at Work* insert discusses the new tax law and limitations to the deductibility of interest expense to a maximum of 30 percent of firm earnings before interest and taxes plus depreciation and amortization (EBITDA)
- ◆ Figure revision illustrates the dramatic differences in capital structures used by firms in very different types of industries to reflect the current capital structures of retailer Bed, Bath and Beyond (BBBY) and oil and gas production company, Wildhorse Resources (WRD)

Chapter 10

Capital-Budgeting Techniques and Practice

- ◆ Includes an extensively revised chapter introduction, which looks at Disney's decision to build the Shanghai Disney Resort
- ◆ Offers a simplified, intuitive discussion of the IRR and MIRR
- ◆ Offers a simplified, intuitive discussion of the ranking of mutually exclusive projects
- ◆ Includes an expanded problem set.

Chapter 11

Cash Flows and Other Topics in Capital Budgeting

- ◆ Revised the calculation of operating cash flows to reflect the changes resulting from passage of the Tax Cuts and Jobs Act of 2017, in particular bonus depreciation
- ◆ Includes revised examples and problems, which reflect the change in the calculation of depreciation
- ◆ Includes an expanded problem set.

Chapter 12

Determining the Financing Mix

- ◆ Offers a revised chapter introduction using a comparison of social media firm, Snap Inc. and computer chip maker, Broadcom (AVGO)
- ◆ Revised problem examples and end-of-chapter exercises reflect the tax code revision of 2017
- ◆ A new mini-case that analyzes the capital structure of Wildhorse Resources (WRD) focuses on whether a bank should agree to a loan extension for the firm considering its current capital structure and operating conditions

Chapter 13

Dividend Policy and Internal Financing

- ◆ Updated discussion of dividend policy reflects the revision to the U.S. tax code
- ◆ A streamlined discussion of tax implications for dividend policy focuses on the applicable tax rates for dividends and capital gains
- ◆ Revised end-of-chapter study problems reflect changes in the tax code

Chapter 14

Short-Term Financial Planning

- ◆ Revised end-of-chapter problems and in-chapter examples reflect changes to the U.S. tax code

Chapter 15

Working-Capital Management

- ◆ New *Finance at Work* insert evaluates the cost of Payday loans using the same method used to evaluate the cost of trade credit. Students will be surprised to see how expensive these loans are and the fact that they are indeed legal

Chapter 16

International Business Finance

- ◆ Extensive revisions reflect changes in exchange rates and global financial markets
- ◆ A new section titled “Repatriation of Profits and Taxation of Profits Abroad” deals with the changes resulting from the passage of the Tax Cuts and Jobs Act of 2017

Web Chapter 17

Cash, Receivables, and Inventory Management

- ◆ Discussion of cash management has been simplified and reduced in coverage so that students can more easily grasp the important concepts underlying its management

The *Foundations of Finance* Tenth Edition Program

The 10th Edition of *Foundations of Finance* continues its drive to provide the student with an intuitive understanding of financial management while providing them with the concepts and skills needed for the successful manager. An understanding that emphasizes the logic and fundamental principles that drive the field of finance allows students to effectively deal with financial problems in an ever-changing financial environment.

To improve student results, we recommend pairing the text content with MyLab Finance, which is the teaching and learning platform that empowers you to reach every student. By combining trusted author content with digital tools and a flexible platform, MyLab personalizes the learning experience and will help your students learn and retain key course concepts while developing skills that future employers are seeking in their candidates. Select end-of-chapter problems in the text are now offered in MyLab Finance as auto-graded Excel Projects. Using proven, field-tested technology, auto-graded Excel Projects allow instructors to seamlessly integrate Microsoft Excel content into their course without having to manually grade spreadsheets. Students have the opportunity to practice important finance skills in Excel, helping them to master key concepts and gain proficiency with the program.

Another form of learning technology offered with this course is the lecture video. We have recorded brief (10–15 minute) lecture videos to accompany all the numbered in-text examples so that the students can replay them as many times as they need to help them understand more fully each of the in-text examples. Students will benefit from being “tutored” when it comes to the primary examples in the text. The videos can be found in the Multimedia Library as well as the eText within MyLab Finance.

Solving Teaching and Learning Challenges

In our opinion, the success of this textbook derives from our focus on maintaining *pedagogy that works*. We endeavor to provide students with a conceptual understanding of the financial decision-making process that includes a survey of the tools and techniques of finance. For the student, it is all too easy to lose sight of the logic that drives finance and to focus instead on memorizing formulas and procedures. As a result, students have a difficult time understanding the interrelationships among the topics covered. Moreover, later in life, when the problems encountered do not match the textbook

presentation, students may find themselves unprepared to abstract from what they have learned. We have worked to be “good at the basics.” To achieve this goal, we have refined the book over the last ten editions to include the following features.

Building on Foundational Finance Principles

Chapter 1 presents five foundational principles of finance which are the threads that bind all the topics of the book. Then throughout the text, we provide reminders of the foundational principles in “Remember Your Principles” boxes.

The five principles of finance allow us to 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 financial problems that managers encounter.

LO2 Understand the basic principles of finance, their importance, and the importance of ethics and trust.

Five Principles That Form the Foundations of Finance

To the first-time student of finance, the subject matter may seem like a collection of unrelated decision rules. This impression could not be further from the truth. In fact, our decision rules, and the logic that underlies them, spring from five simple principles that do not require knowledge of finance to understand. These five principles guide the financial manager in the creation of value for the firm’s owners (the stockholders).

As you will see, although it is not necessary to understand finance to understand these principles, it is necessary to understand these principles in order to understand finance. These principles may at first appear simple or even trivial, but they provide the driving force behind all that follows, weaving together the concepts and techniques presented in this text, and thereby allowing us to focus on the logic underlying the practice of financial management. Now let’s introduce the five principles.

PRINCIPLE 1

Principle 1: Cash Flow Is What Matters

You probably recall from your accounting classes that a company’s profits can differ dramatically from its cash flows, which we will review in Chapter 3. But for now

Use of an Integrated Learning System

The text is organized around the learning objectives that appear at the beginning of each chapter to provide the instructor and student with an easy-to-use integrated learning system. Numbered icons identifying each objective appear next to the related material throughout the text and in the summary, allowing easy location of material related to each objective.

A Focus on Valuation

Although many professors and instructors make valuation the central theme of their course, students often lose sight of this focus when reading their text. We reinforce this focus in the content and organization of our text in some very concrete ways:

- ◆ We build our discussion around the five finance principles that provide the foundation for the valuation of any investment.
- ◆ We introduce new topics in the context of “what is the value proposition?” and “how is the value of the enterprise affected?”

Real-World Opening Vignettes

Each chapter begins with a story about a current, real-world company faced with a financial decision related to the chapter material that follows. These vignettes have been carefully prepared to stimulate student interest in the topic to come and can be used as a lecture tool to provoke class discussion.

CHAPTER 1

An Introduction to the Foundations of Financial Management

Learning Objectives

| | | |
|------------|---|--|
| LO1 | Identify the goal of the firm. | The Goal of the Firm |
| LO2 | Understand the basic principles of finance, their importance, and the importance of ethics and trust. | Five Principles That Form the Foundations of Finance |
| LO3 | Describe the role of finance in business. | The Role of Finance in Business |
| LO4 | Distinguish among the different legal forms of business organization. | The Legal Forms of Business Organization |
| LO5 | Explain what has led to the era of the multinational corporation. | Finance and the Multinational Firm: The New Role |
| LO6 | Describe how this course and the skills you will develop in it will help you in your career and in your life. | Developing Skills for Your Career |

Between the introduction of the iPod in October 2001 and the beginning of 2005, Apple sold more than 6 million of the device. Then, in 2004, it came out with the iPod Mini, about the length and width of a business card, which has also been a huge success, particularly among women. How successful has this new product been? By 2004, Apple was selling more iPods than its signature Macintosh desktop and notebook computers.

How do you follow up on the success of the iPod? You keep improving and revising your products, and you keep developing and introducing new products that consumers want—the iPhone. With this in mind, in September 2017, Apple unveiled its iPhone 8 and iPhone X, which immediately dominated smart phone sales, accounting for 61 percent of smartphone sales in the fourth quarter of 2017.

In effect, Apple seems to have a never-ending supply of new, exciting products that we all want. In 2014 Apple bought Beats for \$3 billion; then in April 2015, Apple introduced the Apple Watch, and while there have been rumors about introducing an Apple Car in 2020, it now looks like Apple is gearing up to release an augmented reality headset in the near future. Through all of this, Apple has developed and expanded its services including Apple Pay, Apple Music, the iTunes Store, and iCloud to the point where, in 2018, these new services account for about 16 percent of their total revenue.

How did Apple make the decision to introduce the original iPod and then the iPad? The answer is by identifying a customer need, combined with sound financial management. Financial management deals with the maintenance and creation of economic value or wealth by focusing on decision making with an eye toward creating wealth. This text deals with financial decisions such as when to introduce a new product, when to invest in new assets, when to replace existing assets, when to borrow from banks, when to sell stocks or bonds, when to extend credit to a customer, and how much cash and inventory to maintain. All of these aspects of financial management were factors in Apple’s decision to introduce and continuously improve the iPod, iPhone, and iPad, and the end result is having a major financial impact on Apple.

In this chapter, we lay the foundation for the entire book by explaining the key goal that guides financial decision making: maximizing shareholder wealth. From there we introduce the thread that ties everything together—the five basic principles of finance. Finally, we discuss the legal forms of business. We close the chapter with a brief look at what has led to the rise in multinational corporations.

The Goal of the Firm

The fundamental goal of a business is to create value for the company’s owners (i.e., its shareholders). This goal is frequently stated as “maximization of shareholder wealth.” Thus, the goal of the financial manager is to create wealth for the shareholders by making decisions that will maximize the price of the existing common stock.

LO1 Identify the goal of the firm.



A Step-by-Step Approach to Problem Solving and Analysis

As anyone who has taught the core undergraduate finance course knows, students demonstrate a wide range of math comprehension and skill. Students who do not have the math skills needed to master the subject sometimes 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 appear throughout the book. All of these examples follow a very detailed and structured three-step approach to problem solving that helps students develop their problem-solving skills:

STEP 1: Formulate a Decision Strategy

A company's financing decisions can be evaluated by considering two questions: (1) How much debt is used to finance the firm's assets? (2) Does a company have the ability to service its debt interest payments? These two issues can be assessed by using the debt ratio and the times interest earned ratio, respectively, calculated as follows:

$$\text{Debt ratio} = \frac{\text{total debt}}{\text{total assets}}$$

$$\text{Times interest earned} = \frac{\text{operating profits}}{\text{interest expense}}$$

STEP 2: Crunch the Numbers

A comparison of Disney's debt ratio and times interest earned with the industry is as follows:

| | Disney | Industry |
|-----------------------|--------|----------|
| Debt ratio | 56% | 34.21% |
| Times interest earned | 36.81X | 8.50X |

STEP 3: Analyze Your Results

Disney uses significantly more debt financing than the average firm in the industry. The higher debt ratio implies that the firm has greater financial risk. Even so, Disney appears to have no difficulty servicing its debt, covering its interest 36.81 times compared only to 8.5 times for the average firm in the industry. Disney's higher *times interest earned* is attributable to a significantly higher operating return on its assets (14.79% for Disney and 9.24% for the industry), which more than offsets the firm's use of more debt.

Step 1: *Formulate a Solution Strategy*. For example, what is the appropriate formula to apply? How can a calculator or spreadsheet be used to "crunch the numbers"?

Step 2: *Crunch the Numbers*. Here we provide a completely worked out step-by-step solution. We present first a description of the solution in prose and then a corresponding mathematical implementation.

Step 3: *Analyze Your Results*. We end each solution with an analysis of what the solution means. This stresses the point that problem solving is about analysis and decision making. Moreover, in this step we emphasize 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.

CAN YOU DO IT?

Solving for the Real Rate of Interest

Your banker just called and offered you the chance to invest your savings for 1 year at a quoted rate of 10 percent. You also saw on the news that the inflation rate is 6 percent. What is the real rate of interest you would be earning if you made the investment? (The solution can be found on page 42.)

DID YOU GET IT?

Solving for the Real Rate of Interest

$$\begin{aligned} \text{Nominal or quoted rate of interest} &= \text{real rate of interest} + \text{anticipated rate of inflation} + \text{product of the real rate of interest and the inflation rate} \\ 0.10 &= \text{real rate of interest} + 0.06 + 0.06 \times \text{real rate of interest} \\ 0.04 &= 1.06 \times \text{real rate of interest} \end{aligned}$$

Solving for the real rate of interest:

$$\text{Real rate of interest} = 0.0377 = 3.77\%$$

"Can You Do It?" and "Did You Get It?"

The text provides examples for the students to work at the conclusion of each major section of a chapter, which we call "Can You Do It?," followed by "Did You Get It?" later in the chapter. This tool provides an essential ingredient in the building-block approach to the material that we use.

Concept Check

At the end of major chapter sections we include a brief list of questions that are designed to highlight key ideas presented in the section.

Concept Check

- 1. According to Principle 3, how do investors decide where to invest their money?
- 2. What is an efficient market?
- 3. What is the agency problem, and why does it occur?
- 4. Why are ethics and trust important in business?

Financial Decision Tools

A feature that has proven popular with students has been our recapping of key equations shortly after their discussion. Students get to see an equation within the context of related equations.

| FINANCIAL DECISION TOOLS | | |
|---|--|--|
| Name of Tool | Formula | What It Tells You |
| Bond value when interest is paid semiannually | $V_0 = \frac{\$t/2}{\left(1 + \frac{r_f}{2}\right)^1} + \frac{\$t/2}{\left(1 + \frac{r_f}{2}\right)^2} + \frac{\$t/2}{\left(1 + \frac{r_f}{2}\right)^3} + \dots + \frac{\$t/2}{\left(1 + \frac{r_f}{2}\right)^{2n}} + \frac{\$M}{\left(1 + \frac{r_f}{2}\right)^{2n}}$ | Calculates the value of a bond as the present value of both future interest payments received semiannually and the par value of the bond to be received at maturity. |

Financial Calculators and Excel Spreadsheets

The use of financial calculators and Excel spreadsheets has been integrated throughout the text, especially with respect to presentation of the time value of money and valuation. Where appropriate, actual calculator and spreadsheet solutions appear in the text.

| CALCULATOR SOLUTION | |
|---------------------|--------------|
| Data Input | Function Key |
| 360 | N |
| 6.5/12 | I/Y |
| -1,250 | PMT |
| 0 | FV |
| Function Key | Answer |
| CPT | |
| PV | 197,763.52 |

| A | | B |
|---|----------------------------|----------------|
| 1 | interest rate (rate) = | 0.5417% |
| 2 | number of periods (nper) = | 360 |
| 3 | payment (pmt) = | 1,250 |
| 4 | future value (fv) = | 0 |
| 5 | | |
| 6 | | |
| 7 | present value (pv) = | (\$197,763.52) |
| 8 | | |

Entered values in cell b6: =PV((6.5/12)% ,b2,b3,b4)

Chapter Summaries That Bring Together Concepts, Terminology, and Applications

The chapter summaries have been written in a way that connects them to the in-chapter sections and learning objectives. For each learning objective, the student sees in one place the concepts, new terminology, and key equations that were presented in the objective.

Chapter Summaries

LO1 Explain the purpose and importance of financial analysis. (pgs. 100–103)

SUMMARY: A variety of groups find financial ratios useful. For instance, both managers and shareholders use them to measure and track a company’s performance over time. Financial analysts outside of the firm who have an interest in its economic well-being also use financial ratios. An example of this group would be a loan officer of a commercial bank who wishes to determine the creditworthiness of a loan applicant and its ability to pay the interest and principal associated with the loan request.

KEY TERMS

Financial ratios, page 101 accounting data identify some of the financial strengths and restated in relative terms to help people weaknesses of a company.

Revised Study Problems

With each edition, we have provided new and revised end-of-chapter study problems to refresh their usefulness in teaching finance. Also, the study problems continue to be organized according to learning objective so that both the instructor and student can readily align text and problem materials. New to this edition, the Study Problems with Excel icons indicate that Auto Graded Excel Project spreadsheets are available in MyLab Finance.

- 10-12. (NPV with different required rates of return)** Mooby’s is considering building a new theme park. After future cash flows were estimated, but before the project could be evaluated, the economy picked up and with that surge in the economy interest rates rose. That rise in interest rates was reflected in the required rate of return Mooby’s used to evaluate new projects. As a result, the required rate of return for the new theme park jumped from 9.5 percent to 11.00 percent. If the initial outlay for the park is expected to be \$250 million and the project is expected to return free cash flows of \$50 million in years 1 through 5 and \$75 million in years 6 and 7, what is the project’s NPV using the new required rate of return? How much did the project’s NPV change as a result of the rise in interest rates?
- 10-13. (IRR with uneven cash flows)** The Tiffin Barker Corporation is considering introducing a new currency verifier that has the ability to identify counterfeit dollar bills. The required rate of return on this project is 12 percent. What is the IRR on this project if it is expected to produce the following free cash flows?

Mini Case

This Mini Case is available in MyLab Finance.

The final stage in the interview process for an assistant financial analyst at Caledonia Products involves a test of your understanding of basic financial concepts. You are given the following memorandum and asked to respond to the questions. Whether you are offered a position at Caledonia will depend on the accuracy of your response.

To: Applicants for the position of Financial Analyst
 From: Mr. V. Morrison, CEO, Caledonia Products
 Re: A test of your understanding of basic financial concepts and of the corporate tax code

Please respond to the following questions:

- What is the appropriate goal for the firm and why?
- What does the risk–return trade-off mean?
- Why are we interested in cash flows rather than accounting profits in determining the value of an asset?
- What is an efficient market, and what are the implications of efficient markets for us?
- What is the cause of the agency problem, and how do we try to solve it?
- What do ethics and ethical behavior have to do with finance?
- Define (1) sole proprietorship, (2) partnership, and (3) corporation.

Comprehensive Mini Cases

A comprehensive Mini Case appears at the end of almost every chapter, covering all the major topics included in that chapter. Each Mini Case can be used as a lecture or review tool by the professor. For the students, the Mini Case provides an opportunity to apply all the concepts presented within the chapter in a realistic setting, thereby strengthening their understanding of the material.

Additional MyLab Finance Features

A Powerful Homework and Test Manager. A powerful homework and test manager lets you create, import, and manage online homework assignments, quizzes, and tests that are automatically graded. You can choose from a wide range of assignment options, including time limits, proctoring, and maximum number of attempts allowed. The

bottom line: MyLab Finance means less time grading and more time teaching. Please visit www.pearson.com/mylab/finance to access the full set of features available in MyLab Finance.

Study Plan. The Study Plan gives personalized recommendations for each student, based on his or her ability to master the learning objectives in your course. This allows students to focus their study time by pinpointing the precise areas they need to review, and allowing them to use customized practice and learning aids — such as videos, eTexts, tutorials, and more — to help students stay on track.

Pearson eText. Pearson eText enhances learning — both in and out of the classroom. Students can take notes, highlight, and bookmark important content, or engage with interactive lecture and example videos that bring learning to life anytime, anywhere via MyLab or the app. Pearson eText enhances learning — both in and out of the classroom. Worked examples, videos, and interactive tutorials engage students while algorithmic practice and self-assessment opportunities test students' understanding of the material via MyLab or the app.

Learning Management System (LMS) Integration. You can now link from Blackboard Learn, Brightspace by D2L, Canvas, or Moodle to MyLab Finance. Access assignments, rosters, and resources, and synchronize grades with your LMS gradebook. For students, single sign-on provides access to all the personalized learning resources that make studying more efficient and effective.

Excel Projects. Using proven, field-tested technology, auto-graded Excel Projects let you seamlessly integrate Microsoft Excel content into your course without having to manually grade spreadsheets. Students can practice important statistical skills in Excel, helping them master key concepts and gain proficiency with the program. They simply download a spreadsheet, work live on a statistics problem in Excel, and then upload that file back into MyLab Finance. Within minutes, they receive a report that provides personalized, detailed feedback to pinpoint where they went wrong in the problem.

Financial Calculator. Students can access a fully functional Financial Calculator inside MyLab Finance and a financial calculator app that they can download to their iPhone®, iPad®, or Android device — so they can perform financial calculations and complete assignments, all in the same place.

Question Help. Question Help consists of homework and practice questions to give students unlimited opportunities to master concepts. If students get stuck, learning aids like Help Me Solve This, View an Example, eText Pages, and a Financial Calculator walk them through the problem and show them helpful info in the text — giving them assistance when they need it most.

Worked Out Solutions. Worked Out Solutions are available to students when they are reviewing their submitted and graded homework. They provide step-by-step explanations on how to solve the problem using the exact numbers and data presented in the original problem. Instructors have access to Worked Out Solutions in preview and review mode.

Please visit www.pearson.com/mylab/finance to access the full set of features available in MyLab Finance.

Developing Employability Skills

For students to succeed in a rapidly changing job market, they should be aware of their career options and how to go about developing the necessary skills. With MyLab Finance and *Foundations of Finance*, we focus on developing these skills in the following ways:

Excel Skills Today, Excel is the primary spreadsheet analysis and modeling tool used in business, and a basic competence in Excel will go a long way towards a successful business career. The power to import data from various files and documents makes Excel the perfect tool for business analysis. In MyLab Finance, there are numerous problems available as auto-graded Excel Projects, which are identified in the text with an Excel icon. Using proven, field-tested technology, these projects seamlessly integrate Microsoft Excel content into the course while avoiding the need to manually grade spreadsheets. This feature allows students the opportunity to practice important finance skills in Excel, helping them to master key concepts and gain proficiency with the program.

Critical Thinking Skills This text begins with the presentation of five foundational principles of finance, which are the threads that bind all the topics of the book. Then, throughout the book, these five foundational principles are revisited in “Remember Your Principles” boxes. These five principles of finance allow us to tie the material together and, as a result, demonstrate the common root of financial theory and financial practice. The end result is an introductory treatment of a discipline rather than the treatment of a series of isolated financial problems that managers encounter. This approach allows students to learn more than simply how to calculate the correct answers to problems. It allows them to understand why problems are approached in different ways and to critically interpret problems, design solutions, and analyze and evaluate their solutions. In effect, students learn the tools of analysis, but more importantly, develop an intuitive understanding of why and what they are doing in their analysis. To conduct this analysis, forecast the future, and discount those cash flows, they must make many assumptions about specific variables. By tying together the logic and fundamental principles that drive the field of finance, students are encouraged to develop their critical thinking skills and effectively deal with financial problems in an ever-changing financial environment.

Data Analysis Skills Finance deals with decision making within the firm—when to introduce a new product, make an investment, or how to value a financial asset like a bond or a share of common stock. Gaining an understanding of the decision-making process and the analytical tool set necessary to make those decisions reflects the core of finance and this text.

Table of Contents Overview

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| Part 1 | The Scope and Environment of Financial Management | |
| | 1 An Introduction to the Foundations of Financial Management | Introduces the framework for the maintenance and creation of shareholder wealth, which should be the goal of the firm and its managers, followed by a look at the basic principles of finance. The different legal forms of organization are also discussed along with multinational corporations. |
| | 2 The Financial Markets and Interest Rates | Examines key components of the US financial market system and the financing of business, and the process of raising funds in capital markets. Historical rates of return are examined along with the fundamentals of interest rate determination. |
| | 3 Understanding Financial Statements and Cash Flows | Financial statements are in some ways the “language of business.” As a manager, there are simply some things about a business that can only be understood through a firm’s financial statements. This chapter examines the three basic financial statements that are used to understand how a firm is doing financially, including (1) income statements, (2) balance sheets, and (3) statements of cash flows. |
| | 4 Evaluating a Firm’s Financial Performance | Identifies important financial relationships of interest to managers, lenders, and shareholders to give more meaning to the financial statements. |
| Part 2 | The Valuation of Financial Assets | |
| | 5 The Time Value of Money | Examines the time value of money, looking at calculations associated with moving money through time. |
| | 6 The Meaning and Measurement of Risk and Return | Explains the nature of risk and how risk <i>should</i> relate to expected returns on investments. |
| | 7 The Valuation and Characteristics of Bonds | Explains how bonds and stocks are valued in the marketplace; identifies the different kinds of bonds and their features; and examines the procedures for valuing an asset and applying these ideas to valuing bonds. |
| | 8 The Valuation and Characteristics of Stock | Focuses on the characteristics of common and preferred stocks, and examines how to value them using the same concept for valuing both preferred stock and common stock. |
| | 9 The Cost of Capital | The cost of capital is a key determinant of whether a firm’s investment choices will create value for the firm’s stockholders. In this chapter we evaluate a firm’s overall cost of capital and discuss the estimation of divisional costs of capital. |
| Part 3 | Investment in Long-Term Assets | |
| | 10 Capital-Budgeting Techniques and Practice | Presents capital-budgeting techniques, including the payback period, discounted payback period, net present value, internal rate of return, and the modified internal rate of return. |
| | 11 Cash Flows and Other Topics in Capital Budgeting | Presents cash flow guidelines and examines the calculation of a project’s free cash flows; focuses on options in capital budgeting, closing with an examination of risk and the investment decision. |
| Part 4 | Capital Structure and Dividend Policy | |
| | 12 Determining the Financing Mix | When firms make investment decisions they must simultaneously decide what investments to undertake and how they will finance those investments. In this chapter we investigate the factors underlying the decision process that sometimes leads the firms to borrow money and at other times issue new shares of stock. |
| | 13 Dividend Policy and Internal Financing | Dividend policy and a firm’s decision to retain earnings to help finance its investments are opposite sides of the same coin. A decision to pay out a portion of firm earnings to its stockholders in the form of a cash dividend or a stock repurchase is a decision not to retain those earnings and reinvest them in the firm. In this chapter we review various theories concerning why firms choose to pay cash dividends or retain and reinvest earnings. |

| Part 5 Working-Capital Management and International Business Finance | | |
|---|---|--|
| | 14 Short-Term Financial Planning | In order to assure that the firm has the funds it needs to support its day-to-day operations, it is crucial that it forecast those financing needs as part of its planning process. In this chapter we discuss the percent of sales method for preparing a financial forecast as well as the cash budget. |
| | 15 Working-Capital Management | Overviews working capital management as it relates to the analysis of the firm's investment in short-term or current assets and its use of short-term or current liabilities. Discusses how the balancing of these two accounts will determine the ability of the firm to pay its bills on time or firm liquidity. |
| | 16 International Business Finance | Examines foreign exchange markets and currency exchange rates; the concepts of interest rate parity, purchasing power parity, and the law of one price; and capital budgeting for direct foreign investment. |
| | Web 17 Cash, Receivables, and Inventory Management | Discusses the theory behind managing a firm's liquidity by managing its working capital and the fact that this is primarily accomplished by the management of cash, accounts receivables, and inventories. |

Instructor Teaching Resources

The Instructor's Resource Center, accessible at <http://www.pearsonhighered.com/irc>, hosts all of the instructor resources that follow. Instructors can register online for access or may contact their sales representative for further information.

| Supplements available to instructor at www.pearsonhighered.com/irc | Features of the Supplement |
|--|--|
| Instructor's Resource Manual Authored by Sonya Britt-Lutter from Kansas State University | <ul style="list-style-type: none"> • Chapter orientations • Chapter outlines • Solutions to end-of-chapter Review Questions, Study Problems, and Mini Cases, as well as any associated Excel files |
| Test Bank Authored by Rodrigo J. Hernandez from Radford University | More than 1600 multiple-choice, true/false, short-answer, and graphing Questions with these annotations: <ul style="list-style-type: none"> • Type (multiple-choice, true/false, short-answer, essay) • Topic (the term or concept the question supports) • Learning outcome • AACSB learning standard (written and oral communication; ethical understanding and reasoning; analytical thinking; information technology; interpersonal relations and teamwork; diverse and multicultural work; reflective thinking; application of knowledge) |
| Computerized TestGen | TestGen allows instructors to: <ul style="list-style-type: none"> • Customize, save, and generate classroom tests • Edit, add, or delete questions from the test item files • Analyze test results • Organize a database of tests and student results. |
| PowerPoints Authored by Sonya Britt-Lutter from Kansas State University | PowerPoints include lecture notes, key equations, and figures and tables from the text. In addition, these the slides meet accessibility standards for students with disabilities. Features include, but are not limited to: <ul style="list-style-type: none"> • Keyboard and screen reader access • Alternative text for images • High color contrast between background and foreground colors |

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 Lori Grady, Bucks County Community College
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 Thomas Hiebert, University of North Carolina, Charlotte
 Marlin Jensen, Auburn University
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—A.J.K./J.D.M./J.W.P.