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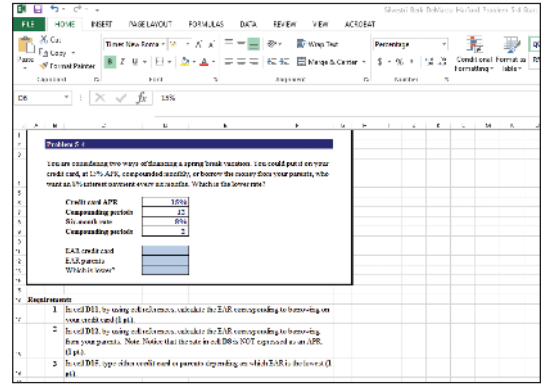
# Fundamentals of Investing

FOURTEENTH EDITION

Scott B. Smart • Chad J. Zutter

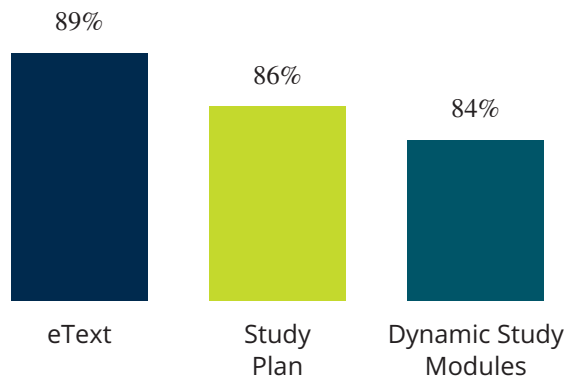


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# Fundamentals of Investing

Fourteenth Edition

Global Edition

**SCOTT B. SMART**

Indiana University

**CHAD J. ZUTTER**

University of Pittsburgh



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**Dedicated to  
our friends and mentors,  
Dr. Lawrence J. Gitman and Michael D. Joehnk,  
who trusted us as coauthors and successors of *Fundamentals of Investing*.**

**SBS**

**CJZ**

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# About the Authors



**Scott B. Smart** is a finance professor and the Whirlpool Finance Faculty Fellow at the Kelley School of Business at Indiana University. Dr. Smart received his B.B.A. from Baylor University and his M.A. and Ph.D. from Stanford University. His research focuses primarily on applied corporate finance topics and has been published in journals such as the *Journal of Finance*, the *Journal of Financial Economics*, the *Journal of Corporate Finance*, *Financial Management*, and others. His articles have been cited by business publications including *The Wall Street Journal*, *The Economist*, and *Business Week*. Winner of more than a dozen teaching awards, Dr. Smart has been listed multiple times as a top business school teacher by *Business Week*. He has held Visiting Professor positions at the University of Otago and Stanford University, and he worked as a Visiting Scholar for Intel Corporation, focusing on that company's mergers and acquisitions activity during the "Dot-com" boom in the late 1990s. As

a volunteer, Dr. Smart currently serves on the boards of the Indiana University Credit Union and Habitat for Humanity. In his spare time he enjoys outdoor pursuits such as hiking and fly fishing.

**Chad J. Zutter** is a finance professor and the James Allen Faculty Fellow at the Katz Graduate School of Business at the University of Pittsburgh. Dr. Zutter received his B.B.A. from the University of Texas at Arlington and his Ph.D. from Indiana University. His research has a practical, applied focus and has been the subject of feature stories in, among other prominent outlets, *The Economist* and *CFO Magazine*. His papers have been cited in arguments before the U.S. Supreme Court and in consultation with companies such as Google and Intel. Dr. Zutter won the prestigious Jensen Prize for the best paper published in the *Journal of Financial Economics* and a best paper award from the *Journal of Corporate Finance*, where he is currently an Associate Editor. He has won teaching awards at the Kelley School of Business at Indiana University and the Katz Graduate School of Business at the University of Pittsburgh. Dr. Zutter also serves on the board of Lutheran SeniorLife, and prior to his career in academics, he was a submariner in the U.S. Navy. Dr. Zutter and his wife have four children and live in Pittsburgh, Pennsylvania. In his free time he enjoys horseback riding and downhill skiing.

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# Preface

## New to this Edition

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Just as in all of our previous editions, we aim to stay current in the field of investments and to continue to craft a book that will truly meet the needs of students and professors.

In every chapter, our changes were designed to make the material more up to date and more relevant for students. A number of new topics have been added at appropriate places, and new features appear in each chapter of the fourteenth edition:

- New author videos of solutions to all in-text examples that students can see on MyLab Finance within the eText or Multimedia Library help them increase their understanding of the concept and application being demonstrated by the in-text example and act as a guide for the end-of-chapter problems or related assignments made by their professors.
- New GeoGebra animations for select in-chapter figures allow students to manipulate key model inputs to illustrate concepts and reinforce learning.
- A number of end-of-chapter problems 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.
- New Excel templates for many end-of-chapter problems are available in MyLab Finance. These templates do not solve problems for students but rather help students reach a solution faster by inputting data for them or by organizing facts presented in problems in a logical way.
- Student and instructor versions of the Excel Screenshots that appear throughout the chapters are available in MyLab Finance. Student versions only allow students to manipulate the input values, whereas instructors' Excel files available in the instructor resources area provide full access to the spreadsheet models.
- Updated financial calculator images better match the financial calculator available on MyLab Finance.
- Revised or replaced chapter openers and related end-of-chapter problems in every chapter help students see the real-world application of chapter content.
- New author videos introduce the main ideas of each chapter and highlight the application of key concepts and the connections between chapters.
- Expanded use of real-world data in examples, tables, figures, and end-of-chapter problems gives the text a more applied, practical feel and helps students understand that the skills they learn can help them personally or on the job.
- Updated Investor Facts boxes from the previous edition, and new ones to this edition, provide depth and breadth and again highlight the importance of investments concepts in the real world.

- A large percentage of the end-of-chapter problems were revised using interest rates, stock prices, and other values that better reflect market conditions at the time of the revision.

## The *Fundamentals of Investing* Program

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“Great firms aren’t great investments unless the price is right.” Those words of wisdom come from none other than Warren Buffett, who is, without question, one of the greatest investors ever. The words of Mr. Buffett sum up very nicely the essence of this book—namely, to help students learn to make informed investment decisions, not only when buying stocks but also when investing in bonds, mutual funds, or any other type of investment.

To enhance learning, we recommend pairing the text content with MyLab Finance, which is the teaching and learning platform that empowers students’ independent learning. By combining trusted author content with digital tools and a flexible platform, MyLab personalizes the learning experience and will help students learn and retain key course concepts while developing skills that future employers are seeking in their candidates. From **author videos** to **Excel Projects**, MyLab Finance helps you teach your course, your way. Learn more at [www.pearson.com/mylab/finance](http://www.pearson.com/mylab/finance)

## Solving Teaching and Learning Challenges

---

The fact is, investing may sound simple, but it’s not. Investors in today’s turbulent financial markets confront many challenges when deciding how to invest their money. More than a decade after the 2008 meltdown in financial markets, investors are still more wary of risk than they were before the crisis. This book is designed to help students understand the risks inherent in investing and to give them the tools they need to answer the fundamental questions that help shape a sound investment strategy. For example, students want to know, what are the best investments for me? Should I buy individual securities, mutual funds, or exchange-traded funds? How do I make judgments about risk? Do I need professional help with my investments, and can I afford it? Clearly, investors need answers to questions like these to make informed decisions.

The language, concepts, and strategies of investing are foreign to many. To become informed investors, students must first become conversant with the many aspects of investing. Building on that foundation, they can learn how to make informed decisions in the highly dynamic investment environment. This fourteenth edition of *Fundamentals of Investing* provides the information and guidance needed by individual investors to make such informed decisions and to achieve their investment goals.

This book meets the needs of professors and students in the first investments course offered at colleges and universities, junior and community colleges, professional certification programs, and continuing education courses. Focusing on both individual securities and portfolios, *Fundamentals of Investing* explains how to develop, implement, and monitor investment goals after considering the risk and return of different types of investments. A conversational tone and liberal use of examples guide students through the material and demonstrate important points.

### Hallmarks of *Fundamentals of Investing*

Using information gathered from academicians and practicing investment professionals, plus feedback from adopters, the fourteenth edition reflects the realities of

today's investment environment. At the same time, the following characteristics provide a structured framework for successful teaching and learning.

**Clear Focus on the Individual Investor.** The focus of *Fundamentals of Investing* has always been on the individual investor. This focus gives students the information they need to develop, implement, and monitor a successful investment program. It also provides students with a solid foundation of basic concepts, tools, and techniques. Subsequent courses can build on that foundation by presenting the advanced concepts, tools, and techniques used by institutional investors and money managers.

**Comprehensive yet Flexible Organization.** The text provides a firm foundation for learning by first describing the overall investment environment, including the various investment markets, information, and transactions. Next, it presents conceptual tools needed by investors—the concepts of return and risk and the basic approaches to portfolio management. It then examines the most popular types of investments—common stocks, bonds, and mutual funds. Following this series of chapters on investments is a chapter on how to construct and administer one's own portfolio. The final section of the book focuses on derivative securities—options and futures—which require more expertise. Although the first two parts of the textbook are best covered at the start of the course, instructors can cover particular investment types in just about any sequence. The comprehensive yet flexible nature of the book enables instructors to customize it to their own course structure and teaching objectives.

We have organized each chapter according to a decision-making perspective, and we have been careful always to point out the pros and cons of the various investments and strategies we present. With this information, individual investors can select the investment actions that are most consistent with their objectives. In addition, we have presented the various investments and strategies in such a way that students learn the decision-making implications and consequences of each investment action they contemplate.

**Timely Topics.** Current events, changing regulations, and other factors constantly reshape financial markets and investments. Virtually all topics in this book take into account changes in the investment environment. For example, several chapters that emphasize the tax consequences of an investment or strategy incorporate the latest tax changes passed in the United States of America as part of the Tax Cuts and Jobs Act in December 2017. In Chapter 2, we discuss how securities trading has changed in recent years, and we highlight the Spotify direct listing IPO as a potential threat to the traditional underwriting business of investment banks. Chapter 3 shares some advice from the Securities and Exchange Commission on the perils of investing in cryptocurrencies. Chapter 5 offers expanded content on the concept of correlation, using data on real companies to illustrate how correlation affects the performance of a portfolio. These are but a few of the examples of new content found throughout the text.

In addition, the fourteenth edition provides students access to short video clips from professional investment advisors. In these clips, which are carefully integrated into the content of each chapter, students will hear professionals sharing the lessons that they have learned through years of experience working as advisors to individual investors.



**Globalization.** One issue that is reshaping the world of investing is the growing globalization of securities markets. As a result, *Fundamentals of Investing* continues to stress the global aspects of investing. We initially look at the growing importance of international markets, investing in foreign securities (directly or indirectly), international investment performance, and the risks of international investing. In later chapters, we describe popular international investment opportunities and strategies as part of the coverage of each specific type of investment vehicle. This integration of international topics helps students understand the importance of maintaining a global focus when planning, building, and managing an investment portfolio. Global topics are highlighted by a globe icon in the margin.

1

## The Investment Environment

MyLab Finance Chapter Introduction Video

**LEARNING GOALS**

After studying this chapter, you should be able to:

**LG1** Understand the meaning of the term investment and list the attributes that distinguish one investment from another.

**LG2** Describe the investment process and types of investors.

**LG3** Discuss the principal types of investments.

**LG4** Describe the purpose and content of an investment policy statement, review fundamental tax considerations, and discuss investing over the life cycle.

**LG5** Describe the most common types of short-term investments.

**LG6** Describe some of the main careers available to people with financial expertise and the role that investments play in each.

**Y**ou have worked hard for your money. Now it is time to make your money work for you. Welcome to the world of investments. There are literally thousands of investments, from all around the world, from which to choose. How much should you invest, when should you invest, and which investments are right for you? The answers depend upon the knowledge and financial circumstances of each investor.

Financial news is plentiful, and finding financial information has become easier than ever. Traditional media outlets, including TV networks such as CNBC, Bloomberg Television, and Fox Business Network and print-based powerhouses such as *The Wall Street Journal* and *The Financial Times*, provide financial advice for individual investors. However, more people obtain investment information from the Internet than from all other sources combined. The Internet makes enormous amounts of information readily available, enables investors to trade securities with the click of a mouse, and provides free and low-cost access to tools that were once restricted to professional investors. All of this helps create a more level playing field—yet at the same time, such easy access can increase the risks for inexperienced investors.

Whether you are an experienced investor or a novice, the same investment fundamentals apply. Perhaps the most fundamental principle in investing, and one that you would be wise to keep in mind whenever you invest, is this—there is a tradeoff between an investment's risk and its return. Most people would like their investments to be as profitable as possible, but there is an almost unavoidable tendency for investments with the greatest profit potential to be associated with the highest risk. You will see examples of this link between risk and return throughout this text. First, we address the question, "What is an investment?"

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**Comprehensive, Integrated Learning System.** The Learning Goal system begins each chapter with six Learning Goals, labeled with numbered icons. These goals anchor the most important concepts and techniques to be learned. The Learning Goal icons are then tied to key points in the chapter's structure, including:

- First-level headings
- Summary
- Discussion Questions
- Problems
- Cases

This tightly knit structure provides a clear road map for students—they know what they need to learn, where they can find it, and whether they've mastered it by the end of the chapter.

An **opening story** sets the stage for the content that follows by focusing on an investment situation involving a real company or real event, which is in turn linked to the chapter topics. Students see the relevance of the vignette to the world of investments.

In many cases, an end-of-chapter problem draws students back to the chapter opener and asks them to use the data in the opener to make a calculation or draw a conclusion to demonstrate what they learned in the chapter.

**Examples** illustrate key concepts and applications and, new to this edition, are paired with author-created solution videos in MyLab Finance (within the eText or Multimedia Library), as noted by the associated MyLab Finance Solution Video callout in the text. Students can watch the author videos to increase their understanding of the concept and application being demonstrated by the in-text example and as a guide for the end-of-chapter problems assigned by their professors.

**Example** »

**McDonald's  
Common  
Stock Return**

MyLab Finance  
Solution Video

Suppose you purchased a single share of McDonald's common stock for \$119.62 on January 3, 2017, the first day that the stock market was open for trading that year. During 2017 you received \$3.83 in cash dividends. At the end of the year, you sold the stock for \$172.12. You earned \$3.83 in dividends and you realized a \$52.50 capital gain (\$172.12 sale price – \$119.62 purchase price) for a total dollar return of \$56.33. On a percentage basis, the return on McDonald's shares in 2017 is calculated as  $\$56.33 \div \$119.62 = 0.471$  or 47.1%. If you continued to hold the stock rather than sell it, you would have earned the same return, but your capital gain would have been unrealized.

**An Advisor's Perspective** consists of short video clips of professional investment advisors discussing the investments topics covered in each chapter. Students can access the video clips on MyLab Finance.

**AN ADVISOR'S PERSPECTIVE**

**Rick Loek, CEO,**  
Calrima Financial and  
Insurance Agency

"There are three financial phases that we go through in life."  
MyLab Finance

**WATCH YOUR BEHAVIOR**

**Cut Your Taxes and Your Losses**  
Several researchers have found that investors are very reluctant to sell stocks that have gone down in value, presumably because they hope to "get even" in the future. Holding losers rather than selling them is often a mistake because the tax code provides an incentive to sell these stocks. Investors can deduct realized investment losses (up to a point) against other forms of income, thereby lowering their tax liabilities.

**Watch Your Behavior** boxes appear in the margins of most chapters and highlight investment lessons gleaned from the behavioral finance literature.

**INVESTOR FACTS**

**Apple on Top** A firm's market capitalization, which equals the price per share times the number of shares outstanding, is a measure of its scale. On August 2, 2018, Apple Inc. became the first company in history with a market capitalization above \$1 trillion. It wasn't alone in reaching that milestone very long. **Amazon.com** Inc. reached the \$1 trillion mark just a month later on September 4.

Each chapter contains a handful of **Investor Facts**—brief sidebar items that give an interesting statistic or cite an unusual investment experience. These facts add a bit of seasoning to the concepts under review and capture a real-world flavor. The Investor Facts sidebars include material focused on topics such as art as an investment, the downgrade of the U.S. government's credit rating, the use of financial statements to detect accounting fraud, and recent issues of unusual securities such as bonds with 100-year maturities.



**Famous Failures in Finance boxes**—short, boxed discussions of real-life scenarios in the investments world, many of which focus on ethics—appear in selected chapters and on the book’s website. Many of these boxes contain a Critical Thinking Question for class discussion, with guideline answers given in the Instructor’s Manual.

## FAMOUS FAILURES IN FINANCE

### Implicit Guarantee Might Not Be Forever

Norway’s Eksportfinans ASA, a partially state-owned lender, was established more than four decades ago with the support of the government to provide long-term financing for the export sector. In a surprise move on 18th November 2011, the government decided to wind down Eksportfinans ASA, after denying the lender permission to waive European Union capital requirements to prevent concentration of loans to single industries.

After the government withdrew support, Moody’s Investors Service downgraded

Eksportfinans to junk, cutting its rating by seven points. Even though the Norwegian Trade Minister stated that the downgrade does not reflect the company’s ability to pay its debts, the ratings cut sent yields surging on debt from Norway’s biggest banks and other state-backed lenders. Credit default swaps on sovereign debt issued by Norway were also affected, increasing as investors became nervous. In 10 days, the yield on Eksportfinans’s benchmark two-year note surged 6.76 percentage points.

These events were a good reminder that there is risk even in AAA rated countries like Norway.

**Key Equations** are screened in yellow throughout the text to help readers identify the most important mathematical relationships. Select key equations also appear in the text’s rear endpapers.

#### Equation 10.1

$$\text{Taxable equivalent yield} = \frac{\text{Yield on municipal bond}}{1 - \text{Marginal federal tax rate}}$$

**Excel Screenshots** Many chapters provide screenshots showing completed Excel models designed to solve in-chapter examples. The MyLab Excel icon indicates that student versions of these screenshots are available in MyLab Finance.

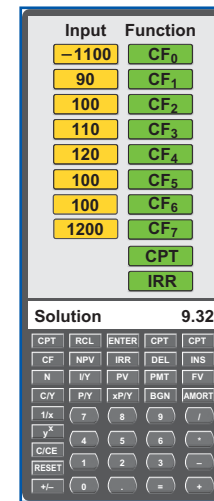


	A	B
1	<b>GROWTH RATE FOR A DIVIDEND STREAM</b>	
2	Year	Dividend
3	2008	\$1.55
4	2009	\$1.66
5	2010	\$1.74
6	2011	\$1.85
7	2012	\$2.18
8	2013	\$2.46
9	2014	\$2.70
10	2015	\$2.88
11	2016	\$2.98
12	2017	\$3.06
13	Annual Growth Rate	7.85%

Entry in Cell B13 is  
`=RATE((A12-A3),0,-B3,B12,0)`.  
 The expression (A12-A3) in the entry calculates the number of years of growth. The minus sign appears before B3 because the first dividend is treated as a cash outflow and the last dividend as a cash inflow.

**Calculator Keystrokes** At appropriate spots in the text the student will find sections on the use of financial calculators, with marginal calculator graphics that show the inputs and functions to be used. The MyLab financial calculator callout in the text indicates that the reader can use the financial calculator tool in MyLab Finance to find the solution for an example by inputting the keystrokes shown in the calculator screenshot.

**MyLab Finance  
Financial Calculator**



**Concepts in Review** questions appear at the end of each section of the chapter. These review questions allow students to test their understanding of each section before moving on to the next section of the chapter. Answers for these questions are available in the Multimedia Library of MyLab Finance, at the book’s website, and by review of the preceding text.

**CONCEPTS  
IN REVIEW**

Answers available at  
[http:// www.pearson.com  
/mylab/finance](http://www.pearson.com/mylab/finance)

- 10.1** What appeal do bonds hold for investors? Give several reasons why bonds make attractive investment outlets.
- 10.2** How would you describe the behavior of market interest rates and bond returns over the past 50 years? Do swings in market interest rates have any bearing on bond returns? Explain.
- 10.3** Identify and briefly describe the five types of risk to which bonds are exposed. What is the most important source of risk for bonds in general? Explain.

The **end-of-chapter summary** makes Fundamentals of Investing an efficient study tool by integrating chapter contents with online Study Plans available in MyLab Finance. A thorough summary of the key concepts—What You Should Know—is directly linked with the text and online resources—Where to Practice.

**Learning Goal** icons precede each summary item, which begins with a boldfaced restatement of the learning goal.

MyLab Finance		Here is what you should know after reading this chapter. MyLab Finance will help you identify what you know and where to go when you need to practice.
What You Should Know	Key Terms	Where to Practice
<p><b>NOTE</b> The end-of-chapter summaries restate the chapter’s Learning Goals and review the key points of information related to each goal.</p> <p><b>LG1</b> Understand the meaning of the term <i>investment</i> and list the attributes that distinguish one investment from another. An investment is any asset into which investors can place funds with the expectation of generating positive income and/or increasing their value. The returns from investing are received either as income or as increased value.</p> <p>Some of the attributes that distinguish one type of investment from another include whether the investment is a security or property; direct or indirect; debt, equity, or derivative; low risk or high risk; short term or long term; and domestic or foreign.</p>	<p><b>NOTE</b> A list of Key Terms gathers in one place the new vocabulary presented in each chapter.</p> <p>debt, p. 4 derivative securities, p. 4 direct investment, p. 3 domestic investments, p. 5 equity, p. 4 foreign investments, p. 5 indirect investment, p. 3 investment, p. 2 liquidity, p. 2 long-term investments, p. 5 portfolio, p. 2 property, p. 2 returns, p. 2 risk, p. 4 securities, p. 2 short-term investments, p. 5</p>	<p>MyLab Finance Study Plan 1.1</p>

**Discussion Questions**, keyed to Learning Goals, guide students to integrate, investigate, and analyze the key concepts presented in the chapter. Many questions require that students apply the tools and techniques of the chapter to investment information they have obtained and then make a recommendation with regard to a specific investment strategy or vehicle. These project-type questions are far broader than the Concepts in Review questions within the chapter. Answers to Discussion Questions are available for instructors in the Instructor's Manual on the Instructor's Resource Center.


**Expanded and Revised Problem Sets** offer additional review and homework opportunities and are keyed to Learning Goals. Answers/solutions are available for instructors in the Instructor's Manual on the Instructor's Resource Center.



**New!** Indicated by the MyLab Excel icon, Excel templates for many end-of-chapter Problems are available in MyLab Finance. These templates do not solve problems for students, but rather help students reach a solution faster by inputting data for them or by organizing facts presented in problems in a logical way. In addition, in this edition we provide electronic Excel-based versions of many in-text tables, so students can see how the calculations in the tables work, and they can alter the baseline assumption in the printed tables to see how changing assumptions affects the main results of each table. In Chapter 1 students are directed to the website [www.pearson.com/mylab/finance](http://www.pearson.com/mylab/finance), where they can complete a spreadsheet tutorial, if needed.

### Discussion Questions

- LG1** **Q10.1** Using the bond returns in Table 10.1 as a basis of discussion:
- Compare the total returns on Treasury bonds during the 1970s with those produced in the 1980s. How do you explain the differences?
  - How did the bond market do in the 1990s? How does the performance in this decade compare with that in the 1980s? Explain.
  - What do you think would be a reasonable rate of return from bonds in the future? Explain.
  - Assume that you're out of school and hold a promising, well-paying job. How much of your portfolio (in percentage terms) would you want to hold in bonds? Explain. What role do you see bonds playing in your portfolio, particularly as you go further and further into the future?
- LG4** **LG5** **Q10.2** Identify and briefly describe each of the following types of bonds:
- Treasury Inflation-Protected Securities (TIPS)
  - Corporate bonds
  - Zero-coupon bonds
  - Asset-backed securities
  - Eurodollar bonds
  - PIK bonds
- What type of investors do you think would be most attracted to each?
- LG1** **LG4** **Q10.3** What do ratings agencies do? Why is it important for an investor to take a bond rating into account before determining the value of a fixed-income asset?

### Problems

Select problems are available in MyLab Finance. The  icon indicates problems in Excel format available in MyLab Finance.

- LG2** **P10.1** A 7%, five-year bond is callable in two years at a call price of \$2,000. The bond is currently priced in the market at \$1,770. Assuming that the call value and the maturity value are the same, what is the issue's current yield?
- LG2** **P10.2** A certain bond has a current yield of 8.1% and a market price of \$925.50. What is the bond's coupon rate?
- LG2** **P10.3** Connor buys a 12% corporate bond with a current yield of 8%. How much did he pay for the bond?
-  **LG4** **P10.4** An investor is in the 24% tax bracket and lives in a state with no income tax. He is trying to decide which of two bonds to purchase. One is a 7% corporate bond that is selling at par. The other is a municipal bond with a 5% coupon that is also selling at par. If all other features of these bonds are comparable, which should the investor select? Why? Would your answer change if this were an in-state municipal bond and the investor lived in a place with high state income taxes? Explain.
-  **LG4** **P10.5** An investor lives in a state with a 5% tax rate. Her federal income tax bracket is 28%. She wants to invest in one of two bonds that are similar in terms of risk (and both

Two **Case Problems**, keyed to the Learning Goals, encourage students to use higher-level critical thinking skills: to apply techniques presented in the chapter, to evaluate alternatives, and to recommend how an investor might solve a specific problem. Again, Learning Goals show the student the chapter topics on which the case problems focus.

**CFA Exam Questions** from the 2010 Level One Curriculum and the *CFA Candidate Study Notes, Level 1, Volume 4* are now at the end of each part of the book, starting at Part Two. Due to the nature of the material in some of the early chapters, the CFA questions for Parts One and Two are combined and appear at the end of Part Two. These questions offer students an opportunity to test their investment knowledge against that required for the CFA Level-I exam.

In MyLab Finance on the Course Home page, there are three Sample CFA Exams. Each of these exams is patterned after the CFA Level-I exam and comes with detailed guideline answers. The exams deal only with topics that are actually covered in the fourteenth edition of *Fundamentals of Investing* and are meant to replicate as closely as possible the types of questions that appear on the standard Level-I Exam. The Sample CFA Exams on MyLab Finance come in three lengths: 30 questions, 40 questions, and 50 questions. Each exam is

unique and consists of a different set of questions, so students can take any one or all of the exams without running into any duplicate questions. For the most part, these questions are adapted from past editions of the CFA Candidate Study Notes. Answers are included for immediate reinforcement.

### Case Problem 10.1 Max and Veronica Develop a Bond Investment Program

#### LG1 LG4

Max and Veronica Shuman, along with their teenage sons Terry and Thomas, live in Portland, Oregon. Max is a sales rep for a major medical firm, and Veronica is a personnel officer at a local bank. Together they earn an annual income of about \$100,000. Max has just learned that his recently departed rich uncle has named him in his will to the tune of some \$250,000 after taxes. Needless to say, the family is elated. Max intends to spend \$50,000 of his inheritance on a number of long-overdue family items (like some badly needed remodeling of their kitchen and family room, the down payment on a new Porsche Boxster, and braces to correct Tom's overbite). Max wants to invest the remaining \$200,000 in various types of fixed-income securities.

Max and Veronica have no unusual income requirements or health problems. Their only investment objectives are that they want to achieve some capital appreciation, and they want to keep their funds fully invested for at least 20 years. They would rather not have to rely on their investments as a source of current income but want to maintain some liquidity in their portfolio just in case.

#### Questions

- Describe the type of bond investment program you think the Shuman family should

## CFA Exam Questions

### Investing in Common Stocks

Following is a sample of 11 Level-I CFA exam questions that deal with many topics covered in Chapters 6, 7, 8, and 9 of this text, including the use of financial ratios, various stock valuation models, and efficient market concepts. (Note: When answering some of the questions, remember: "Forward P/E" is the same as a P/E based on estimated earnings one year out.) When answering the questions, give yourself 1½ minutes for each question; the objective is to correctly answer 8 of the 11 questions in a period of 16½ minutes.

- Holding constant all other variables and excluding any interactions among the determinants of value, which of the following would most likely increase a firm's price-to-earnings multiple?
  - The risk premium increases.
  - The retention rate increases.
  - The beta of the stock increases.
- A rationale for the use of the price-to-sales (P/S) approach is:
  - Sales are more volatile than earnings.
  - P/S ratios assess cost structures accurately.
  - Revenues are less subject to accounting manipulation than earnings.
- A cyclical company tends to
  - have earnings that track the overall economy.
  - have a high price-to-earnings ratio.
  - have less volatile earnings than the overall market.
- Consider a company that earned \$4.00 per share last year and paid a dividend of \$1.00. The firm has maintained a consistent payout ratio over the years and analysts expect this to continue. The firm is expected to earn \$4.40 per share next year, and the stock is expected to sell for \$30.00. The required rate of return is 12%. What is the best estimate of the stock's current value?
  - \$44.00
  - \$22.67
  - \$27.77
- A stock's current dividend is \$1 and its expected dividend is \$1.10 next year. If the investor's required rate of return is 15% and the stock is currently trading at \$20.00, what is the implied expected price in one year?
  - \$21.90
  - \$22.00
  - \$23.00
- A firm has total revenues of \$187,500, net income of \$15,000, total current liabilities of \$50,000, total common equity of \$75,000, and total assets of \$150,000. What is the firm's ROE?
  - 15%
  - 20%
  - 24%

## 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.

**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 (available with select titles) anytime, anywhere via MyLab or the app. Pearson eText enhances learning—both in and out of the classroom. Worked examples, videos, and interactive tutorials bring learning to life, while algorithmic practice and self-assessment opportunities test students' understanding of the material—anytime, anywhere 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.

Visit [www.pearson.com/mylab/finance](http://www.pearson.com/mylab/finance) to access all the available features included with the fourteenth edition of *Fundamentals of Investing*.

## Developing Employability Skills

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For students to succeed in a rapidly changing job market, they should be aware of their career options and how to go about developing skills that prepare them to pursue those career opportunities. In this book and in MyLab Finance, we focus on developing these skills in a variety of ways.

**Excel modeling skills**—Each chapter offers students opportunities to work with Excel spreadsheets available on MyLab to build Excel models to solve investment problems. Many chapters provide Excel screenshots showing completed models designed to solve in-chapter examples.

**Ethical reasoning skills**—The Famous Failures in Finance boxes appearing in each chapter often highlight ethical problems arising in the investments context as well as the potential consequences of unethical actions by investment professionals. These boxes will help students recognize the ethical temptations they are likely to face while pursuing an investments career or as they invest their own money.

**Critical thinking skills**—Nearly every significant investment decision involves critical thinking because making optimal decisions means weighing tradeoffs of alternative decisions, such as the risk/reward tradeoff inherent in making any investment. To weigh these tradeoffs, students must first learn how to quantify them. Nearly every chapter in this book talks about the quantitative benefits and costs of different investments, and students who master this content will be in a strong position to make better investment decisions on behalf of their clients and themselves.

**Data analysis skills**—Investments is all about data. Analysts have to identify the data that is relevant for a particular investments problem, and they must know how to process that data in a way that leads to a good investment decision. In-chapter examples and end-of-chapter problems require students to sort out relevant from irrelevant data and to use the data that is available to make clear recommendations about what course of action an investor should take.

## Instructor Teaching Resources

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We recognize the key role of a complete and creative package of materials to supplement a basic textbook. We believe that the following materials, offered with the fourteenth edition, will enrich the investments course for both students and instructors.

Supplements available to instructor at <a href="http://www.pearsonglobaleditions.com">www.pearsonglobaleditions.com</a>	Features of the Supplement
<b>Instructor's Manual</b>	<ul style="list-style-type: none"> <li>• Teaching outlines</li> <li>• Chapter summaries</li> <li>• Key concepts</li> <li>• Chapter overviews</li> <li>• Solutions to all questions and problems in the text</li> </ul>
<b>Test Bank</b>	<p>More than 1,800 multiple-choice, true/false, short-answer, and graphing questions with these annotations:</p> <ul style="list-style-type: none"> <li>• Type (multiple-choice, true/false, short-answer, essay)</li> <li>• Topic (the term or concept the question supports)</li> <li>• Learning outcome</li> <li>• 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)</li> </ul>
<b>Computerized TestGen</b>	<p>TestGen allows instructors to:</p> <ul style="list-style-type: none"> <li>• Customize, save, and generate classroom tests</li> <li>• Edit, add, or delete questions from the test item files</li> <li>• Analyze test results</li> <li>• Organize a database of tests and student results.</li> </ul>
<b>PowerPoints</b>	<p>PowerPoints include lecture notes, key equations, and figures and tables from the text. In addition, these slides meet accessibility standards for students with disabilities. Features include but are not limited to:</p> <ul style="list-style-type: none"> <li>• Keyboard and screen reader access</li> <li>• Alternative text for images</li> <li>• High color contrast between background and foreground colors</li> </ul>