Fundamentals of

12th Edition

Investing

Scott Smart Lawrence Gitman Michael Joehnk

MyFinanceLab

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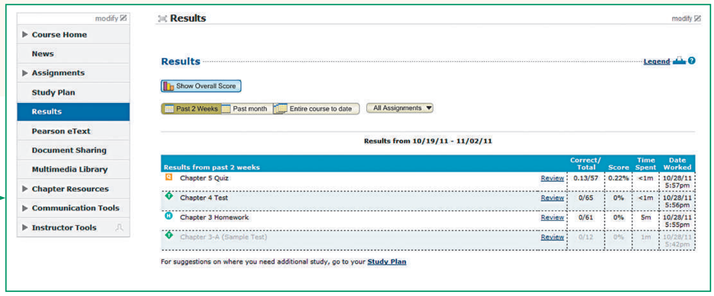

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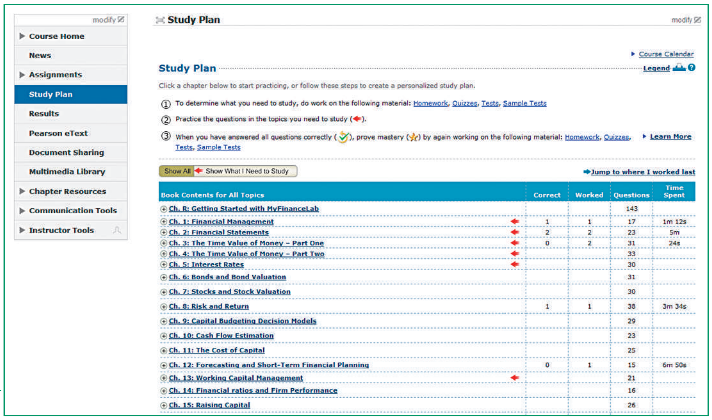

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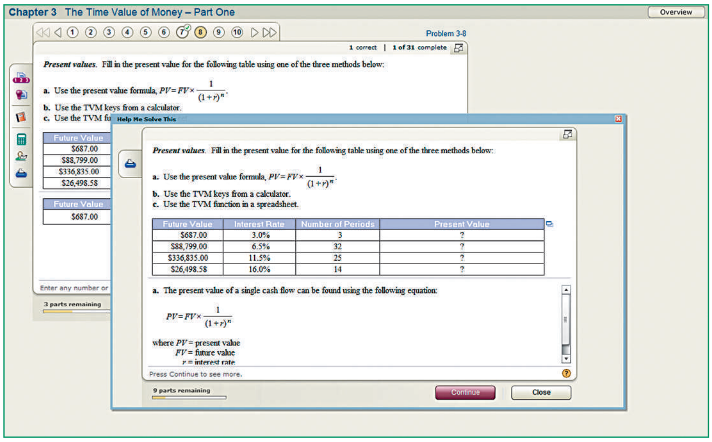

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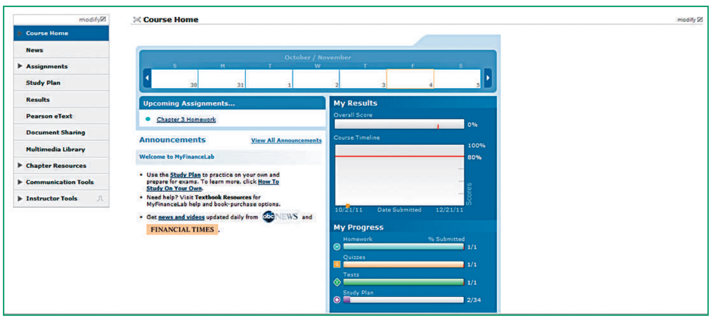

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Did your textbook come with a MyFinanceLab Student Access Kit? If so, go to www.pearsonmylab.com to register using the code. If not, you can purchase access to MyFinanceLab online at www.myfinancelab.com.

Fundamentals of Investing

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Fundamentals of Investing

Twelfth Edition

SCOTT SMART
Indiana University

LAWRENCE GITMAN, CFP®
San Diego State University

MICHAEL JOEHNK, CFA
Arizona State University

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ROBIN F. GITMAN,
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Preface

"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.

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. After the 2008 meltdown in financial markets, investors have become more wary of risk than they have been in many years. 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? What's the market outlook in the next few years? What 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. In order 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 twelfth 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 both markets and investment vehicles. A conversational tone and liberal use of examples guide students through the material and demonstrate important points.

New for the Twelfth Edition

Our many adopters are interested in how we have changed the content from the eleventh to the twelfth edition. We hope that this information will also interest potential adopters because it indicates our mandate 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.

The most dramatic change in the twelfth edition is the positioning of Scott Smart as the book's lead author. Scott received his Ph.D. from Stanford University in 1991, and he has been a member of the finance faculty at Indiana University since then. He is currently Associate Chair of the MBA Program at Indiana University's Kelley School of Business. His scholarly articles have appeared in the *Journal of Financial Economics*, the *Journal of Finance, Financial Management*, the *Financial Review*, the *Journal of*

Accounting and Economics, and other scholarly journals. He has been recognized as an outstanding teacher by *Business Week*, and he has won more than a dozen teaching awards. Readers will see Scott's imprint on every page.

Some of the major changes made in the twelfth edition are the following:

- Updated all real-world data through 2012, including text, tables, and figures.
- Adopted a new, tablet-like design and included many new digital features that students can use on their own to enhance their learning.
- Added a new feature called An Adviser's Perspective. Available on MyFinanceLab, this feature consists of short video clips of professional investment advisers, including some of national prominence (such as Jim Grant of Grant's Interest Rate Observer), talking about the investments topics covered in each chapter.
- Added new QR codes in the margins of each chapter. Students can scan these codes with their smart phones to gain access to videos and other web content that enhance the topical coverage of each chapter.
- Added a new feature called Investor Mistakes. These boxes appear in the margins of most chapters and highlight investment lessons gleaned from the behavioral finance literature.
- Updated numerous Investor Facts boxes from the eleventh edition and incorporated entirely new ones in most chapters.
- Updated the Markets in Crisis feature, highlighting various aspects of the recent financial crisis and recession.
- Step-by-step video tutorials featuring author Scott Smart can be found in MyFinanceLab as a learning aid for select end-of-chapter questions.
- Expanded the use of real-world data in examples.
- Expanded and updated coverage of behavioral finance, particularly but not exclusively in Chapter 9.
- Revised or replaced every chapter opener, and in many chapters, included an end-of-chapter problem that ties back to the chapter opener.
- Expanded coverage of exchange-traded funds in Chapter 12.

Hallmarks of *Fundamentals of Investing*

Using information gathered from academicians and practicing investment professionals, plus feedback from adopters, the twelfth 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

Today, about half of all U.S. households own stock either directly or indirectly through mutual funds or participation in 401(k)s. That percentage has been growing for many years and is likely to continue. 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 investment vehicles 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

Various issues and developments constantly reshape financial markets and investment vehicles. Virtually all topics in this book take into account changes in the investment environment. For example, in every chapter we've continued and updated a feature that was new to the eleventh edition called Markets in Crisis. This feature highlights various aspects of the recent and historic financial crisis, the government's response to that crisis, and the deep recession that followed the crisis. Fundamentally, investing is about the tradeoff between risk and return, and the Markets in Crisis feature serves as a reminder to students that they should not focus exclusively on an investment's returns.

In addition, the twelfth edition provides students access to short video clips from professional investment advisers. 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 advisers 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.

Comprehensive, Integrated Learning System

Another feature of the twelfth edition is its comprehensive and integrated learning system, which makes clear to students what they need to learn in the chapter and helps them focus their study efforts as they progress through the chapter. For more detailed discussion of the learning system, see the feature walkthrough later in the preface (beginning on page xxi).

CFA Questions

We are pleased to include CFA questions in the twelfth edition, both in the written text and in MyFinanceLab. CFA exam questions appear in the text at the end of five of the book's six parts. 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.

Also added to this edition are three Sample CFA Exams in MyFinanceLab. 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 twelfth 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 MyFinanceLab come in three lengths: 30 questions, 40 questions, and 50 questions. Each exam is unique and consists of a different set of questions, so you can take any one or all of the exams without running into any duplicate questions. For the most part, these questions are adapted from the 2009 CFA Candidate Study Notes. Answers are included for immediate reinforcement.

MyFinanceLab

MyFinanceLab is a fully integrated online homework and tutorial system. MyFinanceLab offers flexible instructor tools like the easy-to-use homework manager for test, quiz, and homework assignments, automatic grading, and a powerful online Gradebook. Students can take preloaded Sample Tests for each chapter and their results generate an individualized Study Plan that helps focus and maximize their study time. Students will find ample opportunities to solve problems (some with help from author Scott Smart on video) and to explore investments-related content on the Internet through features like Smart's Tour of the Web. Please visit **www.myfinancelab.com** for more information or to register.

The Smart, Gitman, & Joehnk

PROVEN TEACHING/LEARNING/MOTIVATIONAL SYSTEM

Users of *Fundamentals of Investing* have praised the effectiveness of the Smart/Gitman/Joehnk teaching and learning system, which has been hailed as one of its hallmarks. In the twelfth edition we have retained and polished the system, which is driven by a set of carefully developed learning goals. Users have also praised the rich motivational framework that underpins each chapter. Key elements of the pedagogical and motivational features are illustrated and described below.

THE LEARNING GOAL 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.


2:15 AM

1

RISK

RETURN

WS NEWS

The Investment Environment

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 steps in investing, 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.

You 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. At one time, the only exposure most people had to investment news was a 10-second announcement on the evening news about the change in the Dow Jones Industrial Average that day. Today, Americans are bombarded with financial news: Cable TV networks such as CNBC specialize in business and financial news, and network newscasters feature business news more prominently. In print, in addition to *The Wall Street Journal*, you can subscribe to *Investor's Business Daily*, *Barron's*, *Kiplinger's Personal Finance Magazine*, *Money*, *Smart Money*, and many other publications that focus on investing.

Today approximately half of all Americans own stocks or stock mutual funds, and many of those people are new investors. The Internet has played a major role in opening the world of investing to them. It makes enormous amounts of information readily available and enables investors to trade securities with the click of a mouse. In short, technology makes investing much easier than it has ever been. Access to tools formerly restricted to investment professionals helps create a more level playing field—yet at the same time, such easy access can increase the risks for inexperienced investors.

Regardless of whether you conduct transactions online or use a traditional broker, the same investment fundamentals apply. Chapter 1 introduces the various types of investments, the investment process, the role of investment plans, the importance of meeting liquidity needs, and careers in finance. Becoming familiar with investment alternatives and developing realistic investment plans should greatly increase your chance of achieving financial success.

1

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.

What Is a P/E Ratio?

In the margins of each chapter students will find new **QR codes**. By scanning these codes with their smart phones, students will be taken to websites with useful information to enhance their understanding of the topics covered in the textbook. For example, many of these QR codes link students with free online video tutorials covering a range of topics.

INVESTOR MISTAKES

What's in a Name?—Confusion over ticker symbols can cause investors to make embarrassing and costly mistakes. One study discovered that investors who intended to buy shares in a company called MCI Communications (which was widely known simply by the initials MCI but traded under the ticker symbol MCIC) mistakenly purchased shares in Massmutual Corporate Investors. The reason for this error was that Massmutual's ticker symbol is MCI.

Also new to this edition, **Investor Mistakes** boxes appear in the margins of most chapters and highlight investment lessons gleaned from the behavioral finance literature.

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.

ETHICS IN INVESTING

Cooking the Books: What Were They Thinking?

Recent scandals involving fraudulent accounting practices have resulted in public outrage, not only in the United States but around the world as well. In February 2012 the San Francisco–based maker of products such as Kettle Chips and Pop Secret Popcorn, Diamond Foods, fired its CEO and CFO after discovering $80 million in payments to walnut growers that had been accounted for improperly. Diamond's stock fell nearly 40% in a single day on news of the accounting fraud. In January 2009 Ramalinga Rau, Chairman of the Indian tech company Satyam Computer Services, confessed that the firm's books had been falsified and overstated the firm's revenues and assets while understating its expenses. Satyam's stock lost more than 90% of its value between 2008 and 2009 as the scandal unfolded.

These were hardly the first cases of accounting fraud leading to financial ruin. It appears that creative and unethical accounting practices kept real costs and debts off the books at Enron, WorldCom, Xerox, Qwest Communications, Conseco, and dozens of other public companies. When the reality finally caught up with the fantasy, thousands of investors and employees lost their life savings.

Unscrupulous executives used a number of accounting tricks to deceive the public including capitalizing operating expenses on the balance sheet, recognizing fictitious or premature revenues, creating off-balance-sheet liabilities, using off-balance-sheet derivative transactions to understate risk, and writing off goodwill as extraordinary loss rather than amortizing it over time to manipulate future earnings growth.

Critical Thinking Question One of the steps to strengthen corporate reporting is to separate internal and external audits of a company by not permitting an auditor to provide both internal and external audits to the same client. Will this regulation be able to eliminate conflict of interest? Discuss.

An Adviser's Perspective consists of short video clips of professional investment advisers discussing the investments topics covered in each chapter. Students can access the video clips on MyFinanceLab.

AN ADVISER'S PERSPECTIVE

Ryan McKeown
***Senior VP—Financial Advisor*, Wealth Enhancement Group**

"Margin trading allows an investor to leverage up their investments."

MyFinanceLab

INVESTOR FACTS

Detecting Fraud—Researchers have discovered that information published in financial statements can be helpful in predicting which firms are most likely to commit accounting fraud. Firms that are most likely to commit fraud include those with the following characteristics:

- Declining receivables turnover
- Falling gross profit margins
- Rapidly growing sales (because fast-growing firms may face great temptation to commit fraud in order to raise more capital)
- Rising debt ratios
- Net income that exceeds cash flow from operations

Ethics boxes—short, boxed discussions of real-life scenarios in the investments world that focus on ethics—appear in nine selected chapters and on the book's website. Many ethics boxes contain a Critical Thinking Question for class discussion, with guideline answers given in the Instructor's Manual.

WITHIN THE CHAPTER

Each chapter features a short **Markets in Crisis** item that discusses some element of the recent financial crisis and the recession that followed. These items help students see the breadth of the financial crisis and the depth of its impact around the world.

MARKETS IN CRISIS

SEC Bans Short Selling

In September 2008, as the financial crisis grew deeper, the Securities and Exchange Commission announced a temporary ban on short sales of almost 800 financial stocks from September 19 to October 9. Research shows that the prices of stocks affected by the ban rose significantly, but those price increases were largely reversed when the ban was lifted. The vulnerability of stock markets to excessive short selling in times of crisis has led the SEC to implement rules aimed at preventing significant downward price pressure but allowing for unfettered price discovery. The alternative uptick rule (Rule 201) approved in 2010 imposes restrictions on short selling only when a stock has triggered a circuit breaker by experiencing a price decline of at least 10% in one day. At that point, short selling would be permitted if the price of the security were above the current national best bid.

Key Equations are screened in green throughout the text to help readers identify the most important mathematical relationships.

Equation 6.1

$$\text{EPS} = \frac{\text{Net profit after taxes} - \text{Preferred dividends}}{\text{Number of shares of common stock outstanding}}$$

Smart's Tour of the Web is a short video discussion (included as part of MyFinanceLab) of several websites that have useful information related to content in each chapter.

Smart's Tour of the Web

To watch author Scott Smart discuss key websites for this chapter, visit www.myfinancelab.com

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.

Input	Function
−1000	PV
2	N
8	I
	CPT
	FV

Solution
1,166.40

CONCEPTS IN REVIEW

Answers available at www.pearsonhighered.com/smart

7.1 Identify the three major parts of security analysis and explain why security analysis is important to the stock selection process.

7.2 What is intrinsic value? How does it fit into the security analysis process?

7.3 How would you describe a satisfactory investment? How does security analysis help in identifying investment candidates?

7.4 Would there be any need for security analysis if we operated in an efficient market environment? Explain.

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 at the book's website and by review of the preceding text.

The **end-of-chapter summary** makes *Fundamentals of Investing* an efficient study tool by integrating chapter contents with online learning resources available in **MyFinanceLab**. 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.

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 odd-numbered questions are available to students on the book's website.

Expanded and Revised Problem Sets offer additional review and homework opportunities and are keyed to Learning Goals. Answers to odd-numbered Problems are available to students on the book's website, while all answers/solutions are available for instructors in the Instructor's Manual.

MyFinanceLab

Here is what you should know after reading this chapter. MyFinanceLab 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
LG1 **Review the concept of return, its components, the forces that affect the level of return, and historical returns.** Return is the reward for investing. The total return provided by an investment includes income and capital gains (or losses). Return is commonly calculated on a historical basis and then used to project expected returns. The level of return depends on internal characteristics and external forces, which include the general level of price changes. Significant differences exist among the average annual rates of return realized over time on various types of security investments.	deflation, *p. 121* expected return, *p. 120* income, *p. 118* inflation, *p. 121* return, *p. 118* total return, *p. 119*	MyFinanceLab Study Plan 4.1 Excel Table 4.3
LG2 **Discuss the role of time value of money in measuring return and defining a satisfactory investment.** Because investors have opportunities to earn interest on their funds, money has a time value. Time value concepts should be considered when making investment decisions. Financial calculators and electronic spreadsheets can be used to streamline time value calculations. A satisfactory investment is one for which the present value of its benefits equals or exceeds the present value of its costs.	satisfactory investment, *p. 123*	MyFinanceLab Study Plan 4.2 Excel Table 4.5

Discussion Questions

LG1 Q4.1 Choose a publicly traded company that has been listed on a major exchange or in the over-the-counter market for at least 5 years. Use any data source of your choice to find the annual cash dividend, if any, paid by the company in each of the past 5 calendar years. Also find the closing price of the stock at the end of each of the precedings 6 years.

a. Calculate the return for each of the five 1-year periods.
b. Create a graph that shows the return that the investment earned on the *y*-axis and the year in which the return was earn on the *x*-axis.
c. On the basis of the graph in part **b**, estimate the return for the coming year, and explain your answer.

LG2 Q4.2 Two investments offer a series of cash payments over the next 4 years, as shown in the following table:

Investment	Year 1	Year 2	Year 3	Year 4
1	\$100	\$200	\$300	\$400
2	\$250	\$250	\$250	\$250

a. What is the total amount of money paid by each investment over the 4 years?
b. From a time value of money perspective, which of these investments is more attractive?
c. Can you think of a reason why investors might prefer Investment 1?

LG4 Q4.3 Access appropriate estimates of the expected inflation rate over the next year, and the current yield on 1-year, risk-free securities (the yield on these securities is referred to as the *nominal* rate of interest). Use the data to estimate the current risk-free *real* rate of interest.

LG3 LG6 Q4.4 Choose 3 NYSE-listed stocks and maintain a record of their dividend payments, if any, and closing prices each week over the next 6 weeks.

a. At the end of the 6-week period, calculate the 1-week HPRs for each stock for each of

Problems

All problems are available on www.myfinancelab.com

LG1 P4.1 How much would an investor earn on a stock purchased 1 year ago for \$45 if it paid an annual cash dividend of \$2.25 and had just been sold for \$52.50? Would the investor have experienced a capital gain? Explain.

LG1 P4.2 An investor buys a bond for \$10,000. The bond pays \$300 interest every 6 months. After 18 months, the investor sells the bond for \$9,500. Describe the types of income and/or loss the investor had.

LG1 P4.3 Assuming you purchased a share of stock for \$50 one year ago, sold it today for \$60, and during the year received 3 dividend payments totaling \$2.70, calculate the following.

a. Income
b. Capital gain (or loss)
c. Total return
(1) In dollars
(2) As a percentage of the initial investment

AT CHAPTER END

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.

Case Problem 6.1 Sara Decides to Take the Plunge

LG1 LG6

Sara Thomas is a child psychologist who has built up a thriving practice in her hometown of Boise, Idaho. Over the past several years she has been able to accumulate a substantial sum of money. She has worked long and hard to be successful, but she never imagined anything like this. Even so, success has not spoiled Sara. Still single, she keeps to her old circle of friends. One of her closest friends is Terry Jenkins, who happens to be a stockbroker and who acts as Sara's financial adviser.

Not long ago Sara attended a seminar on investing in the stock market, and since then she's been doing some reading about the market. She has concluded that keeping all of her money in low-yielding savings accounts doesn't make sense. As a result, Sara has decided to move part of her money to stocks. One evening, Sara told Terry about her decision and explained that she

Excel with Spreadsheets problems, appearing at the end of all chapters, challenge students to solve financial problems and make decisions through the creation of spreadsheets. In Chapter 1 students are directed to the website **www.myfinancelab.com**, where they can complete a spreadsheet tutorial, if needed. In addition, this tutorial and selected tables within the text carrying a spreadsheet icon are available in spreadsheet form on the text's website.

Excel with Spreadsheets

You have just learned about the mechanics of margin trading and want to take advantage of the potential benefits of financial leverage. You have decided to open a margin account with your broker and to secure a margin loan. The specifics of the account are as follows:

- Initial margin requirement is 70%.
- Maintenance margin is 30%.
- You are informed that if the value of your account falls below the maintenance margin, your account will be subject to a margin call.

You have been following the price movements of a stock over the past year and believe that it is currently undervalued and that the price will rise in the near future. You feel that the opening of a margin account is a good investment strategy. You have decided to purchase 3 round lots (i.e., 100 shares per round lot) of the stock at its current price of $25 per share.

Create a spreadsheet similar to the spreadsheet for Table 2.3, which can be viewed at www.myfinancelab.com, to model and analyze the following market transactions.

CFA 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. These questions are also assignable in MyFinanceLab.

CFA Exam Questions

Being certified as a Chartered Financial Analyst (CFA) is globally recognized as the highest professional designation you can receive in the field of professional money management. The CFA charter is awarded to those candidates who successfully pass a series of 3 levels of exams, with each exam lasting 6 hours and covering a full range of investment topics. The CFA program is administered by the CFA Institute in Charlottesville, VA. (For more information about the CFA program, go to www.cfainstitute.org.)

Starting with this Part (2) of the text, and at the end of each part hereafter, you will find a small sample of questions similar to those that you might encounter on the Level I exam.

The Investment Environment and Conceptual Tools

Following is a sample of questions similar to ones that you might find on the CFA exam, Level 1. These questions deal with many of the topics covered in Parts 1 and 2 of this text, including the time value of money, measures of risk and return, securities markets, and portfolio management. (When answering the questions, give yourself 1½ minutes for each question; the objective is to correctly answer 8 of the 11 questions in 16½ minutes.)

1. Liquidity is best described as:
   a. wanting a portfolio to grow over time in real terms to meet future needs.
   b. converting an asset into cash without much of a price concession.
   c. wanting to minimize the risk of loss and maintain purchasing power.

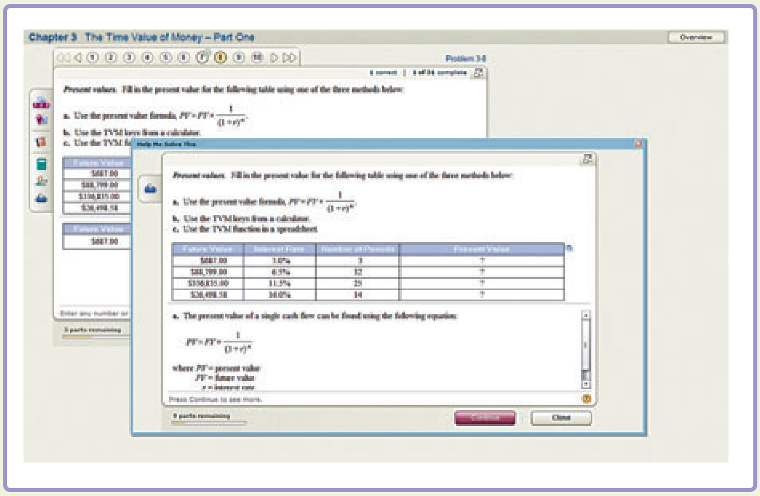
2. A portfolio consists of 75% invested in Security A with an expected return of 35% and 25% invested in Security B with an expected return of 7%. Compute the expected return on the portfolio.

3. Stocks A and B have standard deviations of 8% and 15%, respectively. The correlation between the two stocks' returns has historically been 0.35. What is the standard deviation of a portfolio consisting of 60% invested in Stock A and 40% invested in Stock B?

4. Which of the following portfolios would be off the efficient frontier?

Portfolio	Expected Return (%)	Risk (%)
A	13	17
B	12	18
C	18	30

INTERACTIVE LEARNING



MyFinanceLab is a fully integrated homework and tutorial system which solves one of the biggest teaching problems in finance courses—students learn better with lots of practice, but grading complex multipart problems is time-consuming for the instructor. In MyFinanceLab, students can work the end-of-chapter problems with algorithmically generated values for unlimited practice and instructors can create assignments that are automatically graded and recorded in an online Gradebook.

MyFinanceLab also contains brief videos of author Scott Smart walking students through step-by-step solutions of select end-of-chapter problems.

MyFinanceLab: hands-on practice, hands-off grading.

Supplemental Materials

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 twelfth edition, will enrich the investments course for both students and instructors.

Fundamentals of Investing Companion Website

The book's Companion Website offers students and professors an up-to-date source of supplemental materials. This resource is located at **www.pearsonhighered.com/smart**. Visitors will find calculator keystrokes tutorials; answers to Concepts in Review questions; answers to odd-numbered Discussion Questions and Problems; a comprehensive list of the QR codes that appear in the text; and other readings and material that are beyond the normal scope of the first-level investments course.

Also at the book's website are three complete online chapters that appeared in earlier editions of this book: "Investing in Preferred Stocks," "Tax-Advantaged Investments," and "Real Estate and Other Tangible Investments." These highly informative chapters have been updated and moved to the website in response to user, reviewer, and our own preference that the text focus solely on securities investing. In addition to its improved focus, moving these chapters to the website allows us to both tighten and improve a number of text discussions and to shorten the text's overall length. We feel this change improves the text's effectiveness in terms of both content and length.

Instructor's Manual

Revised by Robert J. Hartwig of Worcester State College, the *Instructor's Manual* contains chapter outlines; lists of key concepts discussed in each chapter; detailed chapter overviews; answers/suggested answers to all Concepts in Review and Discussion Questions, Problems, and Critical Thinking Questions to Ethics in Investing boxes; solutions to the Case Problems; and ideas for outside projects.

Test Item File

Revised for the twelfth edition, also by Robert J. Hartwig of Worcester State College, the *Test Item File* includes a substantial number of questions. Each chapter features true-false and multiple-choice questions, as well as several problems and short-essay questions. The *Test Item File* is also available in Test Generator Software (TestGen with QuizMaster). Fully networkable, this software is available for Windows and Macintosh. TestGen's graphical interface enables instructors to easily view, edit, and add questions; export questions to create tests; and print tests in a variety of fonts and forms. Search and sort features let the instructor quickly locate questions and arrange them in a preferred order. QuizMaster, working with your school's computer network, automatically grades the exams, stores results on disk, and allows the instructor to view or print a variety of reports.

PowerPoint Lecture Slides

To facilitate classroom presentations, PowerPoint slides of all text images and classroom lecture notes are available for Windows and Macintosh. The slides were revised by textbook author Scott Smart.

CourseSmart for Instructors

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George Kutner
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David J. McLaughlin
Anne Macy
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Scott B. Smart
Lawrence J. Gitman
Michael D. Joehnk

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1

The Investment Environment

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 steps in investing, 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.

You 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. At one time, the only exposure most people had to investment news was a 10-second announcement on the evening news about the change in the Dow Jones Industrial Average that day. Today, Americans are bombarded with financial news: Cable TV networks such as CNBC specialize in business and financial news, and network newscasters feature business news more prominently. In print, in addition to *The Wall Street Journal*, you can subscribe to *Investor's Business Daily*, *Barron's*, *Kiplinger's Personal Finance Magazine*, *Money*, *Smart Money*, and many other publications that focus on investing.

Today approximately half of all Americans own stocks or stock mutual funds, and many of those people are new investors. The Internet has played a major role in opening the world of investing to them. It makes enormous amounts of information readily available and enables investors to trade securities with the click of a mouse. In short, technology makes investing much easier than it has ever been. Access to tools formerly restricted to investment professionals helps create a more level playing field—yet at the same time, such easy access can increase the risks for inexperienced investors.

Regardless of whether you conduct transactions online or use a traditional broker, the same investment fundamentals apply. Chapter 1 introduces the various types of investments, the investment process, the role of investment plans, the importance of meeting liquidity needs, and careers in finance. Becoming familiar with investment alternatives and developing realistic investment plans should greatly increase your chance of achieving financial success.

Investments and the Investment Process

LG1 LG2

NOTE The Learning Goals shown at the beginning of the chapter are keyed to text discussions using these icons.

You are probably already an investor. If you have money in a savings account, you already have at least one investment to your name. An **investment** is simply any asset into which funds can be placed with the expectation that it will generate positive income and/or increase its value.

The rewards, or **returns**, from investing come in two basic forms: income and increased value. Money invested in a savings account provides *income* in the form of periodic interest payments. A share of common stock also provides income (in the form of dividends), but investors often buy stock because they expect its price to rise. That is, common stock offers both income and the chance of an *increased value*. Since 1900, the average annual return on a savings account has been a little more than 3%. The average annual return on common stock has been just over 9%. Of course, during major market downturns (such as the one that occurred in 2008), the returns on nearly all investments fall well below these long-term historical averages.

Is cash placed in a simple (no-interest) checking account an investment? No, because it fails both tests of the definition: It does not provide added income and its value does not increase. In fact, over time inflation erodes the purchasing power of money left in a non-interest-bearing checking account.

We begin our study of investments by looking at types of investments and at the structure of the investment process.

Attributes of Investments

When you invest, the organization in which you invest—whether it is a company or a government entity—offers you the prospect of a future benefit in exchange for the use of your funds. Organizations compete for the use of your funds, and just as retailers compete for customers' dollars by offering a wide variety of products with different characteristics, organizations attempting to raise funds from investors offer a wide variety of investments with different attributes. As a result, investments of every type are available, from virtually zero-risk savings accounts at banks, which in recent years offered returns of less than 1%, to shares of common stock in high-risk companies that might triple in value in a short time. The investments you choose will depend on your resources, your goals, and your willingness to take risk. We can describe a number of attributes that distinguish one type of investment from another.

NOTE Investor Facts offer interesting or entertaining tidbits of information.

Securities or Property **Securities** are investments issued by firms, governments, or other organizations that represent a financial claim on the resources of the issuer. The most common types of securities are stocks and bonds, but more exotic types such as stock options are available as well. Usually you can buy and sell securities with relative ease, and investors trade billions of shares of stock each day in the United States markets. The focus of this book is primarily on the most basic types of securities, particularly common stocks.

INVESTOR FACTS

Art as an Asset—Securities don't necessarily perform better than property. Over the decade ending in 2011, fine art produced an average annual return of 4.6%, compared to 0% for stocks in the S&P 500.

(Sources: (1) www.artasanasset.com; (2) Saporito, Bill, "Paint by Numbers," *Time*, January 30, 2012.)

Property, on the other hand, consists of investments in real property or tangible personal property. *Real property* refers to land, buildings, and that which is permanently affixed to the land. *Tangible personal property* includes items such as gold, artwork, antiques, and other collectibles. In most cases, property is not as easy to buy or sell as are securities. Investors who want to sell a building or a painting may have to hire a real estate agent or an auctioneer to locate a buyer, and it may take weeks or months to sell the property.

Direct or Indirect A **direct investment** is one in which an investor directly acquires a claim on a security or property. If you buy shares of common stock in a company such as IBM, then you have made a direct investment, and you are a part owner of that firm. An **indirect investment** is an investment in a collection of securities or properties managed by a professional investor. For example, when you send your money to a mutual fund company such as Vanguard or Fidelity, you are making an indirect investment in the assets held by these mutual funds.

Direct ownership of common stock has been on the decline in the United States for many years. For example, in 1945 households owned (directly) more than 90% of the common stocks listed in the United States. Over time that percentage dropped to its current level of about 30%. The same trend has occurred in most of the world's larger economies. In the United Kingdom, for example, households' direct ownership of shares fell from roughly 66% to 14% in the last half century. Today, households directly hold less than one-quarter of outstanding shares in most of the world's major stock markets, as Figure 1.1 shows.

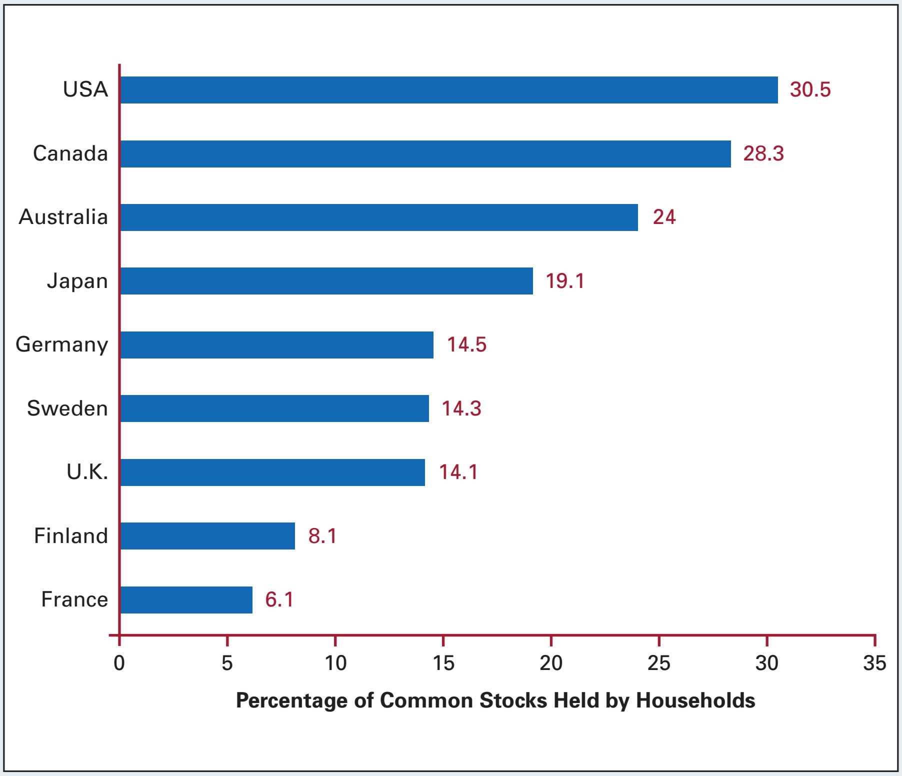
Just as direct stock ownership by households has been falling, indirect ownership has been rising. One way to examine this trend is to look at the direct ownership held by institutions that manage money on behalf of households. In 1945 pension funds and mutual funds combined held just less than 2% of the outstanding stock in the United States, but today their direct ownership is approximately 45%.

Tax policy helps to explain the decline in direct stock ownership by individuals and the related rise in direct ownership by institutions such as mutual funds and pension funds. Starting in 1978, section 401(k) of the Internal Revenue Code allowed employees

FIGURE 1.1

Direct Stock Ownership by Households

The figure shows the percentage of common stocks in each country that is owned directly by households. In most countries, households' direct ownership accounts for less than one-quarter of listed common stocks in the country.
(Source: Kristian Rydqvist, Joshua Spizman, and Ilya Strebulav, "The Evaluation of Aggregate Stock Ownership: A Unified Explanation." CEPR Discussion Paper No. 7356, July 2009.)



to avoid paying tax on earnings that they elect to receive as deferred compensation, such as in a retirement savings plan. Since then, most large companies have adopted so-called 401(k) plans, which allow employees to avoid paying current taxes on the income that they contribute to a 401(k) plan. Employees are taxed on this income when they withdraw it during their retirement years. Typically, mutual fund companies such as Fidelity and Vanguard manage these 401(k) plans, so stocks held in these plans represent indirect ownership for the workers and direct ownership for the mutual fund companies.

An important element of this trend is that individuals who trade stocks often deal with professional investors who sell the shares that individuals want to buy or buy what individuals want to sell. For instance, in 2012, Fidelity had almost $1.5 trillion in assets in its various mutual funds and employed approximately 38,000 people, many of whom had advanced investments training and access to a tremendous amount of information about the companies in which they invest. Given the preponderance of institutional investors in the market today, individuals are wise to consider the advantages possessed by the people with whom they are trading.

Debt, Equity, or Derivative Securities Most investments fall into one of two broad categories—debt or equity. **Debt** is simply a loan that obligates the borrower to make periodic interest payments and to repay the full amount of the loan by some future date. When companies or governments need to borrow money, they issue securities called *bonds*. When you buy a bond, in effect you lend money to the issuer. The issuer agrees to pay you interest for a specified time, at the end of which the issuer will repay the original loan.

NOTE Quick Response codes can be scanned with a smartphone to access additional information online related to the chapter's topic.

Bonds vs. Stocks

Equity represents ongoing ownership in a business or property. An equity investment may be held as a security or by title to a specific property. The most common type of equity security is *common stock*.

Derivative securities are neither debt nor equity. Instead, they derive their value from an underlying security or asset. Stock *options* are an example. A stock option is an investment that grants the right to purchase (or sell) a share of stock in a company at a fixed price for a limited period of time. The value of this option depends on the market price of the underlying stock.

Low- or High-Risk Investments Investments also differ on the basis of risk. **Risk** reflects the uncertainty surrounding the return that a particular investment will generate. The more uncertain the return associated with an investment, the greater is its risk.

As you invest over your lifetime, you will be confronted with a continuum of investments that range from low risk to high risk. For example, stocks are generally considered riskier than bonds because stock returns vary over a much wider range and are harder to predict than are bond returns. However, it is not difficult to find high-risk bonds that are riskier than the stock of a financially sound firm.

In general, investors face a tradeoff between risk and return—to obtain higher returns, investors usually have to accept greater risks. *Low-risk investments* provide a relatively predictable, but also relatively low, return. *High-risk investments* provide much higher returns on average, but they also have the potential for much larger losses.

Short- or Long-Term Investments The life of an investment may be either short or long. **Short-term investments** typically mature within 1 year. **Long-term investments** are those with longer maturities or, like common stock, with no maturity at all.

NOTE Discussions of international investing are highlighted by this icon.

Domestic or Foreign As recently as 25 years ago, U.S. citizens invested almost exclusively in purely **domestic investments**: the debt, equity, and derivative securities of U.S.–based companies and governments. Today investors routinely also look for **foreign investments** (both direct and indirect) that might offer more attractive returns than purely domestic investments. Information on foreign companies is now readily available, and it is now relatively easy to make foreign investments.

The Structure of the Investment Process

The investment process brings together *suppliers* who have extra funds with *demanders* who need funds. Suppliers and demanders of funds usually come together by means of a financial institution or a financial market. **Financial institutions** are organizations, such as banks and insurance companies, that pool the savings of governments, businesses, and individuals and use those funds to make loans and to invest in securities such as short-term bonds issued by the U.S. government. **Financial markets** are markets in which suppliers and demanders of funds trade financial assets, typically with the assistance of intermediaries such as securities brokers and dealers. All types of investments, including stocks, bonds, commodities, and foreign currencies, trade in financial markets.

The dominant financial market in the United States is the *securities market*. It includes stock markets, bond markets, and options markets. Similar markets exist in most major economies throughout the world. The prices of securities traded in these markets are determined by the interactions of buyers and sellers, just as other prices are established in other kinds of markets. For example, if the number of Facebook shares that investors want to buy is greater than the number that investors want to sell, the price of Facebook stock will rise. As new information about the company becomes available, changes in supply (investors who want to sell) and demand (investors who want to buy) may result in a new market price. Financial markets streamline the process of bringing together buyers and sellers so that investors can transact with each other quickly and without incurring exorbitant transactions costs. Financial markets provide another valuable function by establishing market prices for securities that are easy for market participants to monitor. For example, a firm that launches a new product may get an early indication of how that product will be received in the market by seeing whether investors drive the firm's stock price up or down when they learn about the new product.

Figure 1.2 on page 6 is a diagram of the investment process. Note that the suppliers of funds may transfer their resources to the demanders through financial institutions, through financial markets, or in direct transactions. As the broken lines show, financial institutions can participate in financial markets as either suppliers or demanders of funds.

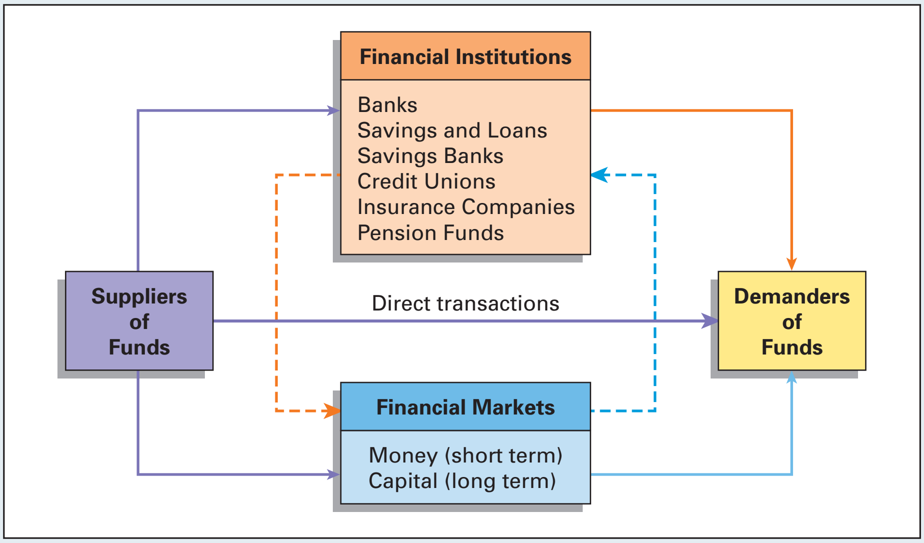
Suppliers and Demanders of Funds Governments, businesses, and individuals are the key participants in the investment process. Each may act as a supplier or a demander of funds. For the economy to grow and prosper, funds must flow to individuals and businesses with attractive investment opportunities. If individuals began suddenly hoarding their excess funds rather than putting them to work in financial institutions and markets, then organizations in need of funds would have difficulty obtaining them. As a result, government spending, business expansion, and consumer purchases would decline, and economic activity would slow.

Government All levels of government—federal, state, and local—require vast sums of money to finance long-term projects related to the construction of public facilities and to keep the government running. Occasionally governments run budget surpluses, allowing them to invest excess funds. In general, though, government is a *net*

FIGURE 1.2

The Investment Process

Financial institutions participate in the financial markets as well as transfer funds between suppliers and demanders. Although the arrows go only from suppliers to demanders, for some transactions (e.g., the sale of a bond or a college loan), the principal amount borrowed by the demander from the supplier (the lender) is eventually returned.



How Much Debt Has the U.S. Government Issued?

demander of funds—meaning that it demands more funds than it supplies because government spending often exceeds tax revenues. The huge amount of money borrowed by governments has the potential to "crowd out" private investment by increasing the cost and decreasing the amount of funds available to individuals and businesses.

Business Most business firms require large sums of money to support operations. Businesses issue a wide variety of debt and equity securities to finance their short-term and long-term needs. They also supply funds when they have excess cash. However, like governments, business firms in general are *net demanders of funds*.

Individuals You might be surprised to learn that even though individuals demand funds in the form of loans to pay for property (e.g., houses and automobiles) and education, as a group, individuals are *net suppliers of funds*. Through their savings, individuals put more into the financial system than they take out.

Types of Investors When we refer to individuals in the investment process, we do so to differentiate households from government and business. We can further characterize the participation of individuals in the investment process in terms of who manages the funds. **Individual investors** manage their own funds to achieve their financial goals. Individual investors usually concentrate on earning a return on idle funds, building a source of retirement income, and providing security for their families.

Individuals who lack the time or expertise to make investment decisions often employ **institutional investors**—investment professionals who earn their living by managing other people's money. These professionals trade large volumes of securities for individuals, as well as for businesses and governments. Institutional investors include banks, life insurance companies, mutual funds, and pension funds. For example, a life insurance company invests the premiums it receives from policyholders to earn returns that will cover death benefits paid to beneficiaries.

Both individual and institutional investors apply similar fundamental principles when deciding how to invest money. However, institutional investors generally control larger sums of money and have more sophisticated analytical skills than do most individual investors. *The information presented in this textbook is aimed primarily at you—the individual investor*. Mastering this material represents only the first step that you need to take to develop the expertise to become an institutional investor.

CONCEPTS IN REVIEW

Answers available at www.pearsonhighered.com/smart

NOTE The Concepts in Review questions at the end of each text section encourage you, before you move on, to test your understanding of the material you've just read.

1.1 Define the term *investment*, and explain why individuals invest.

1.2 Differentiate among the following types of investments, and cite an example of each: (a) securities and property investments; (b) direct and indirect investments; (c) debt, equity, and derivative securities; and (d) short-term and long-term investments.

1.3 Define the term *risk*, and explain how risk is used to differentiate among investments.

1.4 What are *foreign investments*, and what role do they play for the individual investor?

1.5 Describe the structure of the overall investment process. Explain the role played by *financial institutions* and *financial markets*.

1.6 Classify the role of (a) government, (b) business, and (c) individuals as net suppliers or net demanders of funds.

1.7 Differentiate between *individual investors* and *institutional investors*.

Types of Investments

LG3 A wide variety of investments is available to individual investors. As you have seen, investments differ in terms of risk, maturity, and many other characteristics. We devote the bulk of this book—Chapters 6 through 15—to describing the characteristics of different investments and the strategies that you may use when you buy and sell these investments. Table 1.1 on page 8 summarizes some basic information about the major types of investments that we will study.

Short-Term Investments

Short-term investments have a life of 1 year or less and usually (but not always) carry little or no risk. People buy these investments as a temporary "warehouse" for idle funds before transferring the money into a long-term investment. Short-term investments are also popular among conservative investors who may be reluctant to lock up their funds in riskier, long-term assets such as stocks or bonds.

Short-term investments also provide **liquidity**; that is, they can be converted into cash quickly and with little or no loss in value. Provision for liquidity is an important part of any financial plan. We discuss the role of short-term investments in financial planning and their key features later in this chapter.

Common Stock

Common stock is an equity investment that represents ownership in a corporation. Each share of common stock represents a fractional ownership interest in the firm. For example, if you buy 1 share of common stock in a corporation that has 10,000 shares

TABLE 1.1 MAJOR TYPES OF INVESTMENTS

Type	Description	Examples	Where Covered in This Book
Short-term	Savings instruments with lives of 1 year or less. Used to warehouse idle funds and to provide liquidity.	Deposit accounts, U.S. Treasury bills (T-bills), Certificates of deposit (CDs), Commercial paper, Banker's acceptances, Money market mutual funds	Ch. 1
Common stock	Equity investments that represent ownership in a corporation.		Chs. 6–9
Fixed-income securities	Investments that make fixed cash payments at regular intervals.	Bonds, Convertible securities Preferred stock	Chs. 10, 11 Web Ch. 16
Mutual funds	Companies that pool money from many investors and invest funds in a diversified portfolio of securities.	Large-cap funds, Growth funds	Ch. 12
Derivatives	Securities that are neither debt nor equity but are structured to exhibit the characteristics of the underlying assets from which they derive their value.	Options Futures	Ch. 14 Ch. 15
Miscellaneous	Various other investments that are widely used by investors.	Tax-advantaged investments Real estate Tangibles	Web Ch. 17 Web Ch. 18 Web Ch. 18

outstanding, you would be a 1/10,000th owner in the firm. Today, roughly half of all U.S. households own some common stock, either directly or indirectly.

The return on investment in common stock comes from two sources: dividends and capital gains. **Dividends** are payments the corporation makes to its shareholders. Companies are not required to pay dividends to their shareholders, and most firms that are small or are growing very rapidly do not pay dividends. As firms grow and accumulate cash, they often start paying dividends, just as Apple did in 2012. Companies that pay dividends usually pay them quarterly. **Capital gains** occur when the stock price rises above an investor's initial purchase price. Capital gains may be *realized* or *unrealized*. If you sell a stock for more than you paid for it, you have realized a capital gain. If you continue to hold the stock rather than sell it, you have an unrealized capital gain.

example

For example, say you purchased a single share of Walmart common stock for $54.50 on January 3, 2011. During 2011, you received $1.46 in cash dividends. At the end of the year, you sold the stock for $60. You earned $1.46 in dividends and you realized a $5.50 capital gain ($60 sale price – $54.50 purchase price) for a total return of $6.96. On a percentage basis, the return on Walmart shares in 2011 was 12.8% ($6.96 ÷ $54.50). If you continued to hold the stock rather than sell it, at the end of the year you would have earned the same return but your capital gain would have been unrealized.

As mentioned earlier, since 1900 the average annual rate of return on common stocks has been a little more than 9%, so 2011 was a good year for Walmart. As a retailer that focuses on low-priced goods, Walmart performs well when the economy is doing poorly (as has been the case in recent years) and consumers are trying to stretch every dollar in their budgets.

Fixed-Income Securities

Fixed-income securities are investments that offer a periodic cash payment that may be fixed in dollar terms or may vary according to a predetermined formula (for example, the formula might dictate that cash payments rise if a general rise in market interest rates occurs). Some offer contractually guaranteed returns, meaning that the issuer of the security (i.e., the borrower) must fulfill a promise to make payments to investors or risk being sued. Other fixed-income securities come with the expectation of regular payments even if a contractual obligation is absent. Because of their relatively predictable cash payments, fixed-income securities tend to be popular during periods of high interest rates when investors seek to "lock in" high returns and during periods of economic uncertainty when investors are reluctant to invest in riskier securities such as common stocks. The most common fixed-income securities are bonds, convertible securities, and preferred stock.

Bonds **Bonds** are long-term debt instruments (in other words, an IOU, or promise to pay) issued by corporations and governments. A bondholder has a contractual right to receive periodic interest payments plus return of the bond's *face value* (the stated value given on the certificate) at maturity (typically 10 to 30 years from the date issued).

If you purchased a $1,000 bond paying 9% interest in semiannual installments, you would receive $45 ($1,000 × 9% × ½ year) every 6 months. At maturity you would receive the $1,000 face value of the bond. Depending on the bond, you may be able to buy or sell it prior to maturity.

Since 1900 the average annual rate of return on long-term government bonds has been about 5%. Corporate bonds are riskier because they are not backed by the full faith and credit of the U.S. government and, therefore, tend to offer slightly higher returns than government bonds provide.

Convertible Securities A **convertible security** is a special type of fixed-income investment. It has a feature permitting the investor to convert it into a specified number of shares of common stock. Convertibles provide the fixed-income benefit of a bond (interest) while offering the price-appreciation (capital gain) potential of common stock.

Preferred Stock Like common stock, **preferred stock** represents an ownership interest in a corporation and has no maturity date. Unlike common stock, preferred stock has a fixed dividend rate. Firms are generally required to pay dividends on preferred shares before they are allowed to pay dividends on their common shares. Furthermore, if a firm is having financial difficulties and decides to stop paying preferred dividends, it must usually make up all of the dividend payments that it skipped before paying dividends on common shares. Investors typically purchase preferred stocks for the dividends they pay, but preferred shares may also provide capital gains.

INVESTOR FACTS

The Feeling's Mutual!—In 2011, the 8,684 mutual funds in the United States accounted for investment assets of almost $12 trillion. Mutual funds held 25% of all U.S. stocks, and managed 23% of all household financial assets.

(Source: 2012 Investment Company Factbook downloaded from www.ici.factbook.org, accessed July 18, 2012.)

Mutual Funds

A **mutual fund** is a portfolio of stocks, bonds, or other assets that were purchased with a pool of funds contributed by many different investors and that are managed by an investment company on behalf of its clients. Investors in a mutual fund own an interest in the fund's collection of securities. When you send money to a mutual fund, you buy shares in the fund (as opposed to shares in the companies in which the fund invests), and the prices of the mutual fund