Fundamentals of Investing
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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New to this Edition

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

“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 plat-
form, 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

Solving Teaching and Learning Challenges

The fact is, investing may sound simple, but it’s not. Investors in today’s turbulent fi-
nancial 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 stu-
dents 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 judg-
ments 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 profes-
sionals, plus feedback from adopters, the fourteenth edition reflects the realities of
today’s investment environment. At the same time, the following characteristics pro-
vide a structured framework for successful teaching and learning.
Clear Focus on the Individual Investor. According to a 2017 Gallup poll, 54% of Americans report having money invested in stocks either directly or indirectly through mutual funds or participation in 401(k)s. That percentage peaked at 65% in 2008 but fell for six consecutive years in the aftermath of the financial crisis and has only recently started rising again. 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 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.

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 roadmap 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**

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 ÷ $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.

**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.

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.

**Implicit Guarantee Becomes Explicit**

Debt securities issued by agencies such as the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac) have generally had an implicit guarantee from the federal government, meaning that investors believed that these instruments could not go into default, even if they were not “officially” backed by the full faith and credit of the U.S. government. In 2007 as residential mortgage defaults began to rise, Fannie Mae and Freddie Mac came under severe financial distress. On September 7, 2008, the federal government effectively took over these institutions, injecting $100 billion of new capital into each to stabilize them and to reassure investors that these giants of the mortgage industry, which held or guaranteed about $5.5 trillion in residential mortgage debt, would not disappear. The capital infusion helped initially, but investor confidence in the two agencies was rocked again on August 8, 2011, when their credit ratings were downgraded. Standard & Poor’s said that the downgrade reflected their “direct reliance on the U.S. government,” which had seen its own credit rating downgraded three days earlier.

**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.
**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.

**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.

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.
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, where they can complete a spreadsheet tutorial, if needed.
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.
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

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

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 [www.pearsonhighered.com/irc](http://www.pearsonhighered.com/irc)

### Features of the Supplement

**Instructor’s Manual**
- Teaching outlines
- Chapter summaries
- Key concepts
- Chapter overviews
- Solutions to all questions and problems in the text

**Test Bank**
More than 1,800 multiple-choice, true/false, short-answer, and graphing questions with these annotations:
- Type (multiple-choice, true/false, short-answer, essay)
- Topic (the term or concept the question supports)
- Learning outcome
- AACSB learning standard (written and oral communication; ethical understanding and reasoning; analytical thinking; information technology; interpersonal relations and teamwork; diverse and multicultural work; reflective thinking; application of knowledge)

**Computerized TestGen**
TestGen allows instructors to:
- Customize, save, and generate classroom tests
- Edit, add, or delete questions from the test item files
- Analyze test results
- Organize a database of tests and student results.

**PowerPoints**
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:
- Keyboard and screen reader access
- Alternative text for images
- High color contrast between background and foreground colors
Acknowledgments

Many people gave their generous assistance during the initial development and revisions of *Fundamentals of Investing*. The expertise, classroom experience, and general advice of both colleagues and practitioners have been invaluable. Reactions and suggestions from students throughout the country—comments we especially enjoy receiving—sustained our belief in the need for a fresh, informative, and teachable investments text.

A few individuals provided significant subject matter expertise in the initial development of the book. They are Terry S. Maness of Baylor University, Arthur L. Schwartz, Jr., of the University of South Florida at St. Petersburg, and Gary W. Eldred. Their contributions are greatly appreciated. In addition, Pearson obtained the advice of a large group of experienced reviewers. We appreciate their many suggestions and criticisms, which have had a strong influence on various aspects of this volume. Our special thanks go to the following people, who reviewed all or part of the manuscript for the previous 13 editions of the book.

Kevin Ahlgrim  
M. Fall Ainina  
Joan Anderssen  
Felix O. Ayadi  
Gary Baker  
Harisha Batra  
Anand K. Bhattacharya  
Richard B. Bellinfante  
Cecil C. Bigelow  
Robert J. Boldin  
Paul Bolster  
Denis O. Boudreaux  
A. David Brummett  
Gary P. Cain  
Gary Carman  
Daniel J. Cartell  
P. R. Chandy  
Steven P. Clark  
William Compton  
David M. Cordell  
Timothy Cowling  
Robert M. Crowe  
James DeMello  
Richard F. DeMong  
Clifford A. Diebold  
Steven Dolvin  
James Dunn  
Betty Marie Dyatt  
Scott Ehrhorn  
Steven J. Elbert  
Robert Eldridge  
Imad Elhaj  
Thomas Eyssell  
Frank J. Fabozzi  
Robert A. Ford  
Albert J. Fredman  
John Gerlach  
Tom Geurts  
Chaim Ginsberg  
Joel Gold  
Terry Grieb  
Frank Griggs  
Brian Grindier  
Arthur S. Guarino  
Harry P. Guenther  
Tom Guerts  
John Guess  
Matthew Haertzen  
Robert Hartwig  
Mahboubul Hassan  
Gay Hatfield  
Dan Hess  
Robert D. Hollinger  
Sue Beck Howard  
Ping Hsiao  
Roland Hudson, Jr.  
Raad Jassim  
Donald W. Johnson  
Samuel Kyle Jones  
Jeffrey Jones  
Rajiv Kalra  
Ravindra R. Kamath  
Bill Kane  
Daniel J. Kaufmann, Jr.  
Burhan Kawosa  
Nancy Kegelman  
Phillip T. Kolbe  
Sheri Kole  
Christopher M. Korth  
Marie A. Kratochvil  
Thomas M. Krueger  
Wendy Ku  
Lynn Kugele  
George Kutner  
Blake LeBaron  
Robert T. LeClair  
Chun I. Lee  
William Lepley  
Steven Lifland  
Ralph Lim  
James Lock  
Larry A. Lynch  
Barry Marchman  
Weston A. McCormac  
David J. McLaughlin  
Anne Macy  
James Mallett  
Keith Manko  
Timothy Manuel  
Kathy Milligan  
Warren E. Moeller  
Homer Mohr  
Majed R. Muhtaseb  
Joseph Newhouse  
Michael Nugent  
Joseph F. Ollivier  
Michael Palermo  
John Palfy  
James Pandjiris  
John Park  
Thomas Patrick  
Michael Polakoff  
Barbara Poole  
Ronald S. Pretekin  
Stephen W. Pruitt  
Mark Pyles  
S. P. Umamaheswar Rao  
Rathin Rathinasamy  
William A. Richard  
Linda R. Richardson  
William A. Rini  
Roy A. Roberson  
Tammy Rogers  
Edward Rozalezewicz  
William J. Ruckstuhl  
David Russo  
Arthur L. Schwartz, Jr.  
William Scroggins  
Daniel Singer  
Keith V. Smith  
Pat R. Stout  
Nancy E. Strickler  
Glenn T. Sweeney  
Amir Tavakkol  
Phillip D. Taylor  
Wenyuh Tsay  
Robert C. Tueting  
Howard E. Van Auken  
P. V. Viswanath  
Doug Waggle  
Hsinrong Wei  
John R. Weigel  
Sally Wells  
Peter M. Wichert  
Daniel Wolman  
John C. Woods  
Michael D. Woodworth  
Robert J. Wright  
Richard H. Yanow  
Ali E. Zadeh  
Edward Zajicek  
Dazhi Zheng
Because of the wide variety of topics covered in the book, we called upon many experts for advice. We thank them and their firms for allowing us to draw on their insights and awareness of recent developments to ensure that the text is as current as possible. In particular, we want to mention Bill Bachrach, Bachrach & Associates, San Diego, CA; John Markese, President, American Association of Individual Investors, Chicago, IL; Frank Hatheway, CFA, Chief Economist, Nasdaq, New York, NY; George Ebenhack, Oppenheimer & Co., Los Angeles, CA; Mark D. Erwin, ChFC, Commonwealth Financial Network, San Diego, CA; David M. Love, C. P. Eaton and Associates, La Jolla, CA; Michael R. Murphy, Sceptre Investment Counsel, Toronto, Ontario, Canada; Richard Russell, Dow Theory Letters, La Jolla, CA; and Michael J. Steelman, Merrill Lynch, Bonsall, CA.

To create the video feature An Advisor’s Perspective, we relied on the generosity of many investment professionals from around the country. We are especially thankful to David Hays of CFCl and Ed Slott of Ed Slott and Company for helping us to do a great deal of the videotaping for this feature at the Ed Slott conference in Phoenix, Arizona. We are thankful to all of the investment professionals who participated in this project on video:

- Catherine Censullo, Founder, CMC Wealth Management
- Joseph A. Clark, Managing Partner, Financial Enhancement Group
- Ron Courser, CFO, Ron Courser and Associates
- Bob Grace, President, Grace Tax Advisory Group
- James Grant, Founder, Grant’s Interest Rate Observer
- Bill Harris, Founder, WH Cornerstone Investments
- James Johnson, President, All Mark Insurance Services
- Mary Kusske, President, Kusske Financial Management
- Rick Loek, CEO, Calrima Financial and Insurance Agency
- Ryan McKeown, Senior VP, Wealth Enhancement Group
- Thomas O’Connell, President, International Financial Advisory Group
- Phil Putney, Owner, AFS Wealth Management
- Tom Riquier, Owner, The Retirement Center
- Rob Russell, CEO, Russell and Company
- Carol Schmidlin, President, Franklin Planning
- Ed Slott, CEO, Ed Slott and Company
- Bryan Sweet, Owner, Sweet Financial Services
- Steve Wright, Managing Member, The Wright Legacy Group

Special thanks go to Alan Wolk of the University of Georgia for accuracy checking the quantitative content in the textbook. We are pleased by and proud of his efforts. Additionally, we extend our gratitude to Robert Hartwig of Worcester State College for revising and updating the Test Bank and Instructor’s Manual, and to Brian Nethercutt for updating and revising the PowerPoint program.

The staff at Pearson, particularly Donna Battista, Vice President of Business, Economics, and UK Courseware, contributed their creativity, enthusiasm, and commitment to this textbook. Pearson Content Producer Meredith Gertz pulled together the various strands of the project. Other dedicated Pearson staff, including former Portfolio Manager Kate Fernandes, Senior Digital Studio Producer Melissa Honig, Digital Content Team Lead for MyLab Finance Miguel Leonarte, and Senior Product Marketing Manager Kaylee Carlson warrant special thanks for shepherding the project through the development, production, marketing, and website construction.
stages. Additionally, we appreciate the efforts of the extended publishing team, including Denise Forlow at Integra Software Services Inc. and Kerri Tomasso for their oversight of the production process. Without the care and concern of all these individuals, this text would not have evolved into the teachable and interesting text and package we believe it to be.

Finally, our wives, Susan and Heidi, played important roles by providing support and understanding during the book’s development, revision, and production. We are forever grateful to them, and we hope that this edition will justify the sacrifices required during the many hours we were away from them working on this book.

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Chad J. Zutter