INVESTMENTS

Analysis and Management

SEVENTH EDITION

Charles P. Jones

7TH EDITION

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Charles P. Jones

North Carolina State University

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Preface

Why should you care about investing? Just consider the large annual stock returns since 1995 as well as the accelerating trend to self-directed retirement programs with more and more workers deciding which assets to hold in their retirement accounts. To succeed in this environment, you need to understand the fundamentals of investing.

Investors are being deluged with information, and they must learn how to sift through and evaluate this information overload. Today more than 10,000 web sites are devoted to investing information and their number grows daily. Bad advice abounds, the Internet is unregulated, and scammers are on the phone constantly trying to lure unsophisticated investors. You can protect yourself by learning essential investing facts.

We live in a fast-changing world. While terminology and trading mechanisms may change, learning to carefully analyze and evaluate investment opportunities will pay off under any circumstances. You can become a smart investor with reasonable efforts because this text covers the basic terminology and techniques and shows you how to evaluate investment opportunities in a concise, readable, and efficient manner.

GOALS OF THE TEXT

Investments: Analysis and Management is designed to provide a firm understanding of the field of investments while stimulating interest in this fascinating subject. My goals in writing this text are to help you

(1) to understand what the investment opportunities are
(2) to make good investment decisions
(3) to recognize where investment problems and controversies arise and to know how to deal with them.

Also, this text specifically focuses on Internet investing, highlighting the important resources on the Internet and allowing readers to become comfortable with using the Internet as an integral part of their investment activities.

This text is self-contained and designed for readers with varying backgrounds. It assumes the standard prerequisite courses generally in statistics, basic accounting, economics, financial management. However, I have sought to minimize formulas and to simplify difficult material in a presentation that is consistent with current ideas and practices. Relevant, state-of-the-art material has been simplified and structured specifically for the reader's benefit.

The emphasis in this text is on readability—making investments material more readily accessible, as well as interesting and thoughtful to the beginner. *What is most important for you to gain from this text is the desire and ability to make good investing decisions!*

ORGANIZATION OF THE TEXT

This edition is built around the approach that you don't cover something until you need to, and you cover only what is critical to understand the important issues. Unnecessary detail, and advanced topics, are left for a later day. The text is divided into eight parts for organizational purposes—organized around background, returns and basic portfolio theory, the analysis of different types of securities (four parts), modern investment theory, and portfolio management.

Part One provides the background everyone needs before delving into the specifics of security analysis and portfolio management. The goal of this introductory set of chapters is to familiarize beginners with an overview of what investing is all about. After a general discussion of the subject in Chapter 1, the next four chapters describe the variety of securities available when investing directly, investing indirectly (investment companies), the markets in which they are traded, and the mechanics of securities trading.

Part Two is concerned with an analysis of returns and risk, along with the basics of portfolio theory and capital market theory. Chapter 6 contains a careful and complete analysis of the important concepts of risk and return that dominate any discussion of investments. Chapter 7 contains a complete discussion of expected return and risk for both individual securities and portfolios. The primary emphasis is on the essentials of Markowitz portfolio theory. Furthermore, beta, systematic and nonsystematic risk, and the CAPM are introduced in Chapter 7 in order that these important concepts (which are all you really need) can be used throughout the course.

Parts Three and Four focus on the basics of valuation (and therefore the fundamentals of security analysis) by presenting "how-to" tools and techniques for bonds and stocks respectively. Part Three examines the analysis, valuation, and management of bonds, a logical starting point in learning how to value securities. Part Four builds on these concepts in discussing the analysis, valuation, and management of common stocks. Chapter 12 explains the Efficient Market Hypothesis and provides some insights into the controversy surrounding this topic.

Part Five is, like Part Four, devoted to common stocks, a reasonable allocation given investor interest in common stocks. ***Part Five covers fundamental analysis, the heart of security analysis.*** Because of its scope and complexity, three chapters are required to adequately cover the fundamental approach based on the top-down approach. Technical analysis is also covered.

Part Six discusses the other major securities available to investors, derivative securities. Chapter 17 analyzes options (puts and calls), a popular investment alternative in recent years. Stock index options also are covered. Chapter 18 is devoted to financial futures, an important topic in investments. Investors can use these securities to hedge their positions and reduce the risk of investing.

Part Seven contains additional details covering portfolio theory and capital market theory. Chapter 19 continues the discussion of portfolio concepts by concentrating on portfolio selection, based on the concept of efficient portfolios. The separation theorem and systematic and nonsystematic risk are discussed. Chapter 20 discusses capital market theory, a natural extension of portfolio theory. This discussion is divided between the Capital Asset Pricing Model and Arbitrage Pricing Theory.

Finally, ***Part Eight concludes the text with a discussion of portfolio management and the issue of evaluating portfolio performance.*** Chapter 21 is structured around the Association for Investment Management and Research's approach to portfolio management as a process. Chapter 22 is a logical conclusion to the entire book because all investors are keenly interested in how well their investments have performed. Mutual funds are used as examples of how to apply these portfolio performance measures and how to interpret the results.

SPECIAL FEATURES

This text offers several important features, some of which are unique. These features will help you learn how to invest more quickly and easily.

FLEXIBLE CHAPTER SEQUENCE

The sequence of chapters has been carefully restructured and streamlined in the seventh edition. Most of the material on portfolio theory and capital market theory has been moved to Part Seven, although the basics of Markowitz and the CAPM are covered in Chapter 7. Therefore, *you can use the critical elements of portfolio theory and capital market theory throughout most of the course without getting involved in all of the details of capital market theory early on, which tend to be difficult*. Furthermore, this allows you to get to the material on bonds and stocks earlier in the semester, where the real action is.

I have diligently sought to ensure that the text length is reasonably manageable for a one semester course. You will benefit greatly from reading the entire text, but reading various combinations of chapters can also be very beneficial.

PRACTICAL PEDAGOGY

The pedagogy is specifically designed to help the reader understand and apply the basic concepts of investing.

- **Learning objectives** begin each chapter, which will aid the reader in determining what is to be accomplished with a particular chapter.

- **Key words** in boldface, are carefully defined as marginal definitions; they also are included in the glossary. Other important words are italicized.

- **Boxed inserts** continue to provide timely and interesting material from the popular press, enabling the reader to see the real-world side of issues and concepts discussed in the text.

- **"Investments Intuition" sections** set off from the regular text for easy identification, are designed to help the reader quickly grasp the intuitive logic of, and therefore better understand, particular investing issues.

- **"Some Practical Advice"** *sections* offer the reader useful suggestions and cautions.

- **"Using the Internet" sections** throughout the text, contain web addresses dealing with a particular topic being discussed in the text.

- **A detailed summary** at the end of each chapter contains a "bulleted" list of important points for quick and precise reading.

- **Numbered examples** an extensive set in each chapter, are designed to clearly illustrate key concepts.

- **End-of-chapter questions** keyed to specific concepts, are designed to thoroughly review the material in each chapter.

- **Separate problem sets** are designed to illustrate the quantitative material in many chapters. Some of these problems can be solved in the traditional manner; and some are best solved with appropriate software.

- **Demonstration problems** are included with some problem sets to show the reader how to solve the most important types of problems.

- **Chartered Financial Analysts (CFA) exam questions and problems** are included in many chapters. These allow students to see that the concepts and problem-solving processes they are studying in class are exactly the same as those asked on professional examinations for people in the money-management business.

CHANGES IN THE SEVENTH EDITION

The seventh edition has been thoroughly updated using the latest data and numbers available. At the time of publication, most data reflect the most current information. The most important content changes in the seventh edition include:

- Part One has been streamlined to include five chapters, rather than six. Part Two consists of two chapters, with Chapter 6 covering historical returns, and Chapter 7 covering expected returns. This format allows students to concentrate solely on the issue of returns, both historical and prospective, immediately following the introductory background chapters. It also breaks up the material into more manageable parts.
- Chapter 7 in Part Two covers basic portfolio theory and the CAPM, giving students only the essentials of portfolio theory and capital market theory necessary to use the important topics throughout most of the course. The remainder of the portfolio theory and capital market theory material has been moved to Part Seven, where it can be treated as a stand-alone section. Although capital market theory is important, covering all the details early in Part Two (as in the sixth edition) resulted in a significant part of the semester being used up before students get to the important topics of bonds and stocks. This material is also difficult, and may cause students to become frustrated from their study of investments. Finally, the simple truth in many cases is that beginning students do not need so much detail about capital market theory—they simply are not likely to utilize concepts like the capital market line, the separation theorem, and arbitrage pricing theory in a beginning course.

Note that as a result of this reorganization of Part Two, the chapter on market efficiency, now Chapter 12, concludes Part Four on the analysis and management of common stocks.

Everyone needs to consider the Efficient Market Hypothesis to analyze and manage common stocks.

- More questions from previous Chartered Financial Analyst (CFA) examinations are included as part of the end-of-chapter questions and problems.

SUPPLEMENTS

The seventh edition includes a complete set of supplements:

- **Instructor's Manual.** For each chapter, chapter objectives, lecture notes, notes on the use of transparency masters, and additional material relevant to the particular chapter are included. Answers to all questions and problems in the text are provided. The Instructor 's Manual was carefully prepared by the author.
- **Testbank.** The testbank includes numerous multiple choice and true—false questions for each chapter as well as short discussion questions and problems. Most of these have been extensively tested in class and are carefully checked. The Testbank is also available in a computerized format.
- **Internet Exercises.** Developed by P. V. Viswanath of Pace University, this set of exercises presents practical investing situations that use internet resources. The importance of the Internet dictates that students utilize these resources, and this package has exercises to accompany each chapter of the text.
- **PowerPoint.** PowerPoint presentation materials are available.
- **Transparency Masters.** These include selected text art, selected items from other sources, and solutions to selected end-of-chapter problems in the text. These transparencies are held over from the fifth edition for the benefit of those wishing to continue using them.
- **Software.** *The Investment Portfolio,* v. 2.5, a Windows-based software package produced by John Wiley, is available for special packaging with the text. It contains modules on portfolio management, equilibrium, statistics, valuation models, bonds, options, futures and evaluation, and includes data for use with all modules. Users may also enter their own data in spreadsheet or ASCII format. This software is available with extensive documentation as well as a workbook.
- **Website.** John Wiley makes available a website that allows adopters of the text to obtain additional materials.
- **Data Disk.** A file containing returns on financial assets from 1871 is available *to adopters.* These definitive data have been developed over many years by Charles Jones and Jack Wilson at North Carolina State University. Please contact John Wiley.
- **Videos.** A set of NBR videos is available free to adopters. These videos include such topics as "How Wall Street Works."

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pathbreaking work in the area of asset returns and has generously been made available by him, for which I am very grateful.

A text does not reach its seventh edition unless it has met the needs of a large number of instructors who find it to be a useful tool in assisting their teaching. The earlier editions of this text benefited substantially from the reviews of many instructors whose suggestions for improvements are found on many pages of this text. I owe a debt of gratitude to these teachers and colleagues who helped on past editions.

In developing the sixth edition, I benefited greatly from instructors teaching this course, including: Bala Arshanapalli, *Indiana University Northwest*; Christopher Blake, *Fordham University*; Vincent Deni, *Oakland Community College*; Clark Hawkins, *New Mexico State University*; Cheryl McGaughey, *Angelo State University*; Frederick Puritz, *State University of New York at Oneonta*; David L. Scott, *Valdosta State University*; Howard Van Auken, *Iowa State University*; Richard Voth, *Pacific Union College*; Stephen Avard, *Texas A&M University*; Richard B. Carter, *Iowa State University*; James F. Gatti, *The University of Vermont*; Carl Hubbard, *Trinity University*; Bruce McManis, *Nicholls State University*; Maury Randall, *Rider University*; Milan P. Sigetich, *Southern Oregon State College*; Glenn Wood, *California State University—Bakersfield*; and Dennis Zocco, *University of San Diego*.

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I would also like to thank my former editors at Wiley, Rich Esposito, Joe Dougherty, John Woods, and Whitney Blake. My current editor, Marissa Ryan, has been most helpful in developing new supplements and dealing with the fast-changing world of Investments as it affects the total instructional package. The other Wiley professionals with whom I have worked on this project have been excellent, including Jennifer LiMarzi and Cynthia Rhoads.

Finally, I would like to thank my family, who continue to put up with the interruptions caused by writing a book. Without their support, a project such as this is difficult at best. I thank in particular my wife, Kay, who has helped me tremendously in the preparation of various editions of this text. My daughter Kathryn has played a larger role in the seventh edition and been helpful in developing internet-related aspects of this material. Kay and Kathryn make a difficult job bearable, and worth doing.

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