

PRINCIPLES OF FINANCE

THIRD EDITION



ROBERT W. KOLB & RICARDO J. RODRIGUEZ



*Principles of
Finance
Third Edition*

Robert W. Kolb
Ricardo J. Rodríguez

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Preface

Principles of Finance, Third Edition, is intended for a beginning course in finance. The text approaches the three traditional divisions of finance—corporate finance, investments, and financial institutions—by employing the twin concepts of value maximization and the risk/expected return trade-off throughout. One of the main innovations of the text is to provide a synoptic and integrated view of the various sub-disciplines of finance, while stressing their inter-relationships. Usually corporate finance texts cover financial instruments and markets in such a desultory manner as to leave introductory students thinking that the principles of finance apply to firms only. By giving financial instruments and investments separate and more extended treatment, this text helps the student better appreciate the central concepts of finance that unite its sub-disciplines. This orientation toward the **finance** function contrasts with accounting orientations toward the subject matter.

Pedagogical Features of the Text

Throughout the text, three ideas are always kept in view:

- ◆ The goal of financial management is to maximize shareholder wealth.
- ◆ The financial manager confronts persistent trade-offs in attempting to maximize shareholder wealth.
- ◆ Finance is best understood by stressing how corporate finance, investments, and financial institutions and markets form a triad of mutually supporting sub-disciplines.

As a learning vehicle, *Principles of Finance, Third Edition*, adopts a comprehensive approach and includes:

- ◆ the text
- ◆ a Student Resource Manual and Software Guide
- ◆ an extensive selection of computer programs and exercises designed to enhance the learning of finance.

These elements are fully integrated, and they are designed to be mutually supportive.

The Student Resource Manual

This 500-page book is an integral part of the *Principles of Finance* learning package. For each chapter, the manual includes a detailed outline of the chapter contents, numerous multiple-choice study questions, and a review of the chapter's key terms and concepts. In addition, there are study questions and problems with answers and solutions for all of chapters.

Software

As an integral part of the entire learning package, *Principles of Finance* includes three different types of software. Most finance texts do not include software. Of those texts accompanied by software, the software is generally an afterthought. In many instances, the software is not specific to the text and it lacks instructions.

Principles of Finance is different; it includes three dramatically different computer and software resources to aid in learning finance. *Principles of Finance, Third Edition*, includes *REALDATA*—a comprehensive resource of real-world data and more than 100 computer exercises that employ the data. Second, the book contains the latest version of the *Finmaster* software that accompanied earlier editions. The third program is *STUDY!*, which is essentially a study guide and self-testing program on a disk. Each of these programs is discussed fully in the software instructions portion of the Student Resource Manual.

REALDATA. *REALDATA* consists of approximately 700 time series of real-world financial and economic data. The types of data range from money supply figures, to interest rate series, to stock returns data, to mutual fund indexes, to price indexes, and beyond. These data are contained in 36 spreadsheet files. The instructions in the *Student Resource Manual* present definitions of each series so that students can find a particular variable easily. The *Student Resource Manual* also contains more than 100 computer exercises using the data provided. For example, one exercise might ask a student to find and interpret the beta of Apple Computer. Another exercise might ask students to investigate trends in the issuance of stocks and bonds by major corporations. These exercises are keyed to particular chapters of *Principles of Finance* so that students may solve the exercises to build their knowledge of particular concepts they are studying. We have used *REALDATA* in our classes and have found it to be a powerful tool for helping students extend their understanding.

Finmaster. *Finmaster*, which accompanied earlier editions of this text, has been revised to accompany this third edition. The program contains 18 modules that cover the gamut of the introductory finance course, including: the time value of money, capital budgeting, cash budgets, financial ratios, bond analysis, the dividend valuation model, portfolio diversification, regression analysis, and statistical analysis.

Where appropriate, each module includes a graphics feature. For example, it is very easy to use *Finmaster* to explore how changing an assumption in a capital budgeting problem will affect the net present value of the project. *Finmaster* can

graph this changing relationship with ease. The user can save and recall data sets for further analysis. *Finmaster* can save its graphs to a PCX file for printing by most standard word processing programs. In sum, *Finmaster* has become a proven software support item, and this new version includes a number of important improvements and enhancements.

STUDY! The program *STUDY!* includes a bank of multiple-choice questions created specifically for *Principles of Finance, Third Edition*. The student begins the program by selecting any combination of chapters for study. The program loads all available questions for those chapters in a random order and begins to present them to the student. If the student answers correctly, the program updates the student's score on screen and moves to the next question. If the student's answer is wrong, the program gives the correct answer and updates the score. By using the *STUDY!* program, students can cover all of the essential conceptual issues in any set of chapters that they choose.

The Instructor's Package

Principles of Finance, Third Edition, is supplemented by a complete instructional package. We believe it is the best package to accompany any text. It includes four elements.

- ◆ Instructor's Manual and Test Bank
- ◆ Computerized Test Bank
- ◆ Transparency Masters of tables and figures
- ◆ Lecture Notes presented as transparency masters

The Instructor's Manual and Test Bank contains answers and solutions to all end-of-chapter questions and problems, including solutions to all *REALDATA* exercises. It also contains a multiple-choice test bank. The Computerized Test Bank is prepared for IBM-PC type computers. It consists of files of multiple-choice questions for each chapter. (These are the same questions printed in the Instructor's Manual and Test Bank.) The Test Bank questions are presented in WordPerfect files. This approach allows the instructor to use his or her familiar word processing software and avoids the need for learning a specialized test-generating software package.

The Instructor's Package also includes a comprehensive set of Transparency Masters of tables and figures from the text. In addition, the Instructor's Package provides a comprehensive set of Lecture Notes to cover all of the key topics in the text. These are presented in large type, so they can be used as easy-to-see lecture notes, or they can be used as transparency masters for outlines of lecture topics.

Organization of the Text

Principles of Finance, Third Edition, is organized to reflect its integrative character. The text begins with a discussion of money in Part One, arguing that it is a primary

concern with money that distinguishes finance from the broader field of economics and from other business disciplines. This approach brings the time value of money into dramatic relief very early in the text. The time value of money concepts are given a more extensive treatment than found in most other finance texts.

Part Two provides a basic overview of the operation of the firm against the background of financial intermediation and the capital markets. This part concludes with Chapter 8, The Corporation and the Acquisition of Funds, which provides an introduction to the key function of the financial manager in a corporation—capital budgeting. The entire section paves the way for a more coherent understanding of security valuation.

Part Three, Security Valuation and Capital Market Theory, explores the way in which the market will value the securities issued by the corporation. In addition, the discussion of security valuation, portfolio construction, and capital market is much more complete than one finds in most corporate finance texts. This more conceptual approach allows the students a richer understanding of the interaction between the market's assessment of the firm's securities and the employment of those funds.

Part Four is devoted to capital budgeting and corporate financing. Chapter 14 presents the basics of capital budgeting against the principles of security valuation. Chapter 15 brings risk more forcefully into consideration, as it draws on the richer exposition of risk and capital market theory that was developed in Part Three. Chapter 16 analyzes both operating and financial leverage and their effect on risk. Chapters 17 and 18 provide separate, but parallel, treatments of capital structure and dividends with close attention to the Miller and Modigliani irrelevance propositions. Chapters 19 and 20 conclude Part Four with a discussion of leasing and mergers, these topics being presented as extensions of the investment and financing decisions that are analyzed in a value maximization framework.

Part Five, Financial Derivatives and Risk Management, provides the most complete treatment of this area in any beginning finance text. Chapters 21–23 focus on the futures, options, and swaps markets, respectively. Chapter 24 provides an introduction to financial engineering, including a discussion of synthetic securities and portfolio insurance.

Part Six, Special Topics in Corporate Financial Management, leads off with Chapter 25, International Financial Management. This chapter includes a discussion of exchange rates, including interest rate and purchasing power parity. The chapter culminates with a treatment of hedging currency risk and international capital budgeting. The text concludes with Chapters 26–30, which are dedicated to traditional short-term financing concepts. Chapters 26 and 27 address financial analysis and financial planning. Chapter 28, Inventory and Cash Management, examines standard models of inventory management and the chapter applies these inventory models to the management of cash balances. Chapter 29 focuses on Accounts Receivables Management, while Chapter 30 discusses short-term financing vehicles.

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Writing the textbook was only one step in the complex process of bringing *Principles of Finance, Third Edition*, to life. Many colleagues have contributed greatly by reading and commenting on various sections of the book. We have benefitted from the comments and criticisms provided by the following colleagues: Farhad F. Ghannadian, Mercer University; Michael Gombola, Drexel University; Peter Gomori, St. Francis College; Simon Hakim, Temple University; Thomas Herring, Jarvis Christian College; Surendra K. Mansinghka, San Francisco State University; Robert W. McLeod, The University of Alabama; Clair N. McRostie, Gustavus Adolphus College; Reza Rahgozar, University of Wisconsin—River Falls; Murli Rajan, University of Scranton; K. Ramakrishnan, Hofstra University; Bernard Rose, Rocky Mountain College; Charles W. Strang, Western New Mexico University; Howard R. Whitney, Franklin University.

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As the long list of acknowledgments indicates, preparing a package such as *Principles of Finance, Third Edition*, involves many steps and the efforts of many contributors. We are indebted to all of them, for without their efforts this new edition would never have seen the light of day.

Robert W. Kolb
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