

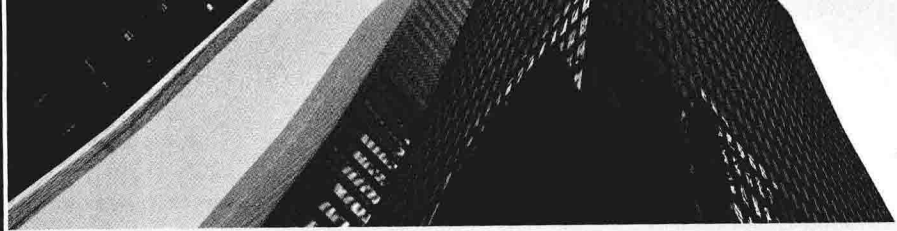
A low-angle, upward-looking photograph of several tall skyscrapers against a clear blue sky. The buildings are dark, with visible window patterns, and their lines converge towards the top of the frame, creating a sense of height and scale.

Tenth Edition

Basic Finance

An Introduction to Financial Institutions,
Investments & Management

Herbert B. Mayo



BASIC FINANCE

**An Introduction to Financial
Institutions, Investments,
and Management**

TENTH EDITION

HERBERT B. MAYO

The College of New Jersey



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**Basic Finance: An Introduction to
Institutions, Investments, and
Management, Tenth Edition**
Herbert B. Mayo

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*For all the cats, dogs, horses, ponies, and the rabbit
who enriched my life*

“Finance” is a broad discipline. From an individual’s perspective, finance encompasses financial institutions and investments. Virtually every day I have some contact with a financial institution. I write and receive checks, review my bank balance on-line, and use my credit cards. Other members of my family do the same. Your contact with financial institutions is probably just as frequent.

I make investment decisions that often meet a specific purpose, such as a stock purchase in my retirement account or my grandchildren’s college fund accounts. I may sell a stock that I believe is overvalued or buy one that I think is undervalued. Many people periodically make investment decisions. They may not even be conscious of these decisions: Having funds withheld from your paycheck and invested in your employer’s 401(k) retirement plan is an investment decision, even if you don’t select the specific assets to include in the plan. And the same applies when you leave funds in a mutual fund or continue to hold a stock. Maintaining those positions are also investment decisions.

Business owners and managers make financial decisions, so the third facet of finance is often referred to as business finance or corporate finance. The employees of governments and nonprofit institutions also make similar financial decisions. Since expected future cash inflows and outflows affect current financial decisions, many tools used for making business decisions also apply to nonbusiness financial decisions.

Of course, financial institutions, investments, and business finance do not operate independently. Some courses in finance are called “Managerial Finance,” while others have titles such as “Financial Management.” You might infer from such names that Financial Management is the same as Managerial Finance, but such an inference is probably incorrect. The focus in managerial finance is business financial decision making. Financial management is generally broader and combines financial institutions, investments, and business finance, although the emphasis is usually on their application to business decision making.

This text introduces you to the three areas of the finance discipline. It provides you with breadth (but not depth) of knowledge of finance and is a foundation on which you may build. I realize that many students will take only one course in a specific discipline. Finance majors generally do not take additional courses in marketing; marketing majors may take only this one course in finance. Since you may have only this exposure to the areas of finance, this text

gives you a working knowledge of the terms, environment, and mechanics of financial decision making.

Besides introducing you to the broad field of finance, *Basic Finance* also aims to encourage all students to do additional work in the field. I am, of course, biased, but survey courses and introductory texts do offer instructors excellent opportunities to encourage (do I dare say “lobby”?) students to do additional work in their areas. To do this additional work, you need basic background. By exposing you to all facets of finance, this textbook lays a foundation that will encourage and facilitate your taking additional courses in finance.

The Conceptual Change from the Previous Edition

The initial concept for *Basic Finance* was a book with many short chapters. The first edition had 27 chapters, and most were less than 20 pages. Each chapter was essentially a self-contained unit, with one important exception, the chapter on the time value of money. Many topics in finance require knowledge of compounding and discounting. Hence coverage of the time value of money is required for you to comprehend much of the material in subsequent chapters.

Over time I reduced the number of chapters and combined topics. For example, I combined preferred stock and long-term bonds. One result of consolidation was that chapters became much longer. If instructors did not want to cover all of the material in a particular chapter, they could pick their way through it. I have decided to return to the initial concept and separate the various topics into individual chapters or modules. With the exceptions of the time value of money and the analysis of financial statements, each chapter is relatively short and can be covered in a single class period. For chapters with a large number of problems, one class can be devoted to the explanations and the next class to the problems.

Possible Organizations for a Basic Finance Course

The book is divided into five parts: financial institutions, financial tools, investments, corporate finance, and derivatives. Few instructors will complete all the chapters. One advantage of short chapters is their adaptability to several approaches. If the course is meant to survey the field of finance, the instructor may select chapters throughout the text and place less emphasis on numerical problems. An alternative strategy is to approach finance through investments. Many students have an inherent interest in investments, especially since they can easily have their own on-line brokerage accounts. The course can be constructed to build upon this interest and expand topics into other areas of finance.

If the course emphasizes corporate finance, Part 4 is especially important, in conjunction with additional selected chapters (e.g., time value of money, risk measurement, initial public offerings, and the descriptions of stocks and bonds). The self-contained chapters should facilitate converting the book into a text that is readily used in a traditional corporate finance course.

Pedagogical Features

All textbooks feature a variety of pedagogical tools designed to improve learning. Anecdotal evidence suggests varying degrees of success. Definitions are placed in boldface in the margins. Over the years, several students have commented on the benefits of the marginal definitions. Time value illustrations permeate this text. Their solutions using a financial calculator are also placed in the margins. This approach avoids breaking the flow of the text material. Since different financial calculators use different formats, the marginal presentation is generic. It lists the known variables and their values, and identifies the unknown. The solution for the unknown is given separately.

In previous editions every chapter began with learning objectives. One day I walked into class and casually asked, “Who reads the learning objectives at the beginning of the chapter?” By the looks on their faces I could tell I needed to add, “I want an honest answer. Don’t tell me Yes if you think that is what I want to hear.” A couple of students said they did read the learning objectives. I then asked, “Who reads the questions at the end of the chapter?” One student said, “Only if you assign them!”

I should not have been surprised, because as an undergraduate, I would not have read them. In this text, I have placed the learning objectives at the end of each chapter, retitled them “review objectives,” and identified where the material is covered in the chapter. The instructor may convert these review objectives into questions and use them in class to efficiently help students review the material.

Where appropriate, the chapters have numerical problems with which to review the material. These problems primarily replicate the text illustrations or present straightforward variations on the text examples. Selected answers are provided in Appendix F.

A new pedagogical feature in this edition is a section at the end of many chapters entitled “Additional Problems with Answers.” These problems are similar to the other problems and illustrations in the chapters. However, unlike the selected answers to the chapters’ problems provided in Appendix F, the “Additional Problems with Answers” provide the steps necessary to determine the solution. The expectation is that the individual student will work through each problem and then consult the answers. Such an approach should increase the student’s ability to work through and solve the problems.

This edition also has a new feature entitled “Relationships.” Relationships play an important role in finance. Changing one variable or factor often causes something else to change. For example, lower interest rates increase bond

prices. Many of the chapters have a self-test in which the student is asked to determine how a change in one thing affects something else. There are three possible answers: increases, decreases, or has no impact (no change). Realizing that there may be no effect can be just as important as perceiving the direction of change! The answers to these fill-in-the blank relationships are provided at the end of the assignment.

Acknowledgments

A textbook author uses the input and assistance of many individuals. Over the years, I have received many thoughtful reviews and comments from individuals who sincerely offered suggestions. Unfortunately, suggestions may be contradictory. Since I cannot please all of the people all the time, I trust that those who offered advice that was not taken will not be offended.

At this point in the Preface, it is traditional for the author to thank members of the editorial and production staffs for their help in bringing the book to fruition. These individuals are geographically dispersed, and it never ceases to amaze me how this far-flung group somehow manages to pull the pieces together. For this edition, I would like to thank Mike Reynolds, executive editor, for his continued support over the years; Clara Goosman, developmental editor; Prashanth Kamavarapu, project manager; and Nate Anderson, marketing manager.

Anne Piotrowski created the PowerPoint slides. Her willingness to work through various styles and possible presentations greatly enhanced the final product.

I also must extend a huge thank-you to Suzanne Davidson and Margaret Trejo for copy editing and proofreading the text. Their attention to detail caught minute errors that I would never perceive. And, of course, special thanks must be extended to Margaret's two dogs, Ella and Simon, who always greeted me with licks and barks, even if I forgot to bring them a treat!



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