

Fundamentals of Financial Management

Sixth Edition

Eugene F. Brigham

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University of Florida

THE DRYDEN PRESS
A Harcourt Brace Jovanovich College Publisher

Fort Worth Philadelphia San Diego New York Orlando Austin San Antonio Toronto Montreal London Sydney Tokyo Acquisitions Editor: Ann Heath/Mike Roche

Developmental Editor: Kathi Erley

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Art and Design Manager: Alan Wendt Production Manager: Barb Bahnsen Permissions Editor: Doris Milligan

Director of Editing, Design, and Production: Jane Perkins

Text and Cover Designer: Rebecca Lemna

Copy Editor: Susan Nodine

Compositor: The Clarinda Company Text Type: 10/12 ITC Garamond Book

Library of Congress Cataloging-in-Publication Data

Brigham, Eugene F., 1930-

Fundamentals of financial management / Eugene F. Brigham. — 6th

ed.

p. cm.

Includes index.

ISBN 0-03-055027-0

1. Corporations—Finance. I. Title.

HG4026.B6693 1991

658.15-dc20

91-18634

Printed in the United States of America 23-040-98765432

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Requests for permission to make copies of any part of the work should be mailed to: Permissions Department, Harcourt Brace Jovanovich, Publishers, 8th Floor, Orlando, FL 32887.

Address orders:

The Dryden Press Orlando, FL 32887

Address editorial correspondence:

The Dryden Press 301 Commerce Street, Suite 3700

Fort Worth, TX 76102

The Dryden Press

Harcourt Brace Jovanovich

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Preface

Fundamentals of Financial Management is intended for use in the introductory finance course. The book begins with a discussion of basic concepts, including accounting data, security markets, interest rates, taxes, risk analysis, time value of money, and valuation models. Subsequent chapters explain how financial managers can help maximize the value of their firms by making better decisions in such areas as capital budgeting, choice of capital structure, and working capital management. This organization has three important advantages:

- 1. Explaining early in the book how accounting data are used, how financial markets operate, and how security prices are determined within these markets helps students understand how financial management can affect the value of the firm. Also, early coverage of risk analysis, time value, and valuation models permits their use in reinforcing these key concepts throughout the remainder of the book.
- 2. Structuring the book around markets and valuation concepts enhances continuity because this organization helps students see how the various topics relate to one another.
- 3. Most students—even those who do not plan to major in finance—are generally interested in stock and bond valuation, rates of return, and the like. Since people's ability to learn a subject is a function of their interest and motivation, and since *Fundamentals* begins by showing the relationship between security markets, security values, and financial management, this organization is good from a pedagogic standpoint.

RELATIONSHIP WITH OUR OTHER BOOKS

As the body of financial knowledge expanded, it first became difficult, then impossible, to provide "everything one needs to know about financial management" in one text, especially in one undergraduate text. This recognition

has led me to limit the scope of this book and also to write other texts to deal with the materials that cannot be included in *Fundamentals*. Lou Gapenski and I have coauthored both an intermediate undergraduate text (*Intermediate Financial Management*, third edition) and a comprehensive book aimed primarily at MBAs (*Financial Management: Theory and Practice*, sixth edition).

The relationship between Fundamentals and these more advanced books deserves special comment. Because the advanced books are often used by students who have used Fundamentals in the introductory undergraduate course, there are two potential dangers: (1) there may be excessive overlap in certain areas, and (2) students may not be sufficiently exposed to alternative points of view on controversial subjects. To avoid unnecessary overlap, both the reviewers and I were on the alert for excessive duplications, and I have attempted to remove them. I should also note that my students in advanced courses invariably tell me that they find it helpful to have the more difficult introductory materials repeated—they need the review. Students also say they like the fact that the style and notation used in our upper-level books are consistent with those in the introductory text, as this makes learning easier. Regarding alternative points of view, I have made every effort to take a moderate, middle-of-the-road approach, and where serious controversy exists, I have tried to present the alternative points of view. Reviewers were asked to consider this point, and their comments have helped eliminate potential biases.

INTENDED MARKET AND USE

As noted before, *Fundamentals* is intended for use as an introductory text. The main parts can be covered in a one-term course, and, supplemented with cases and some outside readings, the book can also be used in a two-term course. If it is used in a one-term course, the instructor will probably cover only selected chapters, leaving the others for students either to examine on their own or to use as references in conjunction with work in later courses. Also, I have made every effort to write the chapters in a modular form, which will allow instructors to cover the material in a different sequence should they choose to do so.

MAJOR CHANGES IN THE SIXTH EDITION

The theory and practice of finance are dynamic, and as new developments occur, they should be incorporated into a textbook such as this one. Also, a team of reviewers and I are constantly looking for ways to improve the book in terms of clarity and student understanding. As a result, several important changes were made in this edition, including a significant reorganization of chapters, a multiple-solution approach to time value of money (TVM) analy-

sis, in which financial calculators are discussed, and greater emphasis on the trends toward globalization and computerization.

Chapter Reorganization

The organization of the fifth edition was generally well received, but reviewers made several good suggestions, so some important structural changes were made. First, financial statement and ratio analysis was moved forward to Chapter 2, where it is used to show how financial decisions affect the operations of the firm, hence the value of its stock. Second, the cost of capital chapter was moved forward so that it now appears immediately after the valuation chapter and before capital budgeting. This change provides a smoother transition from valuation and rate of return to the use of those concepts in financial management, and it also facilitates the teaching of capital budgeting by explaining the discount rate before using it in capital budgeting. Third, the chapter on financial forecasting was moved back to Chapter 16, where students have the background required to understand how asset needs are determined and where funds can be obtained. Also, the shift in the forecasting chapter permits its use as a lead-in to working capital management. Finally, multinational financial management was both integrated throughout the text and also included as a separate chapter in recognition of the increasing importance of globalization.

Time Line and Solutions Approach to TVM Analysis

Chapter 5, "Time Value of Money," has been completely rewritten to emphasize a time line and multiple-solution approach, including an explicit discussion of financial calculators. Each major section in the chapter begins with a verbal discussion of an issue, then presents a time line to show graphically the cash flows that are involved, next gives the equation which must be solved to obtain the required answer, and finally presents three methods which can be used to solve the equation: (1) a numerical solution, (2) a solution based on the time value tables, and (3) a financial calculator solution. This approach helps the student visualize the problem at hand, see that it can be solved in several ways, and then focus on the particular solution technique he or she will actually use. With this approach, financial calculators become, not a "black box," but a window through which to see the true nature of time value analysis.

The same approach is used in subsequent chapters, especially in the chapters dealing with stock and bond valuation, capital budgeting, leasing, and aspects of working capital management.

Globalization

The movement toward globalization of financial markets and institutions is continuing ever more rapidly. A Japanese commercial bank is now the largest in the world, and Japanese and European commercial and investment bankers are aggressively moving into areas that have traditionally been dominated by U.S. firms. The results are not only more competition in lending and underwriting but also access to more potential sources of funds. This means that financial managers must know more about foreign capital markets and securities, as well as more about ways foreign firms are likely to affect domestic U.S. markets of all kinds.

In addition, successful firms are recognizing that it is becoming impossible to remain competitive in many industries without becoming global players. New technological developments have led to increasingly complex products, hence to higher developmental costs for autos, computers, aircraft, prescription drugs, and the like. Huge developmental costs require huge sales volumes, which in turn make it necessary for firms to sell globally. At the same time, improvements in air freight and other types of transportation, and in communications, are making it increasingly feasible to manufacture products virtually anywhere, and strong competitive pressures from multinational companies make it imperative that businesses manufacture wherever costs are lowest. Service companies, including banks, advertising agencies, and accounting firms, must follow their customers, so they too are "going global." However, even if a firm operates only domestically, international events influence domestic interest rates and economic activity, so no one is immune to global pressures. All of this means that financial managers must think globally about many decisions.

Because of these trends, I have incorporated a "think globally" theme into this sixth edition. Throughout the text, I have weaved global threads in an effort to get students to recognize that success in today's world requires a multinational perspective. In addition, I have added a separate chapter on multinational financial management. I am not attempting to make multinational finance experts out of introductory finance students, but students should leave the course understanding that successful firms must make decisions within a global context.

Computerization

Personal computers are changing the way financial managers think about financial analysis. Cash flows through time are thought of as cells across a row in a spreadsheet, and factors which determine the cash flows, such as sales price, unit sales, variable costs, and taxes, are visualized as cells running down a spreadsheet column. Since real-world analyses will be done using PCs, it is important that textbooks be structured to make the transition from the classroom to the real world as easy as possible. Students must recognize that computers are capable of providing answers to questions that were not even asked a few years ago, and textbook problems should be structured so that students can see how the power of computers can be brought to bear on the issues at hand.

With these thoughts in mind, parts of *Fundamentals* have been restructured to reflect computerization. For example, certain tables have been recast

to reflect spreadsheet formats, and text discussions have been revised to enable students to visualize computer solutions. Note, though, that it is not necessary for students using the text to be proficient (or even literate) in computer usage. However, students who continue their studies in finance and who later use spreadsheets such as *Lotus 1-2-3* (either to analyze cases or in real-world applications) will benefit greatly from the changes. For students who do have access to computers and *Lotus 1-2-3*, and for instructors who want their students to explore the power of the computer for analyzing financial problems, the book contains a computer-related problem for most chapters, and a diskette containing the models is available to adopting instructors.

OTHER CHANGES

In addition to the major changes already discussed, I have made a number of other changes in the sixth edition. As always, I have updated and clarified the text and end-of-chapter problems and made changes in the pedagogy to improve student comprehension. Particular emphasis has been placed on including the latest tax laws, updating the real-world examples, and including the latest changes in the financial environment and in financial theory. Here is a sampling of such changes:

- 1. A new section on career opportunities in finance has been added to Chapter 1.
- 2. Self-test questions have been added to the major sections within each chapter. Students are asked about key concepts in the section they have just read. If they cannot answer the questions, they are urged to reread the section. Students at the University of Florida call these questions "attention joggers," and they like them.
- 3. The recent banking and S&L crises, and their effects on the economy, are discussed in some detail.
- 4. Additional "exam-type" end-of-chapter problems have been added to give students practice with problems similar to some of the more difficult ones in the Test Bank.
- 5. I have improved the integrative problems that appear in each chapter after the regular end-of-chapter problems. Integrative problems cover, in a comprehensive manner, all of the major concepts discussed in the chapters. I use these problems as the basis for my lectures, but other instructors assign them as comprehensive study problems.
- 6. To facilitate the use of the integrative problems as lecture problems, the *Instructor's Manual* solutions were written in a lecture note format, and I developed a set of transparency masters/acetates to go with the solutions. Also, since students often get left behind when instructors use overheads, we have changed the *Blueprints* ancillary to make it easier

for students to take notes. Indeed, *Blueprints* has been changed dramatically since it first appeared with the fifth edition. It no longer comes shrinkwrapped with the text, but it is available to all adopting instructors free of charge, and it can be copied in off-campus copy centers. In it the integrative problem is restated, space is provided for taking notes, and graph and table setups and other features designed to help students take clear notes or think through the problems are provided. Using *Blueprints* as a guide, students will be able to take good notes and still have time to follow the lecture.

ANCILLARY MATERIALS

A number of items are available free of charge to adopting instructors:

- 1. Instructor's Manual. A comprehensive manual is available to instructors who adopt the book. The manual contains answers to all text questions and problems, a detailed set of lecture notes (including suggestions for use of the transparency acetates described next), detailed solutions to integrative problems with transparency masters to illustrate them, sample exams, and suggested course outlines.
- 2. Transparencies. A comprehensive set of transparency acetates (6 to 8 per chapter), including 40 color acetates, is available to instructors who adopt the text.
- 3. **Test Bank.** A revised and enlarged *Test Bank* with more than 1,000 class-tested questions and problems, in objective format, is available both in book form and on IBM and Macintosh computer diskettes. The diskettes come in either the regular computerized test bank format or in a *WordPerfect* file for easy editing. New questions, which are more challenging than those in many test banks, have been added. Also, the topics covered, the degree of difficulty, and the correct answer are provided in the margin for each question. Some questions require the use of a financial calculator, but these are grouped together in a separate section at the end of each chapter.
- 4. Supplemental Problems. Another set of additional problems, organized according to topic and level of difficulty, will be provided to instructors who request it.
- 5. **Problem Diskette.** A diskette containing *Lotus 1-2-3* models for the computer-related end-of-chapter problems is also available. To obtain the diskette, complete the order form found at the front of the *Instructor's Manual*.
 - A number of additional items are available for purchase by students:
- 1. **Study Guide.** This supplement outlines the key sections of each chapter, provides students with self-test questions, and provides a set of

- problems and solutions similar to those in the text and in the *Test Bank*.
- 2. Casebook. A new casebook, *Cases in Financial Management* by Eugene F. Brigham and Louis C. Gapenski, is well suited for use with this text. The cases provide real-world applications of the methodologies and concepts developed in the text. Brief versions of this casebook, which contain 12 cases each, are also available. The modules are a perfect supplement for professors seeking a limited number of cases to use with *Fundamentals*.
- 3. Readings Books. A readings book, *Issues in Managerial Finance* (Dryden Press, 1987), edited by Ramon E. Johnson, provides an excellent mix of theoretical and practical articles which can be used to supplement the text. Another supplemental reader is *Advances in Business Financial Management: A Collection of Readings* (Dryden Press, 1989) edited by Philip L. Cooley, which provides a broader selection of articles from which to choose.
- 4. Finance with Lotus 1-2-3: Text and Models. This text by Eugene F. Brigham, Dana A. Aberwald, and Louis C. Gapenski (Dryden Press, 1992) enables students to learn, on their own, how to use *Lotus 1-2-3*.
- 5. **PROFIT** +. This software supplement by James Pettijohn of Southwest Missouri State University contains 18 user-friendly programs that include the time value of money, forecasting, and capital budgeting. The package includes a user's manual, and it is available for the IBM PC.
- 6. Blueprints and "Course-Pack." This supplement is provided to instructors free of charge, and it (or selected parts of it) can be copied in an off-campus copy center and sold to students for the copying cost only. I do this with the chapters I cover, and I add some items such as several old exams, instructions on the use of financial calculators, and the like. Other instructors have only the transparencies copied or some transparencies plus the solutions to some of the end-of-chapter problems. Thus, instructors can construct their own "Course-Packs," drawing from materials provided, to facilitate their students' learning.

ACKNOWLEDGMENTS

This book reflects the efforts of a great many people over a number of years. First, I extend my gratitude to Bodie Dickerson, Oregon State University, who reviewed the manuscript and also worked through the end-of-chapter questions, problems, integrative problems, and computer-related problems to ensure their accuracy and clarity.

Next, I would like to thank the following professors, whose reviews and comments on this and prior editions and companion books have contributed to this edition: Mike Adler, Syed Ahmad, Ed Altman, Bruce Anderson, Ron

Anderson, Bob Angell, Vince Apilado, Henry Arnold, Bob Aubey, Gil Babcock, Peter Bacon, Kent Baker, Robert Balik, Tom Bankston, Les Barenbaum, Charles Barngrover, Bill Beedles, Moshe Ben-Horim, Bill Beranek, Tom Berry, Will Bertin, Scott Besley, Dan Best, Roger Bey, Dalton Bigbee, John Bildersee, Russ Boisjoly, Keith Boles, Geof Booth, Kenneth Boudreaux, Helen Bowers, Oswald Bowlin, Don Boyd, G. Michael Boyd, Pat Boyer, Joe Brandt, Elizabeth Brannigan, Greg Brauer, Mary Broske, Dave Brown, Kate Brown, Bill Brueggeman, Bill Campsey, Bob Carlson, Severin Carlson, David Cary, Steve Celec, Don Chance, Antony Chang, Susan Chaplinsky, Jay Choi, S. K. Choudhary, Lal Chugh, Maclyn Clouse, Margaret Considine, Phil Cooley, Joe Copeland, David Cordell, Marsha Cornett, M. P. Corrigan, John Cotner, Charles Cox, David Crary, John Crockett, Jr., Roy Crum, Brent Dalrymple, Bill Damon, Joel Dauten, Steve Dawson, Sankar De, Fred Dellva, James Desreumaux, Bernard Dill, Gregg Dimkoff, Les Dlabay, Mark Dorfman, Gene Drzycimski, Dean Dudley, David Durst, Ed Dyl, Richard Edelman, Charles Edwards, John Ellis, Dave Ewert, John Ezzell, Michael Ferri, Jim Filkins, John Finnerty, Susan Fischer, Steven Flint, Russ Fogler, Dan French, Michael Garlington, David Garraty, Jim Garven, Adam Gehr, Jr., Jim Gentry, Philip Glasgo, Rudyard Goode, Walt Goulet, Bernie Grablowsky, Theoharry Grammatikos, Ed Grossnickle, John Groth, Alan Grunewald, Manak Gupta, Sam Hadaway, Don Hakala, Gerald Hamsmith, William Hardin, John Harris, Paul Hastings, Bob Haugen, Steve Hawke, Del Hawley, Robert Hehre, George Hettenhouse, Hans Heymann, Kendall Hill, Roger Hill, Tom Hindelang, Linda Hittle, Ralph Hocking, J. Ronald Hoffmeister, Robert Hollinger, Jim Horrigan, John Houston, John Howe, Keith Howe, Steve Isberg, Jim Jackson, Kose John, Craig Johnson, Keith Johnson, Ramon Johnson, Ray Jones, Frank Jordan, Manual Jose, Alfred Kahl, Gus Kalogeras, Mike Keenan, Bill Kennedy, Carol Kiefer, Joe Kiernan, Rick Kish, Don Knight, Dorothy Koehl, Jaroslaw Komarynsky, Duncan Kretovich, Harold Krogh. Charles Kroncke, Don Kummer, Joan Lamm, Larry Lang, P. Lange, Howard Lanser, Edward Lawrence, Martin Lawrence, Wayne Lee, Jim LePage, Jules Levine, John Lewis, Chuck Linke, Bill Lloyd, Susan Long, Judy Maese, Bob Magee, Ileen Malitz, Phil Malone, Terry Maness, Chris Manning, S. K. Mansinghka, Terry Martell, D. J. Masson, John Mathys, John McAlhany, Andy McCollough, Ambrose McCoy, Thomas McCue, Bill McDaniel, John Mc-Dowell, Charles McKinney, Robyn McLaughlin, Jamshid Mehran, Larry Merville, Rick Meyer, Jim Millar, Ed Miller, John Mitchell, Carol Moerdyk, Bob Moore, Barry Morris, Gene Morris, Fred Morrissey, Chris Muscarella, David Nachman, Tim Nantell, Don Nast, Bill Nelson, Bob Nelson, Bob Niendorf. Tom O'Brien, Dennis O'Connor, John O'Donnell, Jim Olsen, Robert Olsen, Jim Pappas, Stephen Parrish, Glenn Petry, Jim Pettijohn, Rich Pettit, Dick Pettway, Hugo Phillips, H. R. Pickett, John Pinkerton, Gerald Pogue, Eugene Poindexter, R. Potter, Franklin Potts, R. Powell, Chris Prestopino, Jerry Prock, Howard Puckett, Herbert Quigley, George Racette, Bob Radcliffe, Bill Rentz, Ken Riener, Charles Rini, John Ritchie, Pietra Rivoli, Antonio Rodriguez, E. N. Roussakis, Dexter Rowell, Jim Sachlis, Abdul Sadik, Thomas Scampini, Kevin Scanlon, Frederick Schadler, Mary Jane Scheuer, Carl Schweser, John Settle,

Alan Severn, Sol Shalit, Frederic Shipley, Dilip Shome, Ron Shrieves, Neil Sicherman, J. B. Silvers, Clay Singleton, Joe Sinkey, Stacy Sirmans, Jaye Smith, Patricia Smith, Steve Smith, Don Sorensen, David Speairs, Ken Stanly, Ed Stendardi, Alan Stephens, Don Stevens, Jerry Stevens, Glen Strasburg, Philip Swensen, Ernest Swift, Paul Swink, Gary Tallman, Dular Talukdar, Dennis Tanner, Craig Tapley, Russ Taussig, Richard Teweles, Ted Teweles, Francis C. Thomas, Andrew Thompson, John Thompson, George Tsetsekos, William Tozer, George Trivoli, David Upton, Howard Van Auken, Pretorious Van den Dool, Pieter Vandenberg, Paul Vanderheiden, JoAnn Vaughan, Jim Verbrugge, Patrick Vincent, Steve Vinson, Susan Visscher, John Wachowicz, Mike Walker, Sam Weaver, Kuo-Chiang Wei, Bill Welch, Fred Weston, Norm Williams, Tony Wingler, Ed Wolfe, Don Woods, Michael Yonan, Dennis Zocco, and Kent Zumwalt.

Special thanks are due to Chris Barry, Texas Christian University, who wrote many of the small business sections; to Dilip Shome, Virginia Polytechnic Institute, who helped greatly with the capital structure chapter; to Roy Crum, University of Florida, who coauthored the multinational finance chapter; and to Art Herrmann, University of Hartford, who coauthored the bankruptcy appendix. Dana Aberwald worked closely with me at every stage of the revision; her assistance was absolutely invaluable. Also, Louis Gapenski worked closely with me on the integrative problems and offered advice on many other parts of the book. In addition, these students and colleagues at the University of Florida worked through and/or discussed with me all or major parts of the book and ancillaries to help eliminate errors and confusing sections: Steve Bouchard, Brian Butler, and West Ludwig. Carol Stanton and Bob Karp typed and helped proof the various manuscripts. Finally, The Dryden Press staff, especially Barb Bahnsen, Kathi Erley, Ann Heath, Ann Helming, Karen Hill, Mary Jarvis, Jennifer Lloyd, Sue Nodine, Jane Perkins, Mike Roche, Cate Rzasa, David Talley, and Alan Wendt, helped greatly with all phases of the text development and production.

ERRORS IN THE TEXT

At this point, most authors make a statement like this: "I appreciate all the help I received from the people listed above, but any remaining errors are, of course, my own responsibility." And generally there are more than enough remaining errors. As a part of my quest for clarity, I resolved to avoid this problem in *Fundamentals*, and as a result of our error detection procedures, I am convinced that it is virtually free of mistakes.

Some of my colleagues suggested that if I am so confident about the book's accuracy, I should offer a reward to people who find errors. With this in mind, but primarily because I want to detect any remaining errors and correct them in subsequent printings, I hereby offer a reward of \$10.00 per error (up 33 percent from the last edition) to the first person who reports it

to me. (Any error that has follow-through effects is counted as two errors only.) Two accounting students have set up a foolproof audit system to make sure I pay—accounting students tend to be skeptics! Please report any errors to me at the address below.

CONCLUSION

Finance is, in a real sense, the cornerstone of the enterprise system—good financial management is vitally important to the economic health of business firms, hence to the nation and the world. Because of its importance, finance should be widely and thoroughly understood, but this is easier said than done. The field is relatively complex, and it is undergoing constant change in response to shifts in economic conditions. All of this makes finance stimulating and exciting, but also challenging and sometimes perplexing. I sincerely hope that *Fundamentals* will meet its own challenge by contributing to a better understanding of our financial system.

Eugene F. Brigham College of Business University of Florida Gainesville, Florida 32611

December 1991

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