



Introduction to
FINANCE

15th
Edition

Ronald W. Melicher

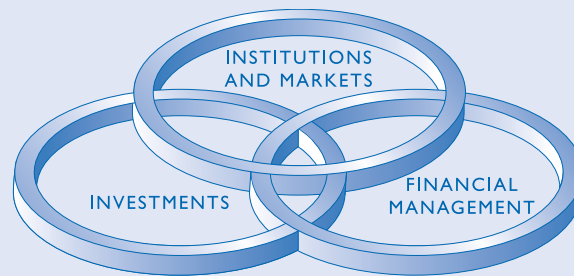
Edgar A. Norton

WILEY

INTRODUCTION TO FINANCE

Markets, Investments, and Financial Management

FIFTEENTH EDITION



Ronald W. Melicher

*Professor of Finance
University of Colorado at Boulder*

Edgar A. Norton

*Professor of Finance
Illinois State University*

WILEY

*To my parents, William and Lorraine, and
to my wife, Sharon, and our children,
Michelle, Sean, and Thor*

Ronald W. Melicher

*To my best friend and wife, Becky,
and our gifts from God, Matthew and Amy*

Edgar A. Norton

VICE PRESIDENT & EXECUTIVE PUBLISHER
EXECUTIVE EDITOR
CONTENT EDITOR
ASSISTANT EDITOR
SENIOR EDITORIAL ASSISTANT
DIRECTOR OF MARKETING
ASSISTANT MARKETING MANAGER
MARKETING ASSISTANT
EDITORIAL OPERATIONS MANAGER
PRODUCT DESIGNER
SENIOR MEDIA SPECIALIST
SENIOR PRODUCTION AND MANUFACTURING MANAGER
ASSOCIATE PRODUCTION MANAGER

George Hoffman
Joel Hollenbeck
Jennifer Manias
Courtney Luzzi
Erica Horowitz
Amy Scholz
Puja Katariwala
Mia Brady
Yana Mermel
Allison Morris
Elena Santa Maria
Janis Soo
Joel Balbin

This book was set in 10/12 Minion by Aptara Corp. and printed and bound by RRD/JC. The cover was printed by RRD/JC.

This book is printed on acid free paper. ∞

Founded in 1807, John Wiley & Sons, Inc. has been a valued source of knowledge and understanding for more than 200 years, helping people around the world meet their needs and fulfill their aspirations. Our company is built on a foundation of principles that include responsibility to the communities we serve and where we live and work. In 2008, we launched a Corporate Citizenship Initiative, a global effort to address the environmental, social, economic, and ethical challenges we face in our business. Among the issues we are addressing are carbon impact, paper specifications and procurement, ethical conduct within our business and among our vendors, and community and charitable support. For more information, please visit our website: www.wiley.com/go/citizenship.

Copyright © 2014, 2008, 2005 John Wiley & Sons, Inc. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning, or otherwise, except as permitted under Sections 107 or 108 of the 1976 United States Copyright Act, without either the prior written permission of the Publisher, or authorization through payment of the appropriate per-copy fee to the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, (978)750-8400, fax (978)750-4470 or on the web at www.copyright.com. Requests to the Publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030-5774, (201)748-6011, fax (201)748-6008, or online at <http://www.wiley.com/go/permissions>.

Evaluation copies are provided to qualified academics and professionals for review purposes only, for use in their courses during the next academic year. These copies are licensed and may not be sold or transferred to a third party. Upon completion of the review period, please return the evaluation copy to Wiley. Return instructions and a free of charge return shipping label are available at www.wiley.com/go/returnlabel. Outside of the United States, please contact your local representative.

Library of Congress Cataloging-in-Publication Data

Melicher, Ronald W.

[Finance]

Introduction to finance : markets, investments, and financial management / Ronald W. Melicher, Professor of Finance University of Colorado at Boulder, Edgar A. Norton, Professor of Finance, Illinois State University—15th ed.

p. cm.

Revised edition of the authors' Finance.

Includes index.

ISBN 978-1-118-49267-3 (pbk.)

1. Finance. 2. Finance—United States. I. Norton, Edgar, 1957- II. Title.

HG173.M398 2014

332—dc23

2013033077

Printed in the United States of America

10 9 8 7 6 5 4 3 2 1

• PREFACE •

The fifteenth edition of *Introduction to Finance: Markets, Investments, and Financial Management* builds upon the successes of its earlier editions while maintaining a fresh and up-to-date coverage of the field of finance.

Our text is designed to present a more balanced first course in finance, one that offers students perspectives on financial markets, investing, and financial management. We use a successful pedagogy that reviews markets and institutions, then the world of investments, and finally the concepts and applications of business financial management.

A movement has been growing to offer a more balanced first course in finance. Previous editions were developed for such an “overview” first course, and this new edition continues in that vein. Eighteen chapters cover the three major financial areas involving the financial system, investments, and business finance. For the student who does not plan to take additional courses in finance, this book provides a valuable overview of the discipline’s major concepts. For the student who wants to take additional courses in finance, the overview presented provides a solid foundation upon which future courses can build.

Introduction to Finance is meant to be used in a course whose purpose is to survey the foundations of the finance discipline. As such, it is designed to meet the needs of students in various programs. Specifically, *Introduction to Finance* can be used in any of the following four ways:

1. As the first course in finance at a college or university where the department wants to expose students to a broad foundational survey of the discipline.
2. As the first and only course in finance for nonfinance business students.
3. As an appropriate text to use at a school that seeks to provide liberal arts majors with a business minor or business concentration. The writing level is appropriate to provide students with a good foundation in the basics of our discipline.
4. As a “lower division” service course whose goal is to attract freshmen and sophomores to business and to attract them to become finance majors.

The philosophy behind the book is threefold. First, we believe that a basic understanding of the complex world of finance should begin with a survey course that covers an introduction to financial markets, investments, and financial management or business finance. Students can gain an integrated perspective of the interrelationships among these three areas. They will appreciate how businesses and individuals are affected by markets and institutions, as well as how markets and institutions can be used to meet the goals of individuals or firms. Given the events in the financial markets and the economy in recent years, this integrated perspective adds value to student learning and understanding of the field.

Second, we wrote the book as an introductory survey of finance with a readable and user-friendly focus in mind. We seek to convey basic knowledge, concepts, and terms that will serve the nonfinance major into the future and that will form a foundation upon which the finance major can build. Some finer points, discussions of theory, and complicated topics are reserved for “Learning Extensions” in selected chapters. We aim to make

students using our text financially literate and cognizant of the richness of finance. The book provides a good foundation for students to build upon in later courses in financial management, investments, or financial markets.

Third, we focus on the practice of finance in the settings of markets, investments, and financial management. We focus on the descriptive in each of these fields. We don't want students to be unable to see the forest of finance because the trees of quantitative methods obscure their view or scare them away. When we do introduce equations and mathematical concepts that are applicable to finance, we will show step-by-step solutions.

By learning about markets (including gaining knowledge about institutions), investments, and management as the three major strands of finance, students will finish their course with a greater understanding of how these three fields interrelate. Financial markets will be seen as the arena to which businesses and financial institutions go to raise funds and as the mechanism through which individuals can invest their savings to meet their future goals. The topic of investments is important in facilitating the savings-investment process. Understanding the trade-off of risk and return, as well as the valuation of bonds and stocks, is essential to investors and businesses raising financial capital. Understanding how securities markets work is equally important. Financial management uses information it obtains from securities and other financial markets to efficiently and profitably manage assets and to raise needed funds in a cost-efficient manner.

A broad exposure to the discipline of finance will meet the needs of nonmajors who should know the basics of finance so they can read the *The Wall Street Journal*, visit business-related Internet sites, and analyze other business information sources intelligently. It will help the nonfinance major work as a member of a cross-functional work team, a team that will include finance professionals. In addition, this overview of finance will start the finance major off on the right foot. Rather than receiving a compartmentalized idea of finance—often viewed through the corporate finance lens that many texts use—the finance major will receive a practical introduction to the different disciplines of finance and will better appreciate their relationships to one another.

Part 1 of the book contains six chapters on the financial system, with primary emphasis on financial markets and the tools and skills necessary to better understand how such markets work. We begin with an overview of the three main subfields of finance, identify the “six principles of finance,” and discuss career opportunities. The principles of finance are the following:

1. Money has a time value.
2. Higher returns are expected for taking on more risk.
3. Diversifying one's investments can reduce risk.
4. Financial markets are efficient in pricing securities.
5. The objectives of managers and stockholders may differ.
6. Reputation matters.

We discuss finance and the role and functions of the financial system to a nation's economy. The role of banks, other financial intermediaries, and the Federal Reserve are reviewed, as are their functions in the financial system. Part 1 introduces the international role of finance and how modern economies are affected by exchange rates, trade, and the flow of global funds.

Following this introduction to the financial system, Part 2 focuses on investments. We review the role of savings in an economy and the ways in which funds flow to and from different sectors. Interest rates are introduced, and the discussion centers on making the student aware of the different influences on interest rate levels and why the rates change over time. Because interest rates measure the cost of moving money across time, this section reviews basic time-value-of-money concepts with many worked-out examples, including the keystrokes that students can use with financial calculators.

Next, after reviewing the characteristics of bonds and stocks, students will learn to apply time-value-of-money concepts to find the prices of these securities. Continuing our overview of investments, we discuss investment banking basics and the operations of securities markets, as well as the fundamentals of investment risks and returns to conclude Part 2. Advanced classes may want to review the financial derivatives basics, which are explained in a learning extension to Chapter 11's discussion of securities and markets.

The raising of funds by businesses in the institutional and market environments is covered in Parts 1 and 2. Next, in Part 3, the final six chapters of the text introduce students to financial management. The discussion begins with the different ways in which to organize a business and

the financial implications of each organizational form. We introduce accounting concepts, such as the balance sheet, income statement, and statement of cash flows with simple examples. We discuss financial ratios, which assist in the process of analyzing a firm's strengths and weaknesses. We review their use as a means to help managers plan ahead for future asset and financing needs. Strategies for managing a firm's current assets and current liabilities are examined, as are the funding sources firms use to tap the financial markets for short-term financing. Finally, we introduce students to capital budgeting basics and capital structure concepts.

New and Improved

The content of *Introduction to Finance* has been updated to incorporate many of the economic and financial events of the past few years. The financial crisis of 2007–2009, the subsequent recession and recovery—along with the behavior of the Federal Reserve and securities markets—provide a means to highlight causes, effects, and the integration of finance into our everyday lives, as well as the implications for markets, investments, and business finance. A *financial crisis* margin icon is placed next to relevant text material.

We continue our innovation from previous editions by featuring a real firm (Walgreens, the retail drugstore chain) in many of the chapters on investments and financial management as a means of presenting and analyzing data.

In addition to these broad improvements, all chapters have been updated and revised to reflect recent events and data. Specific notable changes in this fifteenth edition include the following:

Chapter 1, The Financial Environment, provides an overview of the financial system and environment. Economic and financial developments during the first part of the twenty-first century are identified, including the financial crisis and the 2007–2009 Great Recession.

Chapter 2, Money and the Monetary System, has been updated and the relationship between money supply and economic activity is discussed in light of the recent financial crisis and the associated credit crunch.

Chapter 3, Banks and Other Financial Institutions, features new material relating to how the financial crisis impacted on financial institutions. Falling housing prices, mortgage loan defaults, and declining values on mortgage-backed securities resulted in many financial institutions not having adequate equity capital to continue to operate and, thus, had to merge or be “bailed out.”

Chapter 4, Federal Reserve System, describes the current structure and operations of the Fed including the Fed's response to the recent financial crisis and the Great Recession that followed. We also discuss the Fed's use of a new non-traditional monetary policy that became known as quantitative easing.

Chapter 5, Policy Makers and the Money Supply, describes how the U.S. government responded to the perfect financial storm involving the financial crisis and the subsequent Great Recession.

Chapter 6, International Finance and Trade, updates information on the European Union (EU) membership and the eurozone countries that have adopted the euro as their single currency.

Chapter 7, Savings and Investment Process, discusses how the increased use of debt by consumers to finance their spending contributed to the recent financial crisis and the Great Recession. Because home ownership has been an important component in the savings-investment process of individuals, we have incorporated materials on real estate mortgages and the mortgage markets into this chapter.

Chapter 8, Interest Rates, discusses the factors that explain differences in interest rates at a point in time as well as over time. In this chapter, we also cover the Fed's easy money policy, including the impact of quantitative easing on interest rates resulting in historical lows.

Chapter 9, Time Value of Money, conveys the importance of compounding (earning interest on interest) in building wealth over time. Examples are used to illustrate how to perform calculations with formulas, with interest factor tables, step-by-step financial calculator keystrokes, and Excel spreadsheets. We discuss the implications of the current low interest rate environment.

Chapter 10, Bond and Stocks: Characteristics and Valuations, has its bond valuation section rewritten to use the annual percentage rate (APR) approach as opposed to the effective interest rate (EAR) approach. The chapter contains updated data and improved discussions of bonds

and stocks. We have revised the discussion of the risks facing investors in a low interest rate environment sustained by the Fed since the Great Recession. Spreadsheet examples show how to apply time value concepts to calculate bond prices and stock prices.

Chapter 11, Securities and Markets, incorporates changes in securities trading, including the New York Stock Exchange and IntercontinentalExchange (NYSE–ICE) merger as well as an overview of the Facebook initial public offering (IPO) and some of its problems.

Chapter 12, Financial Returns and Risk Concepts, is one of the more mathematical chapters; it shows how to do calculations with step-by-step calculator keystrokes and spreadsheet functions.

Chapter 13, Business Organization and Financial Data, features data from Walgreens’ financial statements. We maintain that a firm’s goal is to maximize shareholder wealth, and we discuss “sustainability” in light of this goal. In response to the financial crisis, we review problems with using stock options as an incentive mechanism for managers and the balance sheet implications of the government bailout for some U.S. auto companies.

Chapter 14, Financial Analysis and Long-Term Financial Planning, uses updated data from Walgreens and the retail drugstore industry in a practical example of financial ratio analysis using industry averages.

Chapter 15, Managing Working Capital, expands the discussion of managing cash in a difficult business environment with low interest rates. We discuss a new reason why firms hold large amounts of cash, with the tax cost of repatriating the funds back to the home country.

Chapter 16, Short-Term Business Financing, was revised to improve pedagogy and to update the material. It contains information on real firms’ working capital financing strategies and on the implications of the financial crisis on a firm’s ability to obtain short-term financing. We include a section on the American Energy and Infrastructure Jobs Act of 2012 (JOBS Act of 2012), a tool to help small firms obtain financing, including the use of “crowdfunding.”

Chapter 17, Capital Budgeting Analysis, relates the cash flow estimation process for a project to the firm’s statement of cash flows from Chapter 13 and reviews standard capital budgeting analysis tools such as net present value (NPV), internal rate of return (IRR), profitability index (PI), and modified internal rate of return (MIRR).

Chapter 18, Capital Structure and the Cost of Capital, contains updated discussions of trends in the use of debt by corporations and the use of debt financing in the low interest rate environment that has existed since the Great Recession.

LEARNING AND TEACHING AIDS

The fifteenth edition of *Introduction to Finance* offers the following aids for students and instructors:

CHAPTER OPENERS: Each chapter begins with the following:

- Chapter Learning Objectives, which students can use to review the chapter’s main points and which instructors can use as a basis for in-class lecture or discussion;
- Where We Have Been statements that remind students of what was covered in the previous chapters;
- Where We Are Going, which are previews of chapters to come;
- How This Chapter Applies To Me that explain how the content of the chapter, no matter how technical or business specific, has applications to the individual student.

APPLYING FINANCE TO: These boxes show how the topic of each chapter relates to the finance fields of institutions and markets, investments, and financial management.

INTERNET MARGIN NOTES: We direct the student to relevant Web sites at different points in each chapter.

MARGIN DEFINITIONS: Margin definitions of key terms are provided to assist students in learning the language of finance.

CONCEPT CHECKS: These features appear in the margins near the end of every section to quiz students on what they have learned and how well they have learned it. Concept Checks reinforce the topical material and help students determine what they need to review.

MARGIN ICONS: These are placed in the margin to indicate discussions of finance principles, implications of the recent financial crisis, financial or business ethical issues, and global or international discussions.

SPREADSHEET ILLUSTRATIONS: We show how to use spreadsheets to solve problems and to teach students about the power of spreadsheet functions and analysis.

BOXED FEATURES: Throughout the book, boxes are used to focus on current topics or applications of interest. They are designed to illustrate concepts and practices in the dynamic field of finance.

- Small Business Practice boxes highlight aspects of the chapter topics relating directly to small businesses and entrepreneurship.
- Career Opportunities in Finance boxes provide information about various careers in finance and appear in many chapters.
- Personal Financial Planning boxes provide insight into how the chapter's content can be applied to an individual's finances.

LEARNING EXTENSIONS: Chapter appendixes, called Learning Extensions, are included in many chapters. Learning Extensions provide additional in-depth coverage of topics related to their respective chapters, and many challenge students to use their mathematical skills.

END-OF-CHAPTER MATERIALS: Each chapter provides the following:

- Discussion Questions that review chapter material
- Exercises for students to solve and exercise their mathematical skills
- Problems that are more difficult and that should be solved by using spreadsheets

COMPANION WEB SITE: The text's Web site at www.wiley.com/college/melicher contains a myriad of resources and links to aid learning and teaching.

INSTRUCTOR'S MANUAL AND TEST BANK: The Instructor's Manual is available to adopters of this text. It features detailed chapter outlines, lecture tips, and answers to end-of-chapter questions and problems. The manual includes an extensive test bank of true/false and multiple choice questions with answers, revised and expanded for this edition by Kevin Cochrane of College of the Desert.

COMPUTERIZED TEST BANK: This program is for use on a PC running Windows. The Computerized Test Bank contains content from the test bank provided within a Test Generating Program that allows instructors to customize their exams.

POWERPOINT PRESENTATIONS: Created by the authors, a PowerPoint presentation is provided for each chapter of the text. Slides include outline notes on the chapter, additional presentation topics, and figures and tables from the text.

STUDENT PRACTICE QUIZZES: A set of quizzes, revised by Leslie Mathis of University of Memphis, allows students to practice their knowledge and understanding of each chapter. These multiple-choice quizzes are auto-graded to provide students with instant feedback on their work.

SPREADSHEET SOFTWARE: A set of Excel-compatible templates, developed by Robert Ritchey of Texas Tech University, are available on the text's Web site. Students can use the templates to help solve some of the end-of-chapter problems and challenge problems.

ACKNOWLEDGMENTS

We would like to thank the Wiley Publishing team of Executive Editor Joel Hollenbeck, Assistant Editor Courtney Luzzi, and Senior Editorial Assistant Erica Horowitz for their role in preparing and publishing the fifteenth edition of *Introduction to Finance*.

In addition, we are especially grateful to the reviewers for their comments and constructive criticisms of this and previous editions:

Saul W. Adelman, *Miami University, Ohio*

Linda K. Brown, *St. Ambrose University*

Lisa Johnson, *Centura College*

Barbara L. Purvis, *Centura College*

Tim Alzheimer, *Montana State University*

Allan Blair, *Palm Beach Atlantic College*

Stewart Bonem, *Cincinnati State Technical and Community College*

Joseph M. Byers, *Community College of Allegheny County, South Campus*

Robert L. Chapman, *Orlando College*

William Chittenden, *Texas State University*

Will Crittendon, *Bronx Community College*

David R. Durst, *University of Akron*

Sharon H. Garrison, *Florida Atlantic University*

Asim Ghosh, *Saint Joseph's University*

Lester Hadsell, *University of Albany*

Irene M. Hammerbacher, *Iona College*

Kim Hansen, *Mid-State Technical College*

Jeff Hines, *Davenport College*

Jeff Jewell, *Lipscomb University*

Ed Krohn, *Miami Dade Community College*

P. John Limberopoulos, *University of Colorado Boulder*

Leslie Mathis, *University of Memphis*

John K. Mullen, *Clarkson University*

Michael Murray, *Winona State University*

Napoleon Overton, *University of Memphis*

Michael Owen, *Montana State University*

Marco Pagani, *San Jose State University*

Alan Questell, *Richmond Community College*

Ernest Scarbrough, *Arizona State University*

Raymond Shovlain, *St. Ambrose University*

Amir Tavakkol, *Kansas State University*

Jim Washam, *Arkansas State University*

Howard Whitney, *Franklin University*

David Zalewski, *Providence College*

Likewise, we appreciate the comments from students and teachers, who have used previous editions, and the assistance from the dozens of reviewers, who have commented about the early editions. Special recognition goes to Carl Dauten, who coauthored the first four editions, and Merle Welshans, who was a coauthor on the first nine editions of the book. Finally, and perhaps most importantly, we wish to thank our families for their understanding and support during the writing of the fifteenth edition.

Ronald W. Melicher, *Boulder, Colorado*
Edgar A. Norton, *Normal, Illinois*

FEATURES OF THIS BOOK

Chapter Openers

- **Chapter Learning Objectives** that students can use to review the chapter's main points and instructors can use as a basis for in-class lecture or discussion.
- **Where We Have Been** briefly summarizes material from previous chapters.
- **Where We Are Going** briefly previews coverage in future chapters.
- **How This Chapter Applies to Me** briefly outlines personally relevant issues.

Concept Checks appear in the margins near the end of every section to quiz students on what they have just learned and how well they have learned it. Concept checks reinforce the topical material and help students determine what they need to review.

Boxed Features throughout the book are used to focus on current topics or applications of interest. They are designed to illustrate concepts and practices in the dynamic field of finance.

- **Small Business Practice** boxes highlight aspects of the chapter topics relating directly to small businesses and entrepreneurship.
- **Personal Financial Planning** boxes incorporate relevant information on how the chapter's content can be applied to an individual's finances.
- **Career Opportunities in Finance** boxes appear in several chapters and provide information about various careers in finance.
- **Applying Finance To** boxes show how the chapter relates to the finance fields of institutions and markets, investments, and financial management.

Spreadsheet Illustrations explain how to use spreadsheets to solve problems while showing students the powers of spreadsheet function and analysis.

Learning Extensions are chapter appendices, which provide additional in-depth coverage of topics related to their respective chapters. Many challenge students to use their mathematical skills.

End-of-Chapter Materials provide discussion questions, exercises, and special challenge problems that present students with more difficult questions that should be solved using Excel spreadsheets.

Icons:

Concept Check	Internet Activity	Ethics	Global	Finance	Financial Crisis
					
CONCEPT CHECK	INTERNET ACTIVITY	ETHICAL ISSUES	GLOBAL DISCUSSION	FINANCE PRINCIPLE	FINANCIAL CRISIS

• AUTHOR BIOS •

Ron Melicher is a professor of finance and previously served three different terms as chair of the Finance Division, Leeds School of Business, University of Colorado Boulder. He is a past president of the Financial Management Association. Ron earned undergraduate, M.B.A., and doctoral degrees from Washington University in St. Louis, Missouri. While at the University of Colorado, he has received several distinguished teaching awards and was designated a university-wide President's Teaching Scholar. Ron teaches corporate finance and financial strategy and valuation in the M.B.A. and Executive M.B.A. programs, in addition to entrepreneurial finance and investment banking to undergraduate students. His research has been published in major finance journals, including the *Journal of Finance*, *Journal of Financial and Quantitative Analysis*, and *Financial Management*. He is also the coauthor of *Entrepreneurial Finance*, fourth edition (South-Western/Cengage Learning).

Edgar A. Norton is professor of finance in the College of Business at Illinois State University. He holds a double major in computer science and economics from Rensselaer Polytechnic Institute and received his M.S. and Ph.D. from the University of Illinois at Urbana–Champaign. A Chartered Financial Analyst (CFA), he regularly receives certificates of achievement in the field of investments. He has consulted with COUNTRY Financial, Maersk, and the CFA Institute; does pro bono financial planning; and is a past president of the Midwest Finance Association. His research has appeared in numerous journals, such as *Financial Review*, *Journal of Business Venturing*, and *Journal of Business Ethics*. He has coauthored four textbooks, including *Introduction to Finance*.

• BRIEF CONTENTS •

Preface iii

PART I: INSTITUTIONS AND MARKETS 2

- Chapter 1: The Financial Environment 4
- Chapter 2: Money and the Monetary System 21
- Chapter 3: Banks and Other Financial Institutions 43
- Chapter 4: The Federal Reserve System 73
- Chapter 5: Policy Makers and the Money Supply 97
- Chapter 6: International Finance and Trade 123

PART 2: INVESTMENTS 148

- Chapter 7: Savings and the Investment Process 150
- Chapter 8: Interest Rates 173
- Chapter 9: Time Value of Money 199
- Chapter 10: Bonds and Stocks: Characteristics and Valuations 231
- Chapter 11: Securities and Markets 275
- Chapter 12: Financial Returns and Risk Concepts 313

PART 3: FINANCIAL MANAGEMENT 346

- Chapter 13: Business Organization and Financial Data 348
- Chapter 14: Financial Analysis and Long-Term Financial Planning 385
- Chapter 15: Managing Working Capital 415
- Chapter 16: Short-Term Business Financing 447
- Chapter 17: Capital Budgeting Analysis 475
- Chapter 18: Capital Structure and the Cost of Capital 515

Appendix 547

Glossary 556

Index 570

• CONTENTS •

PART I INSTITUTIONS AND MARKETS 2

CHAPTER 1 THE FINANCIAL ENVIRONMENT 4

**HOW HAS THE FINANCIAL ENVIRONMENT
CHANGED? 5**

WHAT IS FINANCE? 5

TWO THEMES 7

WHY STUDY FINANCE? 7

CAREERS IN FINANCE 8

SIX PRINCIPLES OF FINANCE 10

TIME VALUE OF MONEY 10

RISK VERSUS RETURN 10

DIVERSIFICATION OF RISK 10

FINANCIAL MARKETS ARE EFFICIENT 11

MANAGEMENT VERSUS OWNER OBJECTIVES 11

REPUTATION MATTERS 12

OVERVIEW OF THE FINANCIAL SYSTEM 13

CHARACTERISTICS AND REQUIREMENTS 13

FINANCIAL SYSTEM COMPONENTS AND FINANCIAL
FUNCTIONS 14

FINANCIAL MARKETS CHARACTERISTICS 16

MONEY AND CAPITAL MARKETS 16

PRIMARY AND SECONDARY MARKETS 16

MAJOR TYPES OF FINANCIAL MARKETS 16

THE PLAN OF STUDY 17

SUMMARY 18

KEY TERMS 19

DISCUSSION QUESTIONS 19

EXERCISES 19

CHAPTER 2 MONEY AND THE MONETARY SYSTEM 21

THE 2007–2008 FINANCIAL CRISIS 22

**PROCESS OF MOVING SAVINGS INTO
INVESTMENTS 23**

OVERVIEW OF THE MONETARY SYSTEM 24

IMPORTANCE AND FUNCTIONS OF MONEY 26

**DEVELOPMENT OF MONEY IN THE UNITED
STATES 27**

PHYSICAL MONEY (COIN AND PAPER
CURRENCY) 27

DEPOSIT MONEY 32

MONEY MARKET SECURITIES 33

MEASURES OF THE U.S. MONEY SUPPLY 34

M1 MONEY SUPPLY 34

M2 MONEY SUPPLY 35

EXCLUSIONS FROM THE MONEY SUPPLY 36

MONEY SUPPLY AND ECONOMIC ACTIVITY 36

INTERNATIONAL MONETARY SYSTEM 38

SUMMARY 39

KEY TERMS 40

DISCUSSION QUESTIONS 40

EXERCISES 41

PROBLEMS 41

CHAPTER 3 BANKS AND OTHER FINANCIAL INSTITUTIONS 43

**FINANCIAL INSTITUTION DISTRESS DURING
THE FINANCIAL CRISIS 44**

**TYPES AND ROLES OF FINANCIAL
INSTITUTIONS 45**

DEPOSITORY INSTITUTIONS	46
CONTRACTUAL SAVINGS ORGANIZATIONS	46
SECURITIES FIRMS	47
FINANCE FIRMS	48
OVERVIEW OF THE BANKING SYSTEM	48
COMMERCIAL, INVESTMENT, AND UNIVERSAL BANKING	48
FUNCTIONS OF BANKS AND THE BANKING SYSTEM	50
HISTORICAL DEVELOPMENT OF THE U.S. BANKING SYSTEM	51
BEFORE THE CIVIL WAR	51
ENTRY OF THRIFT INSTITUTIONS	53
REGULATION OF THE BANKING SYSTEM	53
GENERAL BANKING LEGISLATION	53
THE SAVINGS AND LOAN CRISIS	55
PROTECTION OF DEPOSITORS' FUNDS	56
STRUCTURE OF BANKS	57
BANK CHARTERS	57
DEGREE OF BRANCH BANKING	57
BANK HOLDING COMPANIES	58
THE BANK BALANCE SHEET	59
ASSETS	60
LIABILITIES AND OWNERS' CAPITAL	63
BANK MANAGEMENT	63
LIQUIDITY MANAGEMENT	64
CAPITAL MANAGEMENT	65
INTERNATIONAL BANKING AND FOREIGN SYSTEMS	67
SUMMARY	68
KEY TERMS	69
DISCUSSION QUESTIONS	69
EXERCISES	70
PROBLEMS	70
CHAPTER 4	
THE FEDERAL RESERVE SYSTEM	73
U.S. CENTRAL BANK RESPONSE TO THE FINANCIAL CRISIS AND GREAT RECESSION	74
THE U.S. BANKING SYSTEM PRIOR TO THE FED	75
WEAKNESSES OF THE NATIONAL BANKING SYSTEM	75
THE MOVEMENT TO CENTRAL BANKING	76
STRUCTURE OF THE FEDERAL RESERVE SYSTEM	77
MEMBER BANKS	77
FEDERAL RESERVE DISTRICT BANKS	78
BOARD OF GOVERNORS	80
FEDERAL OPEN MARKET COMMITTEE (FOMC)	80
ADVISORY COMMITTEES	80
ROLE OF THE CHAIR OF THE FED BOARD OF GOVERNORS	80
MONETARY POLICY FUNCTIONS AND INSTRUMENTS	82
OVERVIEW OF RESPONSIBILITIES	82
RESERVE REQUIREMENTS	83
DISCOUNT RATE POLICY	85
OPEN-MARKET OPERATIONS	86
QUANTITATIVE EASING	87
IMPLEMENTATION OF MONETARY POLICY	88
FED SUPERVISORY AND REGULATORY FUNCTIONS	88
SPECIFIC SUPERVISORY RESPONSIBILITIES	88
SPECIFIC REGULATORY RESPONSIBILITIES	89
FED SERVICE FUNCTIONS	89
THE PAYMENTS MECHANISM	90
TRANSFER OF CREDIT	92
OTHER SERVICE ACTIVITIES	92
CENTRAL BANKS IN OTHER COUNTRIES	92
SUMMARY	94
KEY TERMS	95
DISCUSSION QUESTIONS	95
EXERCISES	95
PROBLEMS	96
CHAPTER 5	
POLICY MAKERS AND THE MONEY SUPPLY	97
NATIONAL ECONOMIC POLICY OBJECTIVES	98
ECONOMIC GROWTH	98
HIGH EMPLOYMENT	99
PRICE STABILITY	99
BALANCE IN INTERNATIONAL TRANSACTIONS	99
FOUR POLICY MAKER GROUPS	100
ETHICAL BEHAVIOR IN GOVERNMENT	100
POLICY MAKERS IN THE EUROPEAN ECONOMIC UNION	101
GOVERNMENT REACTION TO THE PERFECT FINANCIAL STORM	101
GOVERNMENT INFLUENCE ON THE ECONOMY	102

POLICY INSTRUMENTS OF THE U.S.
TREASURY 104
 MANAGING THE TREASURY’S CASH BALANCES 104
 POWERS RELATING TO THE FEDERAL BUDGET AND
 TO SURPLUSES OR DEFICITS 105
 RECENT FINANCIAL CRISIS-RELATED
 ACTIVITIES 106

**AMOUNT OF NATIONAL DEBT AND DEBT
 MANAGEMENT 107**

CHANGING THE MONEY SUPPLY 108
 CHECKABLE DEPOSIT EXPANSION 108
 OFFSETTING OR LIMITING FACTORS 112
 CONTRACTION OF DEPOSITS 112

FACTORS AFFECTING BANK RESERVES 113
 CHANGES IN THE DEMAND FOR CURRENCY 113
 FEDERAL RESERVE SYSTEM TRANSACTIONS 114

**THE MONETARY BASE AND THE MONEY
 MULTIPLIER 117**
 SUMMARY 119
 KEY TERMS 119
 DISCUSSION QUESTIONS 119
 EXERCISES 120
 PROBLEMS 120

**CHAPTER 6
 INTERNATIONAL FINANCE AND
 TRADE 123**

**GLOBAL OR INTERNATIONAL MONETARY
 SYSTEM 124**
 DEVELOPMENT OF INTERNATIONAL FINANCE 124
 HOW THE INTERNATIONAL MONETARY SYSTEM
 EVOLVED 124

EUROPEAN UNIFICATION 126
 EUROPEAN UNION 126
 EUROZONE MEMBERS 126
 THE EURO 126
 EUROPEAN UNION FINANCIAL CRISES 127

**CURRENCY EXCHANGE MARKETS AND
 RATES 127**
 CURRENCY EXCHANGE MARKETS 127
 EXCHANGE RATE QUOTATIONS 128
 FACTORS THAT AFFECT CURRENCY EXCHANGE
 RATES 129
 CURRENCY EXCHANGE RATE APPRECIATION AND
 DEPRECIATION 132
 ARBITRAGE 133
 EXCHANGE RATE DEVELOPMENTS FOR THE U.S.
 DOLLAR 133

**CONDUCTING BUSINESS
 INTERNATIONALLY 134**
 MANAGING FOREIGN EXCHANGE RISK 134
 ETHICAL CONSIDERATIONS 135

FINANCING INTERNATIONAL TRADE 135
 FINANCING BY THE EXPORTER 136
 FINANCING BY THE IMPORTER 138
 BANKER’S ACCEPTANCES 140
 OTHER AIDS TO INTERNATIONAL TRADE 140

**BALANCE IN INTERNATIONAL
 TRANSACTIONS GOAL 141**
 NATURE OF THE PROBLEM 142
 BALANCE-OF-PAYMENTS ACCOUNTS 142
 SUMMARY 144
 KEY TERMS 144
 DISCUSSION QUESTIONS 145
 EXERCISES 145
 PROBLEMS 146

**PART 2
 INVESTMENTS 148**

**CHAPTER 7
 SAVINGS AND THE INVESTMENT
 PROCESS 150**

**GROSS DOMESTIC PRODUCT AND CAPITAL
 FORMATION 151**
 GDP COMPONENTS 151
 IMPLICATIONS OF INTERNATIONAL PAYMENT
 IMBALANCES 153
 LINK BETWEEN SAVING AND INVESTMENT 153

**FEDERAL GOVERNMENT RECEIPTS AND
 EXPENDITURES 155**
 THE BUDGET 155
 FISCAL POLICY MAKERS 156
 DEBT FINANCING 157

**HISTORICAL ROLE AND CREATION OF
 SAVINGS 158**
 FOREIGN SOURCES OF SAVINGS 158
 DOMESTIC SUPPLY OF SAVINGS 158
 CREATION OF SAVINGS 158

MAJOR SOURCES OF SAVINGS 159
 PERSONAL SAVINGS 159
 CORPORATE SAVINGS 160

FACTORS AFFECTING SAVINGS 161
 LEVELS OF INCOME 161
 ECONOMIC EXPECTATIONS 162

ECONOMIC CYCLES	162
LIFE STAGES OF THE INDIVIDUAL SAVER	163
LIFE STAGES OF THE CORPORATION	163
CAPITAL MARKET SECURITIES	164
MORTGAGE MARKETS	165
TYPES OF MORTGAGES AND MORTGAGE-BACKED SECURITIES	165
CREDIT RATINGS AND SCORES	166
MAJOR PARTICIPANTS IN THE SECONDARY MORTGAGE MARKETS	167
A FURTHER LOOK AT THE 2007–2008 FINANCIAL CRISIS	167
EARLY FACTORS	167
A BORROWING-RELATED CULTURAL SHIFT	168
SUMMARY	168
KEY TERMS	169
DISCUSSION QUESTIONS	169
EXERCISES	170
PROBLEMS	170

CHAPTER 8 **INTEREST RATES** 173

SUPPLY AND DEMAND FOR LOANABLE FUNDS 174

HISTORICAL CHANGES IN U.S. INTEREST RATE LEVELS	175
LOANABLE FUNDS THEORY	176

DETERMINANTS OF MARKET INTEREST RATES 179

RISK-FREE SECURITIES: U.S. TREASURY DEBT OBLIGATIONS 180

MARKETABLE OBLIGATIONS	181
DEALER SYSTEM	182
TAX STATUS OF FEDERAL OBLIGATIONS	182
OWNERSHIP OF PUBLIC DEBT SECURITIES	183
MATURITY DISTRIBUTION OF MARKETABLE DEBT SECURITIES	184

TERM OR MATURITY STRUCTURE OF INTEREST RATES 185

RELATIONSHIP BETWEEN YIELD CURVES AND THE ECONOMY	186
TERM STRUCTURE THEORIES	186

INFLATION PREMIUMS AND PRICE MOVEMENTS 188

HISTORICAL INTERNATIONAL PRICE MOVEMENTS	188
INFLATION IN THE UNITED STATES	189
TYPES OF INFLATION	191

DEFAULT RISK PREMIUMS 193

SUMMARY	195
KEY TERMS	195
DISCUSSION QUESTIONS	195
EXERCISES	196
PROBLEMS	196

CHAPTER 9 **TIME VALUE OF MONEY** 199

PRINCIPLES OF FINANCE 200

BASIC CONCEPTS 201

COMPOUNDING TO DETERMINE FUTURE VALUES 201

INFLATION OR PURCHASING POWER IMPLICATIONS	205
--	-----

DISCOUNTING TO DETERMINE PRESENT VALUES 206

EQUATING PRESENT VALUES AND FUTURE VALUES 209

FINDING INTEREST RATES AND TIME REQUIREMENTS 210

SOLVING FOR INTEREST RATES	210
SOLVING FOR TIME PERIODS	211
RULE OF 72	212

FUTURE VALUE OF AN ANNUITY 212

PRESENT VALUE OF AN ANNUITY 214

INTEREST RATES AND TIME REQUIREMENTS FOR ANNUITIES 216

SOLVING FOR INTEREST RATES	216
SOLVING FOR TIME PERIODS	217

DETERMINING PERIODIC ANNUITY PAYMENTS 218

EXAMPLES INVOLVING ANNUAL PAYMENTS	218
REAL ESTATE MORTGAGE LOANS WITH MONTHLY PAYMENTS	219

MORE FREQUENT COMPOUNDING OR DISCOUNTING INTERVALS 220

COST OF CONSUMER CREDIT 221

UNETHICAL LENDERS	221
APR VERSUS EAR	222
SUMMARY	223
KEY TERMS	223
DISCUSSION QUESTIONS	223
EXERCISES	224
PROBLEMS	224

LEARNING EXTENSION 9 **ANNUITY DUE PROBLEMS** 226

FUTURE VALUE OF AN ANNUITY DUE 226

PRESENT VALUE OF AN ANNUITY DUE 227

**INTEREST RATES AND TIME REQUIREMENTS
FOR ANNUITY DUE PROBLEMS 228**

PROBLEMS 229

**CHAPTER 10
BONDS AND STOCKS: CHARACTERISTICS
AND VALUATIONS 231**

**LONG-TERM EXTERNAL FINANCING SOURCES
FOR BUSINESSES 232**

DEBT CAPITAL 234

WHO BUYS BONDS? 235

BOND COVENANTS 236

BOND RATINGS 237

BONDHOLDER SECURITY 238

TIME TO MATURITY 240

INCOME FROM BONDS 241

GLOBAL BOND MARKET 242

READING BOND QUOTES 242

CORPORATE EQUITY CAPITAL 244

COMMON STOCK 245

PREFERRED STOCK 246

READING STOCK QUOTES 248

DIVIDENDS AND STOCK REPURCHASES 249

HOW DO FIRMS DECIDE ON THE DOLLAR AMOUNT
OF DIVIDENDS? 249

STOCK DIVIDENDS AND STOCK SPLITS 251

SHARE REPURCHASES 252

VALUATION PRINCIPLES 252

VALUATION OF BONDS 255

DETERMINING A BOND'S PRESENT VALUE 255

CALCULATING THE YIELD TO MATURITY 258

RISK IN BOND VALUATION 259

VALUATION OF STOCKS 262

VALUING STOCKS WITH CONSTANT
DIVIDENDS 263

VALUING STOCKS WITH CONSTANT DIVIDEND
GROWTH RATES 263

RISK IN STOCK VALUATION 265

**VALUATION AND THE FINANCIAL
ENVIRONMENT 265**

GLOBAL ECONOMIC INFLUENCES 265

DOMESTIC ECONOMIC INFLUENCES 266

INDUSTRY AND COMPETITION 266

SUMMARY 267

KEY TERMS 267

DISCUSSION QUESTIONS 268

EXERCISES 269

**LEARNING EXTENSION 10
ANNUALIZING RATES OF RETURN 272**

HOLDING PERIOD RETURNS 272

ANNUALIZED RATES OF RETURN 272

PROBLEMS 274

**CHAPTER 11
SECURITIES AND MARKETS 275**

**ISSUING SECURITIES: PRIMARY SECURITIES
MARKETS 276**

PRIMARY MARKET FUNCTIONS OF INVESTMENT
BANKERS 276

COST OF GOING PUBLIC 281

THE FACEBOOK IPO 284

OTHER FUNCTIONS OF INVESTMENT BANKING
FIRMS 286

INVESTMENT BANKING REGULATION 287

**TRADING SECURITIES—SECONDARY
SECURITIES MARKETS 288**

ORGANIZED SECURITY EXCHANGES 288

STRUCTURE OF THE NEW YORK STOCK
EXCHANGE 289

WHAT MAKES A GOOD MARKET? 294

A WORD ON COMMISSIONS 296

SECURITY MARKET INDEXES 296

FOREIGN SECURITIES 297

**INSIDE INFORMATION AND OTHER ETHICAL
ISSUES 298**

**CHANGES IN THE STRUCTURE OF THE STOCK
MARKET 299**

SUMMARY 301

KEY TERMS 301

DISCUSSION QUESTIONS 302

PROBLEMS 302

**LEARNING EXTENSION 11
INTRODUCTION TO FUTURES
AND OPTIONS 305**

WHY DO DERIVATIVES EXIST? 305

FUTURES CONTRACTS 306

OPTIONS 307

OPTION PAYOFF DIAGRAMS 308

SUMMARY 310

KEY TERMS 310

DISCUSSION QUESTIONS 311

PROBLEMS 311

CHAPTER 12**FINANCIAL RETURNS AND RISK CONCEPTS 313****HISTORICAL RETURN AND RISK FOR A SINGLE FINANCIAL ASSET 314**

ARITHMETIC AVERAGE ANNUAL RATES OF RETURN 315

VARIANCE AS A MEASURE OF RISK 316

STANDARD DEVIATION AS A MEASURE OF RISK 316

WHERE DOES RISK COME FROM? 319**EXPECTED MEASURES OF RETURN AND RISK 320****HISTORICAL RETURNS AND RISK OF DIFFERENT ASSETS 323****EFFICIENT CAPITAL MARKETS 324****PORTFOLIO RETURNS AND RISK 327**

EXPECTED RETURN ON A PORTFOLIO 327

VARIANCE AND STANDARD DEVIATION OF RETURN ON A PORTFOLIO 328

TO DIVERSIFY OR NOT TO DIVERSIFY? 329

PORTFOLIO RISK AND THE NUMBER OF INVESTMENTS IN THE PORTFOLIO 330

SYSTEMATIC AND UNSYSTEMATIC RISK 331

CAPITAL ASSET PRICING MODEL (CAPM) 332**ETHICS AND JOB OPPORTUNITIES IN INVESTMENTS 335**

SUMMARY 337

KEY TERMS 337

DISCUSSION QUESTIONS 337

PROBLEMS 338

LEARNING EXTENSION 12 ESTIMATING BETA 341**SECURITY MARKET LINE 342**

QUESTIONS AND PROBLEMS 344

PART 3**FINANCIAL MANAGEMENT 346****CHAPTER 13****BUSINESS ORGANIZATION AND FINANCIAL DATA 348****STARTING A BUSINESS 349**

STRATEGIC PLAN WITH A VISION OR MISSION 349

BUSINESS AND FINANCIAL GOALS 350

FORMS OF BUSINESS ORGANIZATION IN THE UNITED STATES 350

PROPRIETORSHIP 351

PARTNERSHIP 352

CORPORATION 353

THE ANNUAL REPORT 355**ACCOUNTING PRINCIPLES 355****INCOME STATEMENT 357****THE BALANCE SHEET 359**

ASSETS 359

LIABILITIES 360

OWNERS' EQUITY 361

STATEMENT OF CASH FLOWS 361**FINANCIAL STATEMENTS OF DIFFERENT COMPANIES 363****THE AUTO BAILOUT AND FINANCIAL STATEMENTS 364****GOAL OF A FIRM 365**

MEASURING SHAREHOLDER WEALTH 366

LINKING STRATEGY AND FINANCIAL PLANS 367

CRITERION FOR NONPUBLIC FIRMS 368

WHAT ABOUT ETHICS? 368

CORPORATE GOVERNANCE 369

PRINCIPAL-AGENT PROBLEM 369

REDUCING AGENCY PROBLEMS 370

FINANCE IN THE ORGANIZATION CHART 372

SUMMARY 374

KEY TERMS 375

DISCUSSION QUESTIONS 375

PROBLEMS 375

LEARNING EXTENSION 13**FEDERAL INCOME TAXATION 379****DEPRECIATION BASICS 381****A FEW WORDS ON DEPRECIATION METHODS 382**

QUESTIONS AND PROBLEMS 382

CHAPTER 14**FINANCIAL ANALYSIS AND LONG-TERM FINANCIAL PLANNING 385****FINANCIAL STATEMENT ANALYSIS 386****RATIO ANALYSIS OF BALANCE SHEET AND INCOME STATEMENT 386****TYPES OF FINANCIAL RATIOS 387**

LIQUIDITY RATIOS AND ANALYSIS 388

ASSET MANAGEMENT RATIOS AND ANALYSIS 390

FINANCIAL LEVERAGE RATIOS AND ANALYSIS 392

PROFITABILITY RATIOS AND ANALYSIS 396
 MARKET VALUE RATIOS AND ANALYSIS 398
SUMMARY OF RATIO ANALYSIS FOR WALGREENS 400
DUPONT METHOD OF RATIO ANALYSIS 400
LONG-TERM FINANCIAL PLANNING 402
 PERCENTAGE OF SALES TECHNIQUE 403
 COST-VOLUME-PROFIT ANALYSIS 405
 DEGREE OF OPERATING LEVERAGE 407
 SUMMARY 409
 KEY TERMS 410
 DISCUSSION QUESTIONS 410
 PROBLEMS 410

**CHAPTER 15
 MANAGING WORKING CAPITAL 415**

OPERATING AND CASH CONVERSION CYCLES 417
 OPERATING CYCLE 417
 CASH CONVERSION CYCLE 418
 DETERMINING THE LENGTH OF THE OPERATING CYCLE AND CASH CONVERSION CYCLE 419
 WORKING CAPITAL REQUIREMENTS 420
CASH BUDGETS 423
 MINIMUM DESIRED CASH BALANCE 423
 ESTIMATED CASH INFLOWS 423
 ESTIMATED CASH OUTFLOWS 424
 CONSTRUCTING THE CASH BUDGET 425
 SEASONAL VERSUS LEVEL PRODUCTION 426
MANAGEMENT OF CURRENT ASSETS 428
 CASH AND MARKETABLE SECURITIES MANAGEMENT 428
 GETTING AND KEEPING THE CASH 434
ACCOUNTS RECEIVABLE MANAGEMENT 436
 CREDIT ANALYSIS 437
 CREDIT-REPORTING AGENCIES 437
 CREDIT TERMS AND COLLECTION EFFORTS 438
INVENTORY MANAGEMENT 440
TECHNOLOGY AND WORKING CAPITAL MANAGEMENT 441
 CASH MANAGEMENT 441
 PROCESSING INVOICES AND FLOAT 442
 TRACKING INVENTORY 442
 SUMMARY 443
 KEY TERMS 443
 DISCUSSION QUESTIONS 443
 PROBLEMS 444

**CHAPTER 16
 SHORT-TERM BUSINESS FINANCING 447**

STRATEGIES FOR FINANCING WORKING CAPITAL 448
 MATURITY-MATCHING APPROACH 449
 AGGRESSIVE APPROACH 451
 CONSERVATIVE APPROACH 451
FACTORS AFFECTING SHORT-TERM FINANCING 452
 OPERATING CHARACTERISTICS 452
 OTHER INFLUENCES IN SHORT-TERM FINANCING 454
PROVIDERS OF SHORT-TERM FINANCING 456
 COMMERCIAL BANK LENDING 456
 TRADE CREDIT FROM SUPPLIERS 460
 COMMERCIAL FINANCE COMPANIES 461
 COMMERCIAL PAPER 462
ADDITIONAL VARIETIES OF SHORT-TERM FINANCING 464
 ACCOUNTS RECEIVABLE FINANCING 464
 INVENTORY LOANS 467
 LOANS SECURED BY STOCKS AND BONDS 468
 OTHER FORMS OF SECURITY FOR BANK LOANS 469
THE COST OF SHORT-TERM FINANCING 469
 SUMMARY 470
 KEY TERMS 471
 DISCUSSION QUESTIONS 471
 PROBLEMS 471

**CHAPTER 17
 CAPITAL BUDGETING ANALYSIS 475**

MANAGEMENT OF FIXED ASSETS 476
IDENTIFYING POTENTIAL CAPITAL BUDGET PROJECTS 476
CAPITAL BUDGETING PROCESS 478
CAPITAL BUDGETING TECHNIQUES 481
 NET PRESENT VALUE 481
 INTERNAL RATE OF RETURN 484
 NPV AND IRR 487
MODIFIED INTERNAL RATE OF RETURN 488
PROFITABILITY INDEX 490
CONFLICTS BETWEEN DISCOUNTED CASH FLOW TECHNIQUES 490
 DIFFERENT CASH FLOW PATTERNS 490
 DIFFERENT TIME HORIZONS 490
 DIFFERENT SIZES 491

PAYBACK PERIOD	491
DIFFERENCE BETWEEN THEORY AND PRACTICE	492
SAFETY MARGIN	492
MANAGERIAL FLEXIBILITY AND OPTIONS	493
ESTIMATING PROJECT CASH FLOWS	493
ISOLATING PROJECT CASH FLOWS	493
APPROACHES TO ESTIMATING PROJECT CASH FLOWS	495
CASH FLOW FROM OPERATIONS	495
CASH FLOW FROM INVESTMENT ACTIVITIES	497
CASH FLOW FROM FINANCING ACTIVITIES	497
AN EXAMPLE	497
DEPRECIATION AS A TAX SHIELD	498
KEEPING MANAGERS HONEST	499
RISK-RELATED CONSIDERATIONS	500
SUMMARY	501
KEY TERMS	502
DISCUSSION QUESTIONS	502
PROBLEMS	503
LEARNING EXTENSION 17	
ESTIMATING PROJECT CASH FLOWS	505
PROJECT STAGES AND CASH FLOW ESTIMATION	505
INITIAL OUTLAY	505
CASH FLOWS DURING THE PROJECT'S OPERATING LIFE	506
SALVAGE VALUE AND NWC RECOVERY AT PROJECT TERMINATION	506
APPLICATIONS	507
CASH FLOW ESTIMATION FOR A REVENUE EXPANDING PROJECT	507
CASH FLOW ESTIMATION FOR A COST-SAVING PROJECT	509
SETTING A BID PRICE	511
SUMMARY	513
DISCUSSION QUESTIONS	513
PROBLEMS	513
CHAPTER 18	
CAPITAL STRUCTURE AND THE COST OF CAPITAL	515
WHY CHOOSE A CAPITAL STRUCTURE?	516
TRENDS IN CORPORATE USE OF DEBT	517
CASHING IN ON LOW INTEREST RATES	518
REQUIRED RATE OF RETURN AND THE COST OF CAPITAL	519
COST OF CAPITAL	520
COST OF DEBT	520
COST OF PREFERRED STOCK	521
COST OF COMMON EQUITY	521
COST OF NEW COMMON STOCK	523
WEIGHTED AVERAGE COST OF CAPITAL	523
CAPITAL STRUCTURE WEIGHTS	524
MEASURING THE TARGET WEIGHTS	524
WHAT DO BUSINESSES USE AS THEIR COST OF CAPITAL?	525
DIFFICULTY OF MAKING CAPITAL STRUCTURE DECISIONS	527
PLANNING GROWTH RATES	528
INTERNAL GROWTH RATE	529
SUSTAINABLE GROWTH RATE	529
EFFECTS OF UNEXPECTEDLY HIGHER (OR LOWER) GROWTH	530
EBIT/EPS ANALYSIS	531
INDIFFERENCE LEVEL	531
COMBINED OPERATING AND FINANCIAL LEVERAGE EFFECTS	534
UNIT VOLUME VARIABILITY	534
PRICE-VARIABLE COST MARGIN	534
FIXED COSTS	534
DEGREE OF FINANCIAL LEVERAGE	535
TOTAL RISK	535
INSIGHTS FROM THEORY AND PRACTICE	537
TAXES AND NONDEBT TAX SHIELDS	537
BANKRUPTCY COSTS	537
AGENCY COSTS	539
A FIRM'S ASSETS AND ITS FINANCING POLICY	540
THE PECKING ORDER HYPOTHESIS	540
MARKET TIMING	540
BEYOND DEBT AND EQUITY	541
GUIDELINES FOR FINANCING STRATEGY	541
SUMMARY	543
KEY TERMS	543
DISCUSSION QUESTIONS	543
PROBLEMS	544
APPENDIX	547
GLOSSARY	556
INDEX	570

INTRODUCTION TO FINANCE

Markets, Investments, and Financial Management

PART I

INSTITUTIONS AND MARKETS

INTRODUCTION

Ask someone what he or she thinks “finance” is about. You’ll probably get a variety of responses: “It deals with money.” “It is what my bank does.” “The New York Stock Exchange has something to do with it.” “It’s how businesses and people get the money they need—you know, borrowing and stuff like that.” And they’d all be correct!

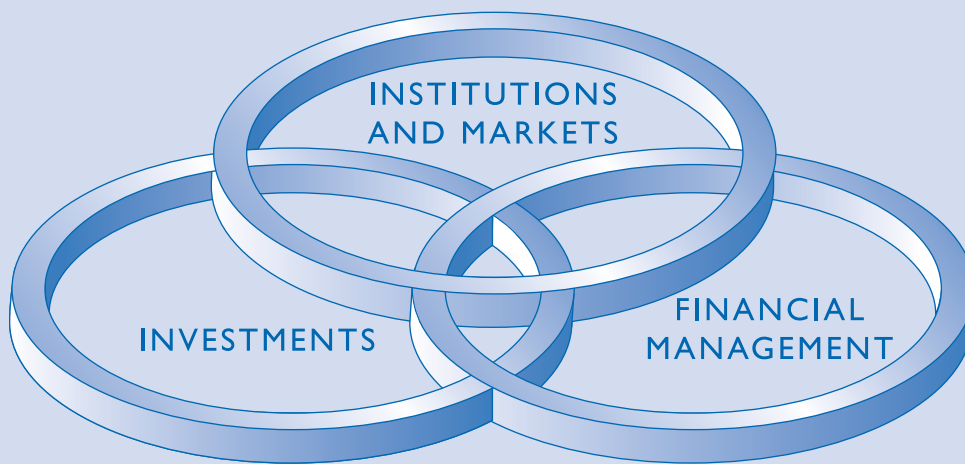
Finance is a broad field. It involves national and international systems of banking and financing business. It also deals with the process you go through to get a car loan and what a business does when planning for its future needs.

It is important to understand that while the U.S. financial system is complex, it generally operates efficiently. However, on occasion, imbalances can result in economic, real estate, and stock market “bubbles,” which when bursts cause havoc on the workings of the financial system. The decade of the 2000s began with the bursting of the “tech” or technology bubble and the “dot.com” bubble. Then in mid-2006, the real estate bubble in the form of excessive housing prices burst. This was followed by the peaking of stock prices in 2007 followed by a steep decline that continued into early 2009. Economic activity began slowing in 2007 and progressed into an economic recession beginning in mid-2008, which was accompanied by double-digit unemployment rates. The result was the 2007–2008 financial crisis and the 2008–2009 Great Recession that produced the most financial distress on the U.S. financial system since the Great Depression years of the 1930s.

Within the general field of finance, there are three areas of study: financial institutions and markets, investments, and financial management. These areas are illustrated in the accompanying diagram. Financial institutions collect funds from savers and lend them to or invest them in businesses or people that need cash. Examples of financial institutions are commercial banks, investment banks, insurance companies, and mutual funds. Financial institutions operate as part of the financial system. The financial system is the environment of finance. It includes the laws and regulations that affect financial transactions. The financial system encompasses the Federal Reserve System, which controls the supply of money in the U.S. economy. It also consists of the mechanisms that have been constructed to facilitate the flow of money and financial securities among countries. Financial markets represent ways for bringing together those that have money to invest with those that need funds. Financial markets, which include markets for mortgages, securities, and currencies, are necessary for a financial system to operate efficiently. Part 1 of this book examines the financial system and the role of financial institutions and financial markets in it.

Securities markets play important roles in helping businesses and governments raise new funds. Securities markets also facilitate the transfer of securities between investors. A securities market can be a central location for the trading of financial claims, such as the New York Stock Exchange. It may also take the form of a communications network, as with the over-the-counter market, which is another means by which stocks and bonds can be traded. When people invest funds, lend or borrow money, or buy or sell shares of a company’s stock, they are participating in the financial markets. Part 2 of this book examines the role of securities markets and the process of investing in bonds and stocks.

The third area of the field of finance is financial management. Financial management studies how a business should manage its assets, liabilities, and equity to produce a good or service. Whether or

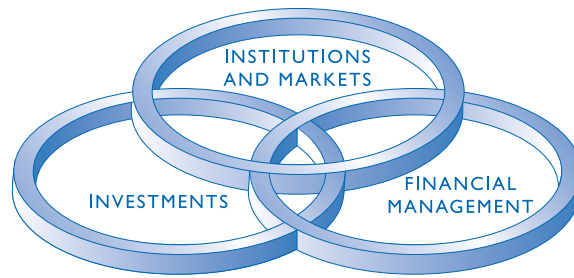


not a firm offers a new product or expands production, or how it invests excess cash, are examples of decisions that financial managers are involved with. Financial managers are constantly working with financial institutions and watching financial market trends as they make investment and financing decisions. Part 3 discusses how financial concepts can help managers better manage their firms.

There are few clear distinctions or separations between the three areas of finance. The diagram intentionally shows institutions and markets, investments, and financial management overlapping one another. Financial institutions operate in the environment of the financial markets and work to meet the financial needs of individuals and businesses. Financial managers do analyses and make decisions based on information they obtain from the financial markets. They also work with financial institutions when they need to raise funds and when they have excess funds to invest. Participants investing in the financial markets use information from financial institutions and firms to evaluate different investments in securities such as stocks, bonds, and certificates of deposit. A person working in one field must be knowledgeable about all three. Thus, this book is designed to provide you with a survey of all three areas of finance.

Part 1, Institutions and Markets, presents an overview of the financial system and its important components of policy makers, a monetary system, financial institutions, and financial markets. Financial institutions operate within the financial system to facilitate the work of the financial markets. For example, you can put your savings in a bank and earn interest. But your money doesn't just sit in the bank: The bank takes your deposit and the money from other depositors and lends it to Kathy, who needs a short-term loan for her business; to Ron for a college loan; and to Roger and Maria, who borrow the money to help buy a house. Banks bring together savers and those who need money, such as Kathy, Ron, Roger, and Maria. The interest rate the depositors earn and the interest rate that borrowers pay are determined by national and even international economic forces. Just what the bank does with depositors' money and how it reviews loan applications is determined to some extent by bank regulators and financial market participants, such as the Federal Reserve Board. Decisions by the president and Congress relating to fiscal policies and regulatory laws may also directly influence financial institutions and markets and alter the financial system.

Chapter 2 presents an overview of the role of money in the operation of the U.S. monetary and financial systems, including discussion of how funds are transferred among individuals, firms, and countries. Depository institutions, such as banks and savings and loans, as well as other financial institutions, involved in the financial intermediation process are the topic of Chapter 3. The Federal Reserve System, the U.S. central bank that controls the money supply, is discussed in Chapter 4. Chapter 5 places the previous chapters in perspective, discussing the role of the Federal Reserve and the banking system in helping meet national economic goals for the United States, such as economic growth, low inflation, and stable exchange rates. Part 1 concludes with an explanation of international trade and the topic of international finance in Chapter 6.



• CHAPTER I •

The Financial Environment

Chapter Learning Objectives . . .

AFTER STUDYING THIS CHAPTER, YOU SHOULD BE ABLE TO DO THE FOLLOWING:

- Define *finance* and explain why finance should be studied.
- Identify several major career opportunities in finance.
- Identify and describe the six principles of finance.
- Identify characteristics and components of an effective financial system.
- Describe the financial functions performed in an effective financial system.
- Briefly describe the four types of financial markets.

Where We Have Been . . .

As we progress through this book, we start each chapter with a brief review of previously covered materials. This will provide you with a reference base for understanding the transition from topic to topic. After completing the text, you will be at the beginning of what we hope is a successful business career.

Where We Are Going . . .

The financial environment within which we live and work is composed of a financial system, institutions, and markets. Part 1 of this text focuses on developing an understanding of the financial institutions and markets that operate to make the financial system work efficiently. Chapter 2 describes the U.S. monetary system, including how it is intertwined with the capital formation process and how it has evolved. Current types of money are described, and we discuss why it is important to control the growth of the money supply. In following chapters, we turn our attention to understanding how financial institutions, policy makers, and international developments influence how the financial system functions.

How This Chapter Applies to Me . . .

While it is impossible to predict what life has in store for each of us in terms of health, family, and career, everyone can be a productive member of society. Nearly all of us will take part in making social, political, and economic decisions. A basic understanding of the financial environment that encompasses economic and financial systems will help you in making informed economic choices.

Let us begin with the following quote by George Santayana, a U.S. philosopher and poet:

Those who cannot remember the past are condemned to repeat it.¹

While this quotation refers to the need to know something about history so individuals can avoid repeating bad social, political, and economic decisions, it is equally important to the field of finance. All individuals have the responsibility to be able to make informed public choices involving the financial environment. By understanding the financial environment and studying the financial system, institutions and markets, investments, and financial management, individuals will be able to make informed economic and financial choices that will lead to better financial health and success. After studying the materials in this book, you will be better informed in making choices that affect the economy and the financial system, as well as be better prepared for a business career, possibly one in the field of finance.

1. George Santayana, *Reason in Common Sense, The Life of Reason*, Vol. 1 (Charles Scribner's Sons, 1905), p. 284.

HOW HAS THE FINANCIAL ENVIRONMENT CHANGED?

The first twelve years of the twenty-first century have been a difficult time in the United States and worldwide. Whereas the 1990s decade was a period of economic growth and prosperity, the early part of the twenty-first century has been characterized by economic and financial markets volatility along with many individuals “treading water” in trying to maintain the standards of living they had achieved.

A price bubble for technology stocks, including so-called dot.com start-ups, burst in the United States in 2000. An economic downturn followed and was exacerbated by the September 11, 2001 terrorist attack. Economic recovery occurred over several years until the housing price bubble burst in 2006 and housing values declined. Securities tied to housing prices declined causing concerns that “over-borrowed” financial institutions might fail because they held insufficient equity capital resources to cover the decline in values of the home mortgages and housing-related debt securities they held. This led to the 2007–2008 financial crisis. A major economic recession (sometimes called the Great Recession) began in early 2008 and continued through mid-2009 and turned out to be the deepest and longest recession since the Great Depression of the 1930s. Unemployment rates exceeded 10 percent in 2009 and remained above the 7 percent level as of the end of 2012.

The health of economies, financial institutions, and markets are linked throughout the world. European and other major foreign financial institutions were caught in the 2007–2008 financial crisis and most foreign economies suffered economic downturns near the end of the 2000s decade. Even China, which had been growing its economy at a double-digit rate during the decade of the 2000s, had a slowing economic activity during the past couple of years. This has worldwide implications since many developed and developing economies are tied to demand for natural resources and other products by Chinese firms.

We believe the analysis and understanding of past developments in economic activity and financial markets is useful to governments, businesses, and individuals in planning their futures. By learning from the past, we may be able to avoid, or mediate, similar pitfalls in the future.

WHAT IS FINANCE?

Finance is the study of how individuals, institutions, governments, and businesses acquire, spend, and manage money and other financial assets. Understanding finance is important to all students regardless of the discipline or area of study because nearly all business and economic decisions have financial implications. The decision to spend or consume (for new clothes or dinner at a fancy restaurant) rather than save or invest (for spending or consuming more in the future) is an everyday decision that we face.

The **financial environment** encompasses the financial system, institutions or intermediaries (we will use these terms interchangeably throughout this text), financial markets, business firms, individuals, and global interactions that contribute to an efficiently operating economy. Figure 1.1 depicts the three areas of finance within the financial environment: institutions and markets, investments, and financial management. Though we identify three distinct finance areas, these areas do not operate in isolation but rather interact or intersect with each other. Our focus in this book is to provide the reader with exposure to all three areas, as well as to show how they are integrated. Of course, students pursuing a major or area of emphasis in finance will take multiple courses in one or more of these areas.

Financial institutions are organizations or intermediaries that help the financial system operate efficiently and transfer funds from savers and investors to individuals, businesses, and governments that seek to spend or invest the funds in physical assets (inventories, buildings, and equipment). **Financial markets** are physical locations or electronic forums that facilitate the flow of funds among investors, businesses, and governments. **Investments** involve the sale or marketing of securities, the analysis of securities, and the management of investment risk through portfolio diversification. **Financial management** involves financial planning, asset management, and fund-raising decisions to enhance the value of businesses.

Finance has its origins in economics and accounting. Economists use a supply and demand framework to explain how the prices and quantities of goods and services are determined in a free-market economic system. Accountants provide the record-keeping mechanism for showing

finance

study of how individuals, institutions, governments, and businesses acquire, spend, and manage money and other financial assets

financial environment

financial system, institutions or intermediaries, financial markets, business firms, individuals, and global interactions that contribute to an efficiently operating economy

financial institutions

organizations or intermediaries that help the financial system operate efficiently and transfer funds from savers and investors to individuals, businesses, and governments that seek to spend or invest the funds in physical assets

financial markets

physical locations or electronic forums that facilitate the flow of funds among investors, businesses, and governments

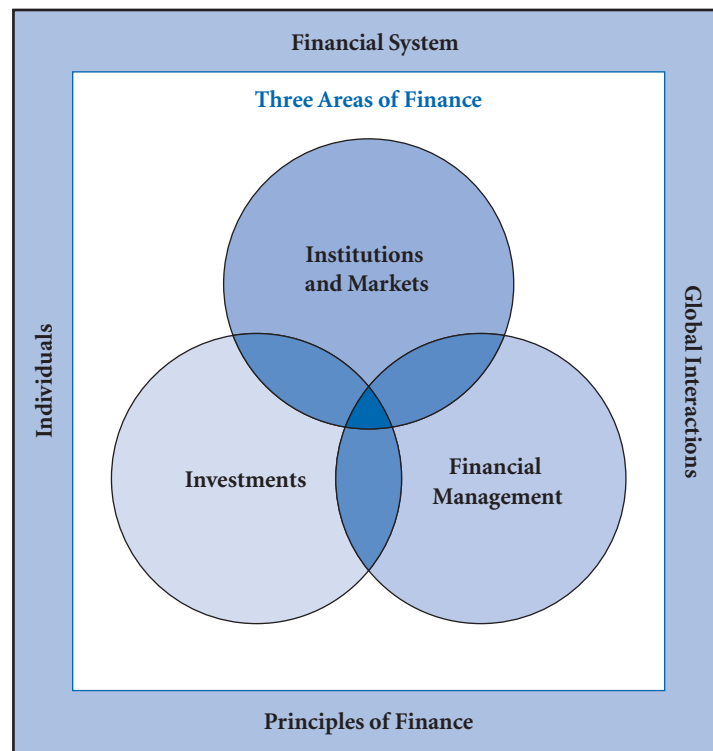
investments

involve the sale or marketing of securities, the analysis of securities, and the management of investment risk through portfolio diversification

financial management

involves financial planning, asset management, and fund-raising decisions to enhance the value of businesses

FIGURE I.1
Graphic Illustration of the Financial Environment



ownership of the financial instruments used in the flow of financial funds between savers and borrowers. Accountants record revenues, expenses, and profitability of organizations that produce and exchange goods and services.

Efficient methods of production and specialization of labor can exist if there is an effective means of paying for raw materials and final products. Businesses can obtain the money needed to buy capital goods such as machinery and equipment only if a mechanism has been established for making savings available for investment. Similarly, federal and other governmental units, such as state and local governments and tax districts, can carry out their wide range of activities if efficient means exist for raising money, for making payments, and for borrowing.

Financial institutions, financial markets, and investment and financial management are crucial elements of the financial environment and well-developed financial systems. Financial institutions are intermediaries, such as banks, insurance companies, and investment companies that engage in financial activities to aid the flow of funds from savers to borrowers or investors.

Financial markets provide the mechanism for allocating financial resources or funds from savers to borrowers. Individuals make decisions as investors and financial managers. Investors include savers and lenders as well as equity investors.

While we are focusing on financial managers in this book, we recognize that individuals must be continuously involved in managing their personal finances. Investment management involves making decisions relating to issuing and investing in stocks and bonds. Financial management in business involves making decisions relating to the efficient use of financial resources in the production and sale of goods and services. The goal of the financial manager in a profit-seeking organization is to maximize the owners' wealth. This is accomplished through effective financial planning and analysis, asset management, and the acquisition of financial capital. Financial managers in not-for-profit organizations aim to provide a desired level of services at acceptable costs and perform the same financial management functions as their for-profit counterparts.

entrepreneurial finance

study of how growth-driven, performance-focused, early-stage firms raise financial capital and manage their operations and assets

personal finance

study of how individuals prepare for financial emergencies, protect against premature death and the loss of property, and accumulate wealth over time

**CONCEPT CHECK**

What are the three areas of finance?

What two finance themes are carried throughout this book?

**INTERNET ACTIVITY**

Go to the Small Business Administration Web site, <http://www.sba.gov>, and explore what is involved in deciding whether to start a new business.

TWO THEMES

As we progress through this book, we offer two themes within the financial institutions and markets, investments, and financial management topic areas. In each chapter, we provide boxed materials relating to small business practice and personal financial planning. Successful businesses typically progress through a series of life cycle stages from the idea stage to exiting the business. More specifically, the successful business typically moves through five stages: development stage, startup stage, survival stage, rapid growth stage, and maturity stage. Individuals who choose to become small business owners do so for a number of different reasons. Some small business owners focus on salary replacement opportunities where they seek income levels comparable to what they could have earned by working for much larger firms. Other individuals pursue lifestyle small business opportunities where they get paid for doing things they like to do. Entrepreneurs seek to own and run businesses that stress high growth rates in sales, profits, and cash flows.

Entrepreneurial finance is the study of how growth-driven, performance-focused, early-stage (from development through early rapid growth) firms raise financial capital and manage their operations and assets. Our small business practice boxes focus on operational and financial issues faced by early-stage firms. **Personal finance** is the study of how individuals prepare for financial emergencies, protect against premature death and the loss of property, and accumulate wealth over time. Our personal financial planning boxes focus on planning decisions made by individuals in regards to saving and investing their financial resources.

WHY STUDY FINANCE?

There are several reasons to study finance. Knowledge of the basics of finance covered in this text should help you make informed: economic decisions, personal and business investment decisions, and career decisions.

1. To make informed economic decisions.

As we will see, the operation of the financial system and the performance of the economy are influenced by policy makers. Individuals elect many of these policy makers in the United States, such as the president and members of Congress. Since these elected officials have the power to alter the financial system by creating laws and since their decisions can influence economic activity, individuals must be informed when making political and economic choices. Do you want a balanced budget, lower taxes, free international trade, low inflation, and full employment? Whatever your financial and economic goals may be, you need to be an informed participant if you wish to make a difference. Every individual should attain a basic understanding of finance as it applies to the financial system. Part 1 of this book focuses on understanding the roles of financial institutions and markets and how the financial system works.

**SMALL BUSINESS PRACTICE***Importance of Small Firms in the U.S. Economy*

As the U.S. economy moved from the industrial age to the information age, dramatic changes occurred in the importance of small businesses. As large firms with five hundred or more employees continued to downsize and restructure throughout the 1990s and into the twenty-first century, small firms provided the impetus for economic growth.

During the mid-1970s through the 1980s period, firms with fewer than five hundred employees provided over half of total employment and nearly two-thirds of the net new jobs in the United States. Small firms provided most of the net new jobs during the 1990s. And, while the decade of the 2000s involved a housing price collapse, a major financial crisis, and economic recession, small firms continued to be the primary supplier of new jobs.

Why have small firms been so successful in creating new jobs? A U.S. Small Business Administration (SBA) white paper suggests two reasons. First, small firms provide a crucial role in technological change and productivity growth. Market economies change rapidly, and small firms can adjust quickly. Second, small firms provide the mechanism and incentive for millions of individuals to pursue the opportunity for economic success.

Others may argue that entrepreneurial spirit and activity account for the importance of small firms in the U.S. economy. Whatever the reasons, the ongoing growth of small businesses continues to be an important stimulus to the economy in the early years of the twenty-first century.

For current statistics, visit the SBA Office of Advocacy Web site at <http://www.sba.gov/advo>.



CONCEPT CHECK

Give three reasons for studying finance.



INTERNET ACTIVITY

Go to The Wall Street Journal Web site section at <http://www.careerjournal.com>, and find information relating to job hunting.

2. To make informed personal and business investment decisions.

An understanding of finance should help you better understand how the institution, government unit, or business that you work for finances its operations. At a personal level, the understanding of investments will enable you to better manage your financial resources and provide the basis for making sound decisions for accumulating wealth over time. Thus, in addition to understanding finance basics relating to the financial system and the economy, you need to develop an understanding of the factors that influence interest rates and security prices. Part 2 of this book focuses on understanding the characteristics of stocks and bonds and how they are valued, securities markets, and how to make risk-versus-return investment decisions.

3. To make informed career decisions based on a basic understanding of business finance.

Even if your business interest is in a nonfinance career or professional activity, you will likely need to interact with finance professionals within and outside your firm or organization. Doing so will require a basic knowledge of the concepts, tools, and applications of financial management. Part 3 of this book focuses on providing you with an understanding of how finance is applied within a firm by focusing on decision making by financial managers.

Of course, you may be interested in pursuing a career in finance or at least want to know what people who work in finance do. Throughout this text, you will find discussions of career opportunities in finance as well as a boxed feature entitled Career Opportunities in Finance.

CAREERS IN FINANCE

Career opportunities in finance are available in financial management, depository financial institutions, contractual savings and real property organizations, and securities markets and investment firms. While you may aspire to own your own business or to be a chief executive officer (CEO) or chief financial officer (CFO) in a major corporation, most of us must begin our careers in an entry-level position. Following are four ways to get started in a finance career.

1. Financial management

Larger businesses or corporations divide their finance activities into treasury and control functions, whereas smaller firms often combine these functions. The treasurer is responsible for managing the firm's cash, acquiring and managing the firm's assets, and selling stocks and bonds to raise the financial capital necessary to conduct business. The controller is responsible for cost accounting, financial accounting, and tax record-keeping activities. Entry-level career opportunities include the following:

- *Cash management analyst* involves monitoring and managing the firm's day-to-day cash inflows and outflows
- *Capital expenditures analyst* involves estimating cash flows and evaluating asset investment opportunities
- *Credit analyst* involves evaluating credit applications and collecting amounts owed by credit customers
- *Financial analyst* involves evaluating financial performance and preparing financial plans
- *Cost analyst* involves comparing actual operations against budgeted operations
- *Tax analyst* involves preparing financial statements for tax purposes

2. Depository financial institutions

Banks and other depository institutions offer the opportunity to start a finance career in consumer or commercial lending. Banks hold and manage trust funds for individuals and other organizations. Entry-level career opportunities include the following:

- *Loan analyst* involves evaluating consumer and/or commercial loan applications
- *Bank teller* involves assisting customers with their day-to-day checking and banking transactions
- *Investments research analyst* involves conducting research on investment opportunities for a bank trust department

3. Contractual savings and real property organizations

Insurance companies, pension funds, and real estate firms provide opportunities for starting a career in finance. These institutions need various employees willing to blend marketing or selling efforts with financial expertise. Entry-level career opportunities include the following:

- *Insurance agent (broker)* involves selling insurance to individuals and businesses and participating in the processing of claims
- *Research analyst* involves analyzing the investment potential of real property and securities for pension fund holdings
- *Real estate agent (broker)* involves marketing and selling or leasing residential or commercial property
- *Mortgage analyst* involves analyzing real estate loan applications and assisting in the arranging of mortgage financing

4. Securities markets and investment firms

Securities firms and various investment-related businesses provide opportunities to start a finance career in the investments area. Opportunities include buying and selling seasoned securities, analyzing securities for investment potential, marketing new securities issues, and helping individuals plan and manage their personal financial resources. Entry-level career opportunities include the following:

- *Stockbroker (account executive)* involves assisting clients in purchasing stocks and bonds and building investment wealth
- *Security analyst* involves analyzing and making recommendations on the investment potential of specific securities
- *Investment banking analyst* involves conducting financial analysis and valuation of new securities being issued
- *Financial planner assistant* involves analyzing individual client insurance needs and investment plans to meet retirement goals

While we have focused on entry-level careers in profit-motivated businesses and financial organizations, careers in finance are available in government or not-for-profit organizations. Finance opportunities at the federal or state government levels include managing cash funds, making asset expenditure decisions, and issuing debt securities to raise funds. Hospitals and other not-for-profit organizations also need expert financial managers to manage assets, control costs, and obtain funds. Government units and not-for-profit organizations hire financial and other analysts to perform these tasks.

All of these entry-level finance job opportunities can be found in the international setting. For example, many businesses engaged in producing and marketing products and services in foreign markets often offer employees opportunities for international job assignments. Large U.S. banks offer international job experiences through their foreign banking operations. Furthermore, since worldwide securities markets exist, securities analysts and financial planners often must analyze and visit foreign-based firms.



CAREER OPPORTUNITIES IN FINANCE

You Are Likely to Have More than One Business Career

Students are advised to prepare for several business careers during their working lifetimes. Corporate America continues to restructure and reinvent itself. At the same time, new industries associated with the information age are developing, and old industries are dropping by the wayside. These developments mean you will have more opportunities for multiple business careers.

Graduates of Harvard University are periodically surveyed concerning their work experiences and careers. Responses to one survey of individuals twenty-five years after graduation found that over half had

worked for four or more employers, and one-fourth had been fired or, in kinder terms, “involuntarily terminated”. Over half of the men and women respondents had had at least two substantially different careers, and in many instances significant retraining was required.

Remember as you read this book that even if you do not plan on a career in finance, learning about finance might become important to you in your working lifetime. No matter where your business career takes you, you will always need to know and understand your personal finances.