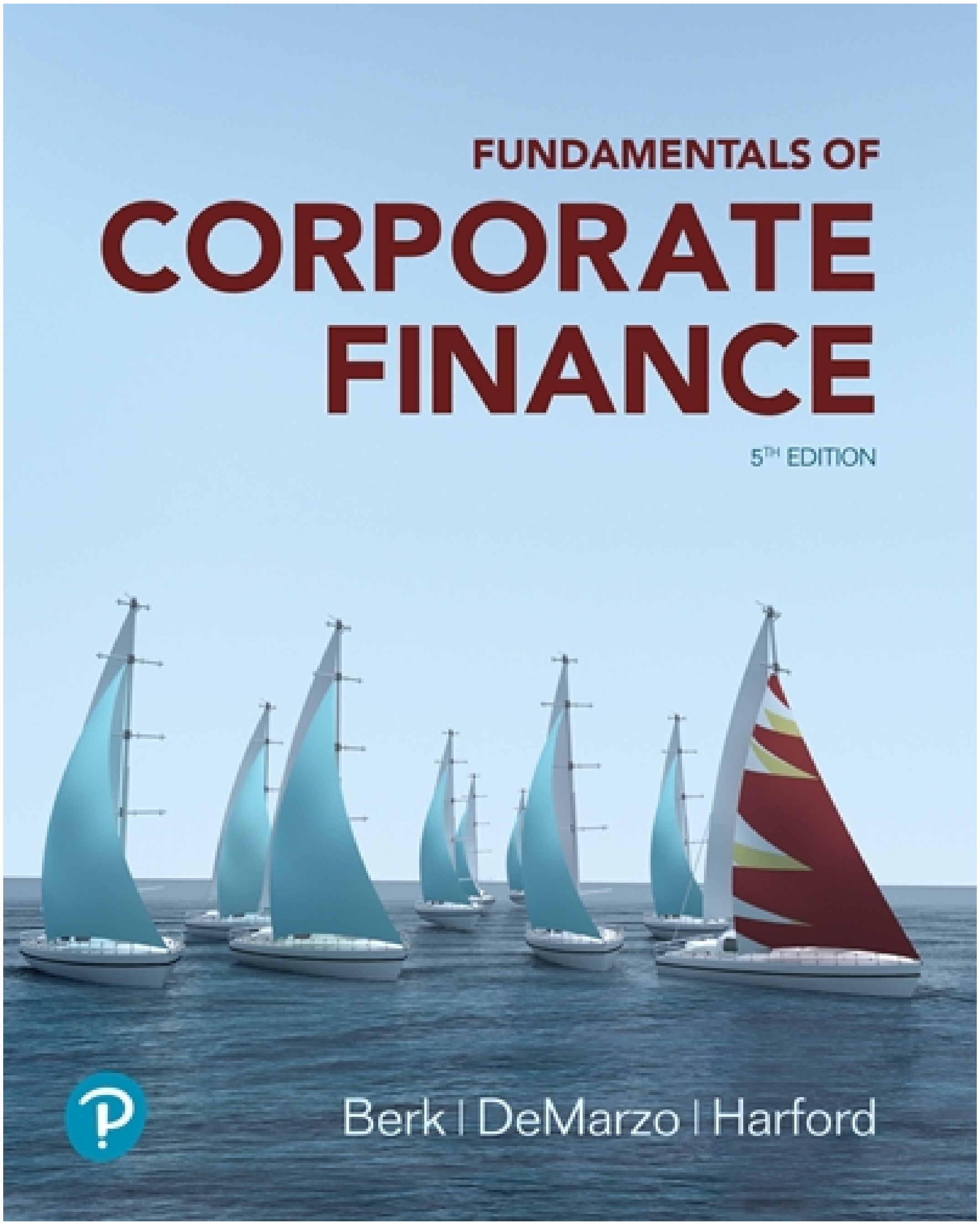
Solutions for Fundamentals of Corporate Finance 5th Edition by Berk



Solutions

Instructor's Solutions Manual

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Fundamentals of Corporate Finance

Fifth Edition

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Pearson

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Preface

This Solutions Manual contains the solutions to the end-of-chapter problems in Chapters 1–23 in the textbook.

Whether you are teaching the corporate finance course for the first time or are an experienced teacher at this level, we hope you will find this manual helpful.

The following features are available for download under the Solutions Manual listing on the Instructor's Resource Center online at www.pearsonhighered.com/irc:

Solutions to the Problems for Chapters 1–23: The solutions that appear in this Solutions Manual are provided.

Excel Solutions to the Problems for Chapters 1–23: Solutions that are available with Excel templates for instructors and students are provided.

Excel Solutions marked with an Excel icon indicate **Excel Projects** problems available in MyLab Finance.

■ Additional Resources for Instructors

In addition to the Solutions Manual, the following supplements are available on the Instructor's Resource Center online at www.pearsonhighered.com/irc, unless otherwise noted:

- *Instructor's Manual:* The Instructor's Manual contains annotated chapter outlines, lecture launchers, and questions for further class discussion. It also contains the solutions to the Data Cases and Integrative Case problems, as well as answers to the chapter ending Critical Thinking questions in the book. As an additional resource to guide instructors with students who are planning to take the CFA exam, CFA learning outcomes met in each chapter are listed. A section also details how the end-of-chapter problems map to the accreditation standards set by the Association to Advance Collegiate Schools of Business (AACSB), so that instructors can track students' mastery of the AACSB standards.
- *MyLab Finance®:* This fully integrated online homework system gives students the hands-on practice and tutorial help they need to learn finance efficiently. Ample opportunities for online practice and assessment in MyLab Finance® (www.myfinancelab.com) are seamlessly integrated into each chapter and organized by section within the chapter summaries.
- *Videos:* Video clips available in MyLab Finance® profile well-known firms such as Boeing and Intel through interviews and analysis. The videos focus on core topical areas such as capital budgeting and risk and return.
- *PowerPoint® Presentation:* The PowerPoint® Presentation includes figures and tables from the book along with additional examples of key concepts.
- *Test Bank:* The Test Bank provides a wealth of accuracy-verified testing material. Each chapter offers a wide variety of true/false, short answer, and multiple-choice questions.
- *Computerized Test Bank:* Every question in the Test Bank is also available in TestGen® software. This easy-to-use software is a valuable test preparation tool that allows professors to view, edit, and add questions.

Contents

Chapter 1
Corporate Finance and the Financial Manager

Note: All problems in this chapter are available in MyFinanceLab.

1. A corporation is a legal entity separate from its owners. This means ownership shares in the corporation can be freely traded. None of the other organizational forms share this characteristic.

2. Owners' liability is limited to the amount they invested in the firm. Stockholders are not responsible for any encumbrances of the firm; in particular, they cannot be required to pay back any debts incurred by the firm.

3. Corporations and limited liability companies give their owners limited liability. Limited partnerships provide limited liability for the limited partners, but not for the general partners.

4. Advantages: Limited liability, liquidity, infinite life
   Disadvantages: Double taxation, separation of ownership and control

5. C corporations must pay corporate income taxes; S corporations do not pay corporate taxes but must pass on the income to shareholders to whom it is taxable. S corporations are also limited to 75 shareholders and cannot have corporate or foreign stockholders.

6. First, the corporation pays the taxes. After taxes, $\$2 \times (1 - 0.25) = \$1.50$ is left to pay dividends. Once the dividend is paid, personal tax on this must be paid, leaving $\$1.50 \times (1 - 0.2) = \$1.20$. So after all the taxes are paid, you are left with \$1.20.

7. An S corporation does not pay corporate income tax, so it distributes \$2 to its stockholders. These stockholders must then pay personal income tax on the distribution. Thus, they are left with $\$2 \times (1 - 0.2) = \$1.60$.

8. The investment decision is the most important decision that a financial manager makes because the manager must decide how to put the owners' money to its best use.

9. The goal of maximizing shareholder wealth is agreed upon by all shareholders because all shareholders are better off when this goal is achieved.

10. Shareholders can

a. ensure that employees are paid with company stock and/or stock options;
b. ensure that underperforming managers are fired;
c. write contracts that ensure that the interests of the managers and shareholders are closely aligned; and/or
d. mount hostile takeovers.

11. When your parents pay for the meal, you benefit from the food but do not take on the cost of the food. This is similar to the agency problem in corporations; managers can benefit from taking actions in their own personal interests using money that belongs to shareholders.

12. The agent (renter) will not take the same care of the apartment as the principal (owner) because the renter does not share in the costs of fixing damage to the apartment. To mitigate this problem, having the renter pay a deposit would motivate the renter to keep damages to a minimum. The deposit forces the renter to share in the costs of fixing any problems that are caused by the renter.

13. There is an ethical dilemma when the CEO of a firm has opposite incentives to those of the shareholders. In this case, you (as the CEO) potentially have an incentive to overpay for another company (which would be damaging to your shareholders) because your pay and prestige will improve.

14. No—it will not necessarily make the shareholders better off. Even though you are reducing costs, which could increase cash flows in the short-term, you will deal with more costly warranty issues and with lost reputation with your customers, potentially leading them to buy from your competitors, which would reduce cash flows in the long-run. Making a less expensive, but lower quality product is NOT the same as maximizing the value of the shares (making your shareholders better off).

15. No—it will not necessarily make the shareholders better off. Even though you are reducing costs, which could increase cash flows in the short term, you will deal with more costly warranty issues and with lost reputation with your customers, potentially leading them to buy from your competitors, which would reduce cash flows in the long run. Making a less expensive, but lower quality product is NOT the same as maximizing the value of the shares (making your shareholders better off).

16. The shares of a public corporation are traded on an exchange (or “over the counter” in an electronic trading system), while the shares of a private corporation are not traded on a public exchange.

17. A primary market is where the company sells shares of itself to investors. The secondary market is where investors can buy and/or sell the company’s shares with other investors (but not the company itself).

18. A limit order specifies a price at which you are willing to buy or sell. It will be executed when there is demand or supply at that price. A market order is executed immediately at the best outstanding limit order. For example, a market buy order will be immediately executed against the best limit ask price.

19. Investors always buy at the ask and sell at the bid. Because ask prices always exceed bid prices, investors “lose” this difference. It is one of the costs of transacting. Because the market makers take the other side of the trade, they make up this difference.

20. Using a dark pool allows traders not to reveal their intentions because limit order books are not visible. In addition, using a dark pool allows traders to potentially trade at a better price. However, dark pools sacrifice the guarantee of immediacy because an order may not be filled.

21. You would need to pay the ask price to buy Apple. That price is $248.87 per share. If you sold, you would receive the bid price: $248.91 per share.

22. The financial cycle describes how money flows from savers to companies and back. In the financial cycle, (1) people invest and save their money; (2) that money, through loans and stock, flows to companies that use it to fund growth through new products, generating profits and wages; and (3) the money then flows back to the savers and investors.

23. Insurance companies essentially pool premiums together from policyholders and pay the claims of those who have an accident, fire, medical need, or die. This process spreads the financial risk of these events out across a large pool of policyholders and the investors in the insurance company. Similarly, mutual funds and pension funds take your savings and spread them out among the stocks and bonds of many different companies, limiting your risk exposure to any one company.

24. Investment banking refers to the business of advising companies in major financial transactions. Examples include buying and selling companies or divisions, and raising new capital by issuing stock or bonds.

25. Mutual, pension, and hedge funds all pool together money and invest it on behalf of the investors in the fund. They differ in terms of who invests in the fund and what the primary objective is. Mutual and pension funds are most similar except that pension funds are investing retirement savings invested through the workplace with the objective of providing retirement income for those employees. Hedge funds are only open to investments by wealthy individuals and endowments. They invest across all asset categories, usually seeking low-risk investment strategies that will generate high returns.

Chapter 1
Corporate Finance and the Financial Manager

■ Chapter Overview

Organizations, regardless of their form or goals, have one thing in common—they will need to make financial decisions, and each organization will have a financial manager contributing to those decisions. These decisions are tied to one very powerful concept, the Valuation Principle, an ongoing theme throughout this text. In this chapter, students are introduced to the different types of firms, noting global differences in the choice of the organizational format. Chapter 1 examines the functions of the financial manager and his or her role on the management team. The importance of a skillful and ethical financial manager cannot be overemphasized, so much so that the chapter details the major decisions faced by a financial manager. Poorly managed companies are targets for takeovers, and stockholders are no longer uninformed or passive. Because stock prices are impacted by decisions made by financial managers, an introduction to the traditional and nontraditional trading venues of the twenty-first century as well as the mechanics of trading are provided. The chapter concludes with a discussion of the importance of financial institutions and their role in very complex, tech savvy world.

■ Chapter Outline

Introduction

1.1 Why Study Finance?

1.2 The Four Types of Firms
Sole Proprietorships
Partnerships
Limited Liability Companies
Corporations
—Formation of a Corporation
—Ownership of a Corporation
Tax Implications for Corporate Entities
- *Example 1.1:* Taxation of Corporate Earnings

—S Corporations
- *Example 1.2:* Taxation of S Corporation Earnings

—C Corporations

1.3 The Financial Manager
- Making Investment Decisions
- Making Financing Decisions
- Managing Short-Term Cash Needs
- The Goal of the Financial Manager

1.4 The Financial Manager's Place in the Corporation
- The Corporate Management Team
- Ethics and Incentives in Corporations
- —Agency Problems
- —The CEO's Performance

1.5 The Stock Market
- The Largest Stock Markets
- Primary Versus Secondary Markets
- Traditional Trading Venues
- • Interview with Frank Hatheway, Chief Economist and Senior Vice President for Nasdaq
- New Competition and Market Changes
- Dark Pools
- Listing Standards
- Other Financial Markets

1.6 Financial Institutions
- The Financial Cycle
- Types of Financial Institutions
- Role of Financial Institutions

■ Learning Objectives

- Grasp the importance of financial information in both your personal and business lives
- Understand the important features of the four main types of firms and see why the advantages of the corporate form have led it to dominate economic activity
- Explain the goal of the financial manager and the reasoning behind that goal, as well as understand the three main types of decisions a financial manager makes
- Know how a corporation is managed and controlled, the financial manager's place in it, and some of the ethical issues financial managers face
- Understand the importance of financial markets, such as stock markets, to a corporation and the financial manager's role as liaison to those markets
- Recognize the role of that financial institutions play in the financial cycle of the economy

CFA Core Curriculum Topics

The following table shows which CFA learning outcomes are covered in the chapter and points to the specific topic covered by the material.

CFA Core Curriculum Topic	Chapter Section	
Ethical Practices and Professional Standards	1.4	The Financial Manager's Place in the Corporation
Financial Reporting and Analysis	1.2	The Four Types of Firms
	1.3	The Financial Manager
	1.4	The Financial Manager's Place in the Corporation
	1.6	Financial Institutions
Corporate Governance	1.4	The Financial Manager's Place in the Corporation
Equity Investments	1.5	The Stock Market
Economics	1.6	Financial Institutions
Analysis of Taxes	1.2	The Four Types of Firms

Lecture Launchers

1. A student recently graduated from a prestigious university with a marketing degree. She spent her last year as an intern in her major. To her dismay, she discovered that it would be at least 10 years before she would be allowed to do the work in her target field of advertising. Her decision: graduate and take a job as a bartender until she figures out what she wants to do. Ask the students what they think about her decision. Is she being realistic? Did she decide that her career goal was not worth 10 years of her life, that the benefits did not justify the costs? Is there a way to quantify her decision? What are ways for her to determine the financial impact of her decision?

2. Read aloud the following sentence from Section 1.1 of the chapter: "Our career paths have become less predictable and more dynamic." Ask the students what this sentence implies and what its implication is for their lives and goals. How does this affect their financial futures, and how might they plan and prepare for such uncertainty?

3. Was "financial ignorance" a driving force behind the collapse of the housing markets? During the last two years, many students found themselves in a role reversal: taking extra jobs to help out their unemployed parents or to help make mortgage payments that were no longer affordable by their parents.

4. It is important for students to realize that finance is so much more than the study of financial markets. To those outside the industry, finance and investment seem synonymous, while in reality investment is one small subset of the field of finance. To appreciate the variety of careers available in finance and the myriad of ways it is used across industries, have students research and then present in class nontraditional and nonpedestrian examples of careers in finance. For example, most opera companies have a financial officer.

5. Before students take the introductory finance course, they have taken accounting and a basic introduction to business class. Thus, they should have some idea, right or wrong, of what finance is. Ask them to explain what they think finance is as if they were explaining it to their grandparents, younger siblings, or people who have no idea of what the field is—literally breaking it down to its basics so that a "child" could understand it. The answers can be very surprising, particularly from some of the international students.

6. Ask how many students own, or intend to own, stock. (You usually get a few hands.) Do they (or will they) feel any responsibility toward the company in which they have invested? Do they (or will they) follow it in the financial news? Do they plan on keeping abreast of how well the company is run or even the identities and expertise of the managers/board members? Why not? Bring to the attention of the class any imbalances between male/female stockholders and, perhaps, note cultural imbalances as well.

7. Do you think of the field of finance as ethical compared to other fields, like marketing, accounting, engineering, or even architecture?

■ Questions for Further Class Discussion

1. Very knowledgeable and experienced people in finance know the Valuation Principle, and yet mistakes are made, both on a personal and corporate level, as people still make the wrong decisions. Why?

2. Is it easy to distinguish between a benefit and a cost? What benefit today could be a cost tomorrow?

3. Ask students what the state of Delaware (if you aren't in Delaware) offers that your state does not in terms of the legal environment for incorporation. Either in class or as homework, have students use the Internet to find the chartering requirements for Delaware and the state in which the class is located to help answer this question.

4. Given the liability of sole proprietorships and the protection of corporations, why is the number of sole proprietorships so high?

5. Limited partnerships are very popular in the entertainment industry. Why?

6. We all have rights and responsibilities as individuals. The Supreme Court ruling in the nineteenth century gave similar rights to corporations. What rights do you and corporations have in common, and how do your rights and responsibilities differ?

7. How important is the stockholder to the economic success of the United States? How has this changed now that the Internet has literally made borders disappear?

8. Discuss compensation for managers. Many students will be managers one day, regardless of their major. Can they think of an example where their interests and the interest of the corporation will not coincide? What are their options in this situation?

9. Merrill Lynch executives gave themselves very large bonuses despite the bankruptcy declaration that amounted to millions. Do you really believe that the Dodd Frank Act can keep this from happening again?

10. Few hierarchal management systems are in place these days. Most corporations have teams. Making a decision that is best for the company is one thing when only you are affected, but what happens when you realize that doing what is ethical may cost your team in compensation?

11. Thinking back over what you have read in the newspapers or seen on television, what are some very bad investment decisions made by financial managers both in the private and public sectors? Why were these mistakes made?

12. Working capital will be discussed later, but what is it exactly, and why is it so important to the financial manager?

13. Who would you rather be: chairman of the board, the CEO, or CFO? Why?

14. Why do you think the New York Stock Exchange is still the largest in the world? How long do you think it will continue to be the largest? Will all exchanges eventually go the way of Nasdaq—no physical location, just technology?

■ AACSB Learning Standards

This section details how the end-of-chapter problems correlate to the general knowledge and skill guidelines in the accreditation standards, as set by the Association to Advance Collegiate Schools of Business (AACSB).

AACSB Learning Standards	End-of-Chapter Problem
Analytical Thinking	Problems 1, 9, 10, 15, 20, 22
Ethical Understanding and Reasoning	Problems 10–15
Information Technology	Problem 18, 21

■ End-of-Chapter Problem Complexity Rating

The end-of-chapter problems are sorted below, according to their level of complexity.

Simple	Average	Complex
2–4, 8, 16, 17, 21	1, 5–7, 9, 10, 18, 19, 21–24	11–15, 20, 25

■ Spreadsheet Solutions in Excel

The following problems for Chapter 1 are available as Excel Project problems in MyLab at www.pearson.com/mylab/finance with Excel spreadsheets.

Problems: None

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Contents

Preface

This Instructor's Resource Manual contains teaching aids and solutions to the critical thinking questions, data cases, and integrative cases in the textbook, as well as relevant information for accreditation and CFA certification.

Whether you are teaching the corporate finance course for the first time or are an experienced teacher at this level, we hope you will find this manual helpful.

Each chapter in the manual contains the following features:

Chapter Overview: The chapter overview provides a summary of the chapter at a glance, emphasizing connections between chapters and approaches unique to this text.

Chapter Outline: For each chapter, a complete topical outline, inclusive of examples supporting the topic, is provided. Use it to prepare your lecture notes or to confirm whether a certain topic is covered in the chapter.

Learning Objectives: A list of the student learning goals, as provided at the beginning of each text chapter, is provided in this Instructor's Resource Manual.

Lecture Launchers: Each chapter of the Instructor's Resource Manual contains Lecture Launchers—suggestions for creative ways to introduce a chapter. They are intended to capture the students' attention by being fun, different, or to simply ease their way into a chapter by reviewing a previous topic upon which the new chapter will build.

Questions for Further Class Discussion: Each chapter of the Instructor's Resource Manual contains questions instructors can use to guide the class toward a deeper discussion of a topic.

End-of-Chapter Problem Complexity Rating: Each end-of-chapter problem in the book is assigned a rating of simple, average, or complex. These complexity ratings will prove particularly helpful if the instructor wishes to vary the difficulty of the problems assigned as homework.

Answers to the Critical Thinking Questions: Answers to the critical thinking questions are provided at the end of each chapter. These questions encourage students to think about they have just read. They give instructors and students a way to gauge how well the material has been assimilated.

■ The Association to Advance Collegiate Schools of Business (AACSB)

For each chapter, the book's end-of-chapter problems have been correlated to the general knowledge and skill guidelines found in the most current Association to Advance Collegiate Schools of Business (AACSB) standards. This feature allows instructors to track students' mastery of the AACSB standards.

The AACSB is a not-for-profit corporation of educational institutions, corporations, and other organizations devoted to the promotion and improvement of higher education in business administration and management. A collegiate institution offering a bachelor's, master's, or doctoral degree program in business administration or accounting may volunteer for AACSB accreditation review. The AACSB makes initial accreditation decisions and conducts periodic reviews to promote continuous quality improvement in management education. Pearson is a proud member of the AACSB.

CFA Topic Areas

For students who are seeking a career in finance and plan to sit for the CFA Level I certification exam, we have linked pertinent sections of each chapter to the Level I Topic Areas from the materials provided by the CFA Institute. With these annotated CFA Topic Areas, the textbook will be a valuable addition to the materials provided by the Institute. Each topic is tied directly to its corresponding chapter section, reducing the need to search the entire chapter or textbook for support information.

Additional Resources for Instructors

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