

Study Guide

for use with

Brealey

Myers

Marcus

Fundamentals of Corporate Finance

Third Edition

Prepared by
Matthew Will

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for use with
**Fundamentals of
Corporate Finance**

Third Edition

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FUNDAMENTALS OF CORPORATE FINANCE
Richard A. Brealey, Stewart C. Myers, Alan J. Marcus

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PREFACE

The book you are using, Fundamentals of Corporate Finance, is by far one of the best textbooks you will encounter as a student of finance. Brealey, Myers and Marcus represent three of the top minds in finance. While each has a depth and specialty that sets himself apart from his peers, a more important trait may be the breadth of the knowledge each has in the field of finance. As a student of finance you are less concerned with the minutia of specific topics, than you are with the broad aspects encountered as a practitioner in this rapidly changing and dynamic field.

The supplements offered with Fundamentals of Corporate Finance illustrate the authors' commitment to excellence in topic coverage, both in depth and breadth. This Study Guide compliments the goal of the main authors and attempts to enhance the learning experience of each student. As with the main text, you will notice that the Study Guide is a student centric tool. Each word is designed to improve on the learning experience. After all, the test of a good "textbook" is not merely the thoroughness with which it covers topics, but how well it conveys the meaning of those topics to you, the student.

The format of the Study Guide is purposely created for ease of use. It tracks the outline of each chapter closely and in many ways can be used as a quick reference source. Many students have found that a quick review of the Study Guide before an actual reading of the chapter may improve comprehension. The thinking behind such a suggestion is that the tired old saying "you can't see the forest for the trees" may actually "hold water." The Study Guide paints a broad picture of the topics being covered, as well as introduces many terms and examples. We view this approach as part of an overall learning experience. The textbook, supplemental materials and your professor all combine to provide a comprehensive presentation of the field of finance.

You will quickly notice that each chapter is formatted in the same manner. A brief description of the topics to be covered in the chapter is presented at the beginning. It is relatively light reading designed to acclimate you to the environment in which the topic resides. This is followed by a “checklist.” The checklist helps you organize your thoughts and proceed through the chapter, knowing where emphasis should be placed. Most chapters also provide a list of business information sources. This information is provided in order to help the reader put a face on the material. The biggest concern expressed in academia is “how relevant is this to the real world?” The business information sources will allow you to immediately link the topic you are covering with actual events and situations. The meat of the chapter is the chapter outline. Here you will see the textbook content outlined and summarized for you. Illustrations and formulas are woven throughout the outline in order to make it more comprehensible. A good technique is to periodically return to the chapter outline as you read the book and let it be your guide. After reading the chapter in the textbook you should be able to glance at the outline and fill in relevant content and examples on your own. Hopefully, the outline will seem almost simplistic once a comprehensive review of the chapter is complete. The chapters are concluded with completion questions and problems. The questions focus on concepts, while the problems are primarily numeric. Answers for each are provided at the end of the chapter. These questions and problems supplement the ones in the textbook and provide the user with extra practice.

In the final analysis, users of this Study Guide should find it a wonderful addition to the family of supplements that make up Fundamentals of Corporate Finance by Brealey, Myers and Marcus. The family of supplements and textbook, when taken in their totality, provide an excellent learning experience.

Professional courtesy dictates a concluding note. This Study Guide is the third in hopefully, a long series of supplements for the textbook Fundamentals of Corporate Finance by Brealey, Myers and Marcus. It represents an update and revision of prior editions. Significant credit must be given to the original authors, David R. Durst and Thomas E. Stitzel. The first draft of any manuscript is by far the most rigorous and challenging. It is my sincere desire that this revision be viewed as a worthy successor to their work and that the reader benefits from the changes and additions. As with any written endeavor, the ones closest to you bear the burden of your absence. Ironically, the benefit felt by the mass of readers to the written word is created and compiled in the most solitary of settings.

Biography

Matthew Will is an Instructor of Finance at Johns Hopkins University. He holds a B.S. in Actuarial Sciences and a M.B.A. in Finance, from Indiana University. He previously served as Coordinator of Research at the "Center for Real Estate Studies," based at Indiana University. In addition to his academic experience, Mr. Will has worked in the private sector for both Fortune 500 firms and small regional companies. He currently teaches courses in Corporate Financial Theory, Investments Analysis & Portfolio Management, Advanced Corporate Finance, and Derivative Securities. Mr. Will received the 1997 "Excellence In Teaching Award" from the Johns Hopkins University Business Division, and is co-author of "Innovative Investor" (McGraw Hill publishers), a software/textbook package covering investment and portfolio management topics. Mr. Will's other publications include "Powerpoint Slides" to accompany "Principles of Corporate Finance" by Brealey and Myers. In addition, he is the author of "Questions to Accompany Morningstar StockTools - 1998."

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CHAPTER 1

THE FIRM AND THE FINANCIAL MANAGER

INTRODUCTION

Like most first chapters of textbooks, the authors provide an introduction to the major areas of study and provide a brief overview of the topics and chapters which follow. Having a good overview of the scope of this course is important. One must have this overview or "big picture" because very soon each chapter will focus us on very detailed subjects. With a good understanding that this overview chapter provides, you will be able to see how the detailed chapter fits into the "big picture" of financial management.

This first chapter provides an orientation to the study of financial management or financial decision making. Given a choice or several alternatives in a business decision, which should I choose? The criteria for choosing, or decision criterion used in this text, is the selection of the alternative which produces the highest value or maximizes value. What creates value in business assets or securities? That is a major topic in this course and several chapters focus on valuation theory, or what we and a lot of other people think affects value. We think that the future cash flow returns associated with a business asset or security affect the value as does the timing and variability or riskiness of those cash flows. So 1) cash flows, 2) timing or when the flow occurs, and 3) variability or riskiness of the cash flows receives considerable time and space in a finance class.

The financial manager or financial decision makers in any business have two major decisions: 1) what assets should we invest in, or the investment decision, and 2) how should we finance the assets, or the financing decision. Both decisions affect the value of the business, so several chapters are devoted to each. The capital budgeting chapters focus on tools for making value-creating investment decisions, while other chapters focus on "financing" issues that are thought to impact value creation.

The choice of business organization has an impact upon the future cash flows, risk of the business, and the ability to raise capital. This choice has an impact upon the future value creating ability of the business, and thus it is important to discuss these concepts early.

LEARNING CHECKLIST

The major learning objectives of the chapter are listed below. Look at the list *before* reading the text and study guide chapter and *after*, just before you close the book or study session. Come back here and "check off" if you can discuss or write about the item in the learning objective, if you can tell someone else, in some detail, about the topic mentioned, or if you have done reasonably well in the text or study guide sample test questions related to the topic. In other words, if you can "check off" below, you know the material and are ready to test on it. Then it is time to move on to another topic.

After preparing this chapter, you should be able to:

- ___ 1. List the advantages and disadvantages of the following forms of business organization: sole proprietorship, partnership, and corporation.
- ___ 2. List and briefly discuss the business functions and major decisions associated with the financial manager.
- ___ 3. Explain why, even with many stakeholder interests in a business, shareholder wealth maximization is a reasonable basis for major business decisions.
- ___ 4. Explain what is meant by "agency problems," and how shareholders and boards of directors can provide incentives for managers to work toward shareholder value maximization.

SOURCES OF BUSINESS INFORMATION

Your professor has selected an excellent textbook package for you to learn financial management concepts. Finance is a really exciting subject and the concepts and principles discussed in the text are practiced every day by businesses, investors, governments, and financial markets and institutions. To keep up with this every day excitement, we encourage you to follow the current events of business and finance. While the library is a great, and prepaid source of recent business happenings, a subscription to publications such as The Wall Street Journal (WSJ), Business Week, Fortune, and other business publications is the best way to stay focused on recent business and finance events. In addition, you will learn about conditions in the job market, a hot topic for all business students. If the WSJ form is passed around, consider it an opportunity to see the ideas of this class and your other business courses come alive every day. From major business announcements to personal money management, reading these business publications on a regular basis is one good sign that you are developing a professional attitude and are serious about your future.

In chapters to come, this section is devoted to highlighting a few important business and finance publications, many located in your library and the internet, with which you should be familiar. In the earlier chapters, the important areas of the WSJ are featured along with a number of finance and business web sites that have become popular. Later, important references and periodicals are discussed. Many of you will have assignments beyond this textbook, usually focused on work in the library or the internet. We hope the materials in this

section may be of assistance with those assignments, and for some, help you prepare for a lifelong interest in finance.

CHAPTER OUTLINE, KEY CONCEPTS AND TERMS

I. ORGANIZING A BUSINESS

- A. The choice of business organization affects the risk and the potential return in the form of after-tax cash flows and thus, the value of the business.
- B. Compare and contrast the following business organizational forms by:
1. The exposure or risks of personal assets from a business venture--limited or unlimited liability.
 2. The ease and cost of organization and maintenance of the business organization.
 3. The expected life of the business under each form or business organization.
 4. The relative tax exposure of the earnings of the business.
 5. The relative ease of raising capital in financial markets.

	Sole Proprietorship	Partnership	Corporation
Who owns the business?	The Manager	Partners	Stockholders
Are managers and owners separate?	No	No	Usually
What is the owner's liability?	Unlimited	Unlimited (exceptions)	Limited
Are owners & the business taxed separately?	No	No	Yes

C. Sole Proprietorship

1. The sole proprietor business blends the personal and business assets of the individual toward a business venture.
2. The sole proprietor incurs unlimited liability (exposure of personal assets to business obligations), limited life, business and personal income/assets are viewed by taxing authorities as one, and because of these risks, has considerable difficulty raising funds in financial markets.

D. Partnerships

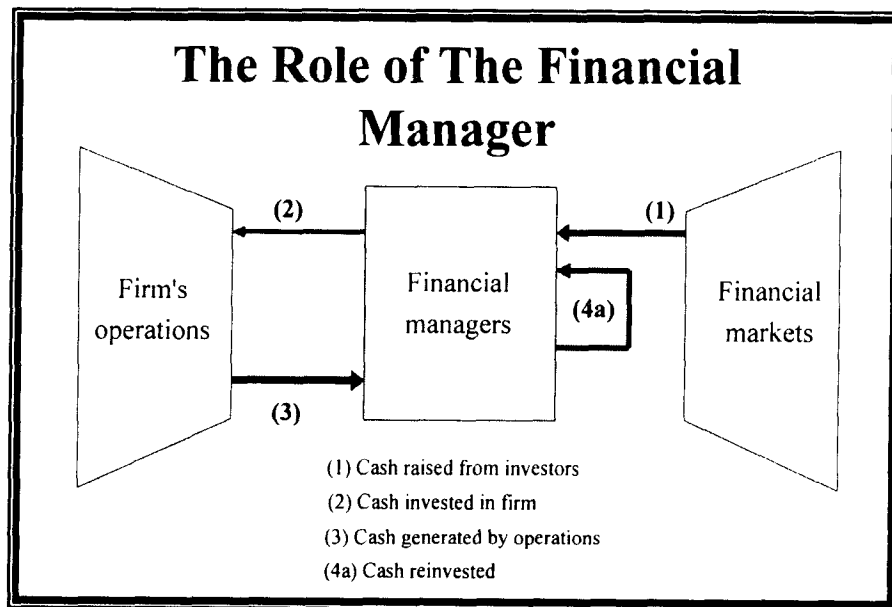
1. A partnership is an agreement of sole proprietors to pool their assets and talents in a business.
2. Like the sole proprietorship, partners are exposed to unlimited liability, limited life of the business, business income is combined with personal income for tax purposes; unlike a sole proprietorship, more than one person is involved, and thus, more capital may be raised in financial markets.

E. Corporations

1. A corporation is a legal entity separate from its owners called shareholders. The legal entity concept causes the corporation to differ considerably from the sole proprietorship and partnership: corporations are taxable entities, have perpetual lives, and are able to combine the capital of many shareholders, have greater organizational and legal costs, but are more likely to raise capital in financial markets.
2. Shareholder owners have limited liability, or their personal assets are free from the obligations of the corporations, and shareholders are more inclined to invest in riskier asset ventures to create value.
3. Shareholders vote for the board of directors, who in turn, appoint senior management, creating a separation of ownership and management of the business.
4. In a small, closely held business, the owner, board member and manager/worker may be the same person or family, while larger, corporations, with professional boards and management may have a broad base of shareholders or be known as public companies.

II. THE ROLE OF THE FINANCIAL MANAGER

- A. The primary functions of the financial manager or financial decision-maker is to raise cash in financial markets (the financing decision), to invest cash (capital budgeting decision), to generate cash from efficient operations, and to allocate cash flows generated for reinvestment or to pay cash dividends.
- B. Funds are raised in financial markets by selling financial assets or securities to investors (stocks and bonds) and investing cash in, in the case of manufacturing firms, in real assets, or physical assets used to produce goods and services.

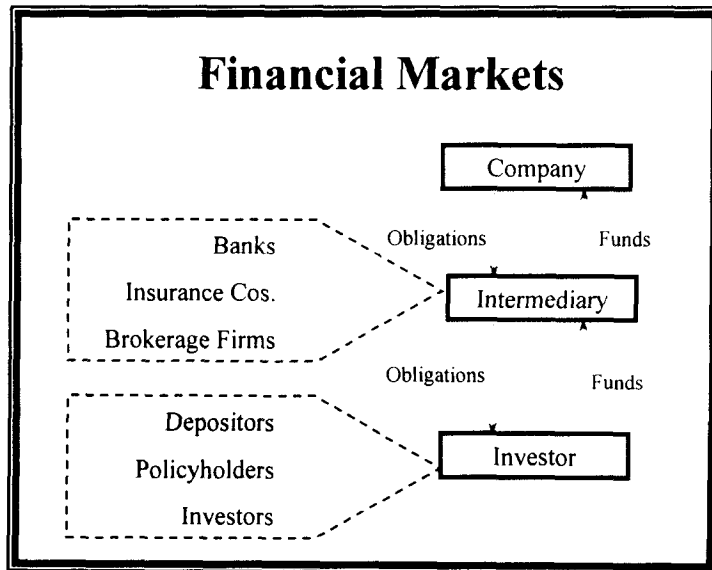


- C. The Capital Budgeting Decision
1. The decision as to the amount and which real assets to acquire is a capital budgeting decision.
 2. Where cash is invested affects the amount of future cash flows generated, the timing of those cash flows, and the variability or riskiness of those future cash flows and thus, the value or worth of the capital budgeting decisions.

III. FINANCIAL INSTITUTIONS AND MARKETS

A. Financial Markets

1. Financial markets enable businesses to raise funds, enable investors to invest in financial assets, change or trade their portfolio of financial assets, and provide a continuous evaluation or valuation of the firm's securities.

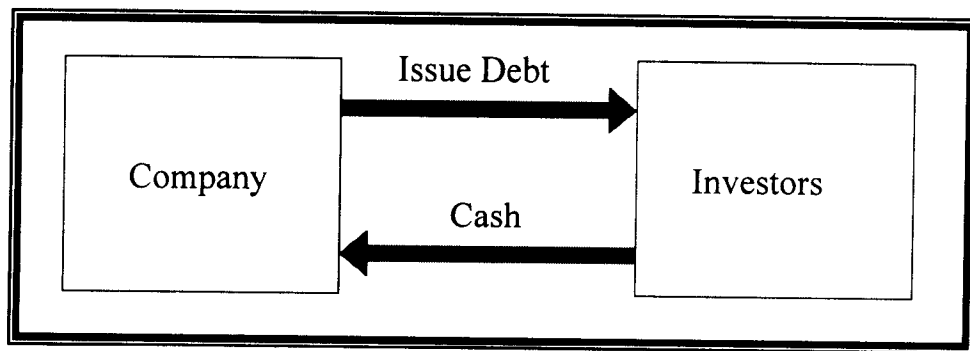


2. The initial sale of securities, where funds are acquired by the business, is called a primary issue or the securities are sold in the primary market.
3. Subsequent trading of the securities in the financial markets is said to trade on the secondary market, such as on stock exchanges or on the over-the-counter (OTC) market, where dealers trade inventories of securities held. Note: no new funds are raised by the firm in the secondary market; however, the firm's securities are evaluated or valued by the secondary market on a continuous basis.

B. Financial Institutions

1. A financial intermediary stands in between (is an intermediary) the saver/investor and borrower of funds, writing a **separate** contract for each.
2. Assets of financial institutions are financial assets such as loans and securities issued by borrowers; liabilities are contracts with investors or depositors.

3. Financial assets appear on two balance sheets as an asset (accounts receivable) and as a liability (accounts payable). Real assets, such as equipment, appear only on one balance sheet.
4. Besides functioning as an intermediary between lenders and borrowers, financial institutions:
 - a. Serve as the center of the payments system of checks and electronic payments.
 - b. Provide contract services permitting borrowers (loans) and savers (pension fund reserves) to transfer expenditures across time.
 - c. Pool various risks in a portfolio, thus reducing the total variability or risk of the stock portfolio or auto insured customers.



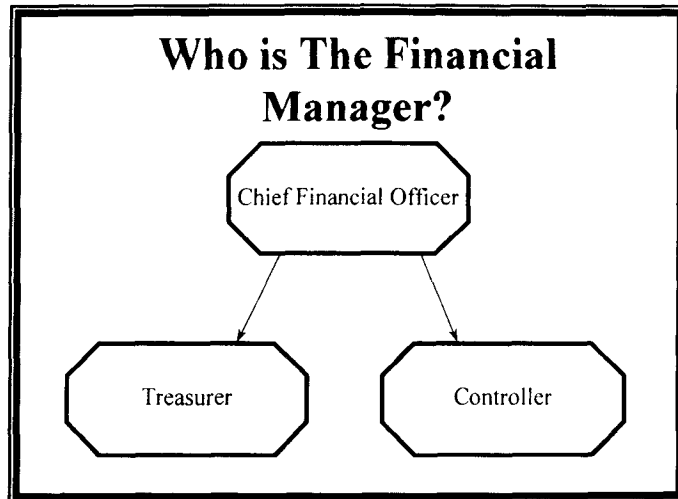
C. The Financing Decision

1. The maturity and type of funds raised in financial markets is the financing decision.
2. The selection and mix of long-term debt and equity securities in sold in capital markets determines the capital structure of the firm.

IV. WHO IS THE FINANCIAL MANAGER?

- A. The financial manager refers to anyone responsible for a significant corporate investment or financing decision. The term is more oriented to the decisions rather than a specific title or job position. This book studies a number of financial manager decision areas, several of which, have a significant impact on shareholder value.

- B. The classic financial manager titles are the treasurer and the controller, with the former more associated with financing, cash management, and financial market relationships and the latter associated with more traditional accounting



functions of financial statements, budgeting, and auditing. The chief financial officer, in larger firms, oversees the treasurer and controller and is involved in formulating corporate strategy and financial policy.

C. **Understanding Financial Markets and Institutions**

1. Knowing the players and procedures of financial markets is an important factor for a financial manager, influencing the cost of funds, terms, and other features of the fund raising activities.
2. The choice and investment returns of capital budgeting decisions affects the value of the securities issued by the business. Thus, investment and financing decisions are closely related.

V. **GOALS OF THE CORPORATION**

- A. Shareholders want managers to make decisions based upon which alternative will maximize the value of the shareholders' investment.
1. Making decisions that maximize focuses the financial manager on expected cash flows from investments, the timing of the cash flows, and the variability or riskiness of those cash flows.
 2. Other decision criterion, such as profit or market share maximization do not achieve value maximization. Making decisions based on profit maximization may focus on accounting income and not consider cash flow, is biased toward short run returns, perhaps ignoring the longer run implications of decisions, and ignores the relative riskiness of the alternatives.
- B. Ethics and Management Objectives -- shareholders and the public are concerned that managers operate within the law and maintain the reputation

and ethical good standing of the business. Fair and ethical relationships build and maintain long run value.

C. Do Managers Really Maximize Firm Value?

1. Shareholders are concerned that managers work for maximizing shareholders' wealth and not managers' wealth and lifestyle. Agency problems exist when managers, as agents of shareholders, have a conflict of interest with shareholders.
2. There are many diverse interests with a "stake" in well being of a business: managers, workers, suppliers, customers, government, shareholders, etc. These stakeholders' interest may conflict at times; managers must work to resolve these diverse interests.
3. Compensation plans motivate managers to work for their own best personal interest and the best interest of the shareholders, thus resolving some agency problems.
4. The board of directors, elected by shareholders, oversees and at times, interferes, if managers do not act in the best interest of shareholders.
5. Managers whose company does not perform for the best interest of shareholders are candidates for a takeover by a new investor group.
6. Every public company and its managers are scrutinized and monitored by stock analysts. This specialist monitoring tends to focus managers on value creation.

VI. TOPICS COVERED IN THIS BOOK -- Following the definition of the financial manager, this book first studies investment decision making, then financing decisions, then a variety of special issues. Please review the table of contents of your text.

COMPLETION QUESTIONS

1. Knowing which assets to buy involves a (*financing/investment*) decision.
2. Investment decisions are also called (*capital/cash*) budgeting decisions.
3. Knowing how to pay for assets is a (*finance/investment*) decision.
4. A business that is organized without partners or stockholders is called a _____.
5. A business that is owned by stockholders is called a _____.
6. Shareholders (*are/are not*) personally liable for obligations of the firm.
7. _____ assets are used to produce goods and services.
8. Financial assets are called (*tangible assets/securities*).
9. A firm may raise cash in the _____ markets.
10. The firm's mix of long-term financing determines its _____ structure.
11. Long-term financing is available in the _____ markets.
12. A new issue of securities is sold in the (*primary/secondary*) market.
13. The trading of existing securities among investors occurs in the (*capital/secondary*) market.
14. Shareholders want the firm to maximize its (*profits/market*) price.
15. In most large companies where managers are not major owners, a conflict of interest may occur. This is known as an (*agency/broker*) problem.
16. Anyone with a financial interest in the firm is known as a (*shareholder/stakeholder*).
17. The person in a company who is responsible for financing, cash management, and relationships with financial markets and institutions is called the (*controller/treasurer*).
18. The company officer who is responsible for budgeting, accounting and auditing is called the (*controller/treasurer*).