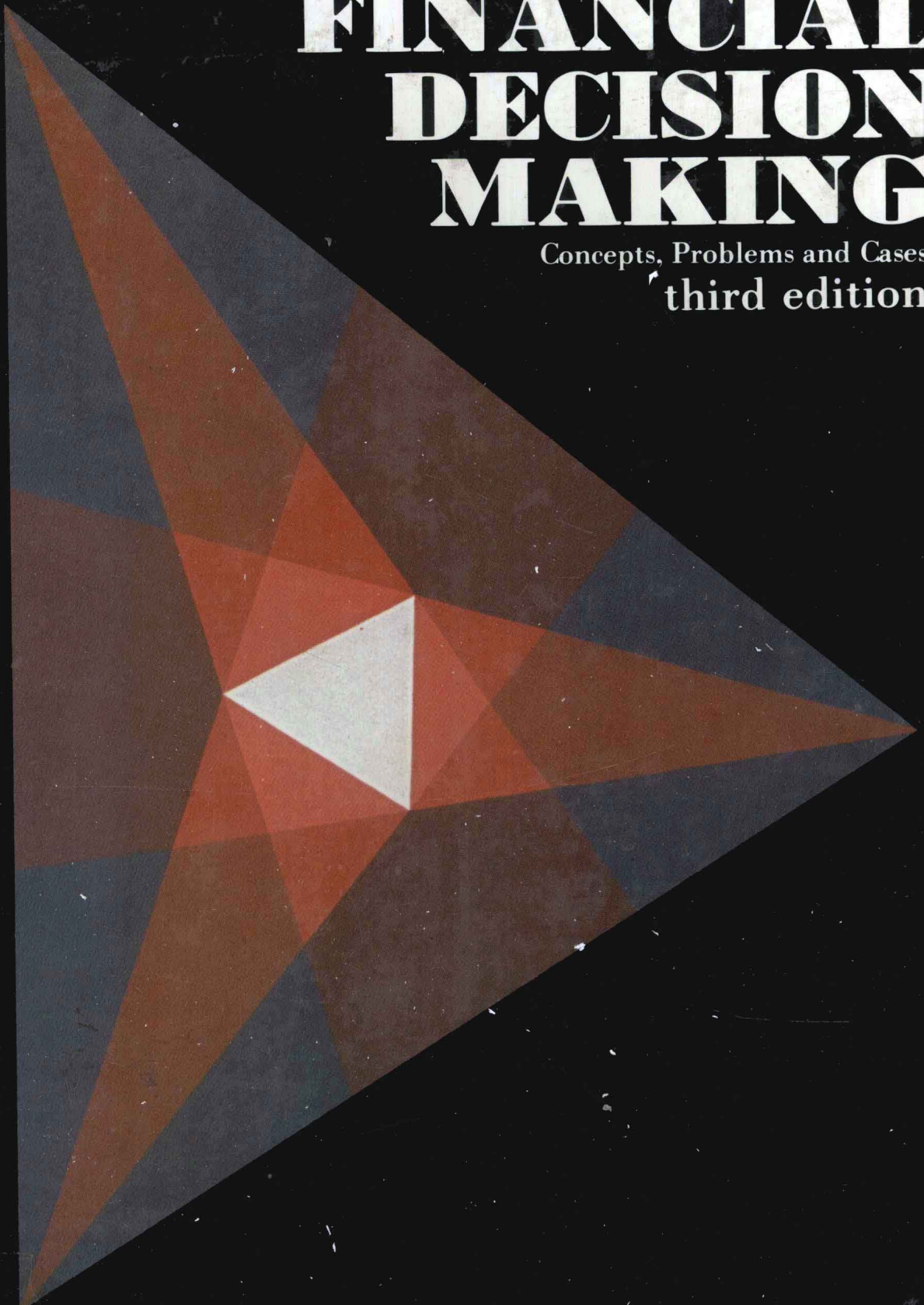


FINANCIAL DECISION MAKING

Concepts, Problems and Cases
third edition



John J. Hampton

THIRD EDITION

Financial Decision Making

Concepts, Problems, & Cases

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RESTON PUBLISHING COMPANY, INC.
A Prentice-Hall Company
Reston, Virginia

Library of Congress Cataloging in Publication Data

Hampton, John J.
Financial decision making.

1. Corporations—Finance. I. Title.
HG4026.H27 1983 658.1'5 82-21619
ISBN 0-8359-2012-7

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A Prentice-Hall Company
Reston, Virginia

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1 3 5 7 9 10 8 6 4 2

PRINTED IN THE UNITED STATES OF AMERICA

Preface

A third edition of a finance book published in 1983 is no small task. The availability of financial calculators and low-cost computing capability has changed the world forever for the financial manager. This edition of *Financial Decision Making* reflects those changes which, incidentally, are so substantial that we considered changing the name of the book and not making it a third edition at all.

The difficulty with calculators and computers is to ensure that the reader masters the basic principles of finance during the learning process. If a book moves directly to the techniques without adequately developing the logic, the reader may become a technician rather than an analyst or manager. Careful attention has been paid to balancing the new calculating tools with the fundamentals of finance.

The third edition of *Financial Decision Making* reflects several changes of note to the reader:

1. *A Return to Basics.* The book has been reorganized to emphasize the foundations of finance. A chapter to review accounting has been added for readers whose accounting skills have been diminished by the passage of time. A number of other changes have been incorporated to firmly implant the principles of the discipline.
2. *Expanded Working Capital Coverage.* The high cost of money and increasing uncertainty in the business environment in the 1980s has brought working capital management to the fore for financial managers. New techniques for handling cash, receivables, and inventory have been developed and implemented by companies. The enlarged coverage of cash and receivables management is designed to better prepare the reader for a career in finance.

3. *Full Integration of Financial Calculators.* If the reader understands the role of time value of money, a finance book may be deemed successful. But when that reader enters the financial area of a company, most of the calculations are actually done with computers or financial calculators. This edition continues to illustrate the principles in terms of formulas and tables but also includes a full coverage of time value techniques using calculators with built-in formulas for the time value of money.

In spite of the substantial changes, the third edition of *Financial Decision Making* continues its stress on the analytical aspects of problem solving. The chapters develop step-by-step approaches to guide the reader from basic concepts to increasingly sophisticated analyses. The materials have been revised in response to the comments of a number of readers and reviewers. I would like to convey my appreciation to the students and professors who were kind enough to offer constructive criticisms as well as suggestions for improvement.

Many people contributed to the refinements and changes in this edition. I particularly thank Henry Arnold, M. Cozzini, C. Wagner, and D. Condon. While space does not permit mentioning so many others, they deserve thanks if this edition better meets the reader's needs.

The Foreword to the first edition noted that "Very few things are as exciting as financial management in large organizations that are working to make it through the 1970s." Looking back, financial management almost seemed calm in the 1970s compared to the world of computers and variable interest rates in the 1980s. The challenges are more exciting than ever. As you read these pages, I hope you will see why.

BERNARDSVILLE, N.J.

J.J.H.

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PART I

The Foundation

Overview of Financial Management
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Overview of Financial Management

ENVIRONMENT OF THE FIRM

The modern industrial or service firm must conduct its business in a rapidly changing and highly competitive environment. A premium is placed on the ability to react quickly and correctly to constantly changing market conditions. Management must be concerned with all aspects of the firm's operations, including production of goods and delivery of services, sales and marketing activities, and supporting functions, such as personnel, training, and data processing. To handle these responsibilities, most firms make extensive use of financial data and reports.

The traditional role of the financial manager involved accurate record keeping, preparation of reports on the company's status and performance, and managing cash so that the firm could pay its bills on time. In this role, financial managers were called upon only when their specialty was needed. For example, when the firm ran short of cash, the financial manager was responsible for locating and obtaining additional funds.

Over time, the role of the financial manager has changed considerably. As of the early 1980s, the financial manager had transcended the traditional role of preparing reports and raising external funds. As businesses became larger and more complex, finance assumed the responsibility of dealing with the problems and decisions associated with managing the firm's assets. The financial manager is involved with the total amount of capital employed by the firm, with the allocation of funds to

differing projects and activities, and with the measurement of the results of each allocation. In this framework, the financial manager needs a broad range of skills, a strong grasp of the nature and scope of the finance function, and an understanding of how the firm operates in its particular marketplace.

Today's financial manager deals with a variety of developments that affect the firm's liquidity and profitability, including:

1. High financing costs identified with risk-bearing investments in a capital-intensive environment
2. Diversification by firms into differing businesses, markets, and product lines
3. High rates of inflation that significantly affect planning and forecasting the firm's operations
4. Emphasis on growth, with its requirements for new sources of funds and improved uses of existing funds
5. High rates of change in technology, with an accompanying need for expenditures on research and development
6. Speedy dissemination of information, employing high-speed computers and nationwide and worldwide networks for transmitting financial and operating data

As we enter the mid-1980s, financial management is an exciting and challenging area in managing large organizations. *Financial Decision Making* is primarily concerned with developing the skills needed to make correct decisions in a fast-moving and technologically complex corporate environment. It is organized with a focus on the problems facing the firm and will assist managers in answering pertinent questions dealing with the firm and its competitive performance. Examples of these issues are:

1. Which new proposals for employing capital should be accepted by the firm?
2. What steps can be taken to increase the value of the firm's common stock?
3. How much working capital will be needed to support the company's operations?
4. Where should the firm go to raise long-term capital, and how much will it cost?
5. Should the firm declare dividends on its common stock, and, if so, how large a dividend should be declared?

NATURE OF FINANCE

Finance is a specialized, functional field found under the general classification of business administration. The term *finance* can be defined as the management of the flows of money through an organization, whether it be a corporation, school, bank, or government agency. Finance concerns itself with the actual flows of money, as well as any claims against money.

Finance, or financial management, is an applied field of business administration. Principles developed by financial managers or borrowed from accounting, economics, or other fields are applied to the problems of managing money. Finance has its own theories and principles but is fundamentally concerned with applications.

As a business discipline, finance can be carefully differentiated from both accounting and economics. *Accounting* is concerned with the recording, reporting, and measuring of business transactions. Using a widely accepted double-entry bookkeeping system, accounting provides data on an organization's activities. The data may be historical, as in the case of last year's balance sheet, or they may be a forecast of future operations, as in the case of next year's operating budget. Finance uses the information provided by the accounting system to make decisions to help organizations achieve their objectives. Stated briefly, accounting is a data-collection process dealing with accurate recording and reporting; finance is a managerial or decision-making process.

Although accountants and financial managers perform different tasks, careers in the two areas frequently overlap. It is not unusual, for example, for a young person to study accounting and then take a position as an accountant. This may be in a corporate setting or with a firm of *certified public accountants*. In mastering the discipline, the accountant will become aware of the financial problems facing the firm or clients. Increasingly, the accountant will advise on courses of action contemplated by the firm. After a number of years, the accountant may have become a financial analyst or manager, no longer doing any accounting on a day-to-day basis. When studying finance, one should recognize its close, natural relationship, as well as the differences, with accounting.

In a similar manner, finance can also be differentiated from *economics*. Economics is concerned with analyzing the allocation of resources in a society. It studies transactions among people involving goods and services with or without the exchange of money. It is interested in supply and demand, costs and profits, and production and consumption. The broad

and highly developed field of economics is closely related to other social sciences, such as sociology, political science, and psychology. Economics may be conveniently divided into two major categories.

1. *Microeconomics* is basically a body of theory that studies how businesses make decisions about pricing and production in different kinds of markets and under differing assumptions. Also called *price theory* or *theory of the firm*, microeconomics tries to explain how rational persons make business decisions.
2. *Macroeconomics*, which is the study of the overall economic situation of a nation or group of nations, attempts to relate such factors as production and consumption into a meaningful view of national economies. It uses definitions such as *gross national product (GNP)* to measure the level of economic activity and has developed fairly sophisticated means for forecasting.

The field of finance rests heavily on the work of economists and uses many economic tools. It begins with the theories and assumptions developed in microeconomics and attempts to apply them in order to explain the workings of a modern business firm. It borrows forecasting and other models from macroeconomics and tests them against current situations in order to predict the results from varying courses of action considered by the firm. Finance is less concerned with theory than is economics. Financial analysts forecast for the individual firm; economists forecast for the industry and the overall level of economic activity.

FIELDS OF FINANCE

The academic discipline of financial management may be viewed as being made up of five specialized fields. In each field, the financial manager is dealing with the management of money and claims against money. Distinctions arise because different organizations pursue different objectives and do not face the same basic set of problems. There are five generally recognized areas of finance:

1. *Public Finance*. Federal, state, and local governments handle large sums of money, which are received from many sources and must be utilized in accordance with detailed policies and procedures. Governments have the authority to tax and otherwise raise funds and must dispense funds according to legislative and other limitations. Also, governments do not conduct their activities to

achieve the same goals as private organizations. Businesses try to make profits, whereas a government attempts to accomplish social or economic objectives. As a result of these and other differences, a specialized field of public finance has emerged to deal with governmental financial matters.

2. *Securities and Investment Analysis.* Purchases of stocks, bonds, and other securities involve analysis and techniques that are highly specialized. An investor must study the legal and investment characteristics of each type of security, measure the degree of risk involved with each investment, and forecast probable performance in the market. Usually this analysis occurs without the investor having any direct control over the firm or institution represented by the security. The field of investment analysis deals with these matters and attempts to develop techniques to help the investor reduce the risk and increase the likely return from the purchase of selected securities.
3. *International Finance.* When money crosses international boundaries, individuals, businesses, and governments must deal with special kinds of problems. Each country has its own national currency; thus, a citizen of the United States must convert dollars to French francs before being able to purchase goods or services in Paris. Most governments have imposed restrictions on the exchange of currencies, and these may affect business transactions. Governments may be facing financial difficulties, such as balance-of-payments deficits, or may be dealing with economic problems, such as inflation or high levels of unemployment. In these cases, they may require detailed accounting for the flows of funds or may allow only certain types of international transactions. The study of flows of funds between individuals and organizations across national borders and the development of methods of handling the flows more efficiently are properly within the scope of international finance.
4. *Institutional Finance.* A nation's economic structure contains a number of financial institutions, such as banks, insurance companies, pension funds, and credit unions. These institutions gather money from individual savers and accumulate sufficient amounts for efficient investment. Without these institutions, funds would not be readily available to finance business transactions, the purchase of private homes and commercial facilities, and the variety of other activities that require substantial amounts of capital. Institutional finance deals with issues of cap-