Financial Management

Fifth Edition

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FINANCIAL MANAGEMENT

5TH EDITION

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Preface

Although the fifth edition of *Financial Management* has been extensively restructured and rewritten, the basic objective remains the same: we intend to involve the reader in the basic decisions faced by financial managers today. For this purpose we provide a theoretical or conceptual framework—models, if you will—that a financial manager can use in making decisions. The financial manager must understand what that world is like and how it is changing, and *why* institutions and financial agreements exist as they do, in order to make sound decisions in a world changing in response to such factors as inflation, deregulation of financial institutions and markets, and fluctuating interest and exchange rates.

We think that financial management is fun. Markets work. There are reasons for what we observe in the world of finance, that make one decision better than another. Financial management need not be dry and oppressive. To the extent that this book is both analytical and stimulating, it will have achieved its objective.

The book is designed for those who are receiving their first exposure to financial management. It is intended for executive programs for non-financial executives and for the introductory course in finance in colleges and universities. It can serve as a basis for a one-semester course or, with the addition of cases and outside readings, for a two-semester course.

In contrast to the four earlier editions, this book is a joint effort. There are two theories on this: (1) Too many cooks spoil the broth, or (2) Two heads are better than one. My collaboration with Ron Melicher provides empirical evidence to support the latter theory. Our thinking and writing styles meshed without jarring, and he has made extremely valuable contributions. Also, he got it done—a task that has eluded me for eleven years. We are also indebted to William Folks for his excellent chapter on international finance.

Changes in the Fifth Edition

There have been many substantitive and constructive changes in this edition. They reflect not only the development and testing of new theories, but the marked changes in the financial environment since the fourth edition was written.

All of the tables, charts, and financial data have been brought up to date, as well as the references provided with each chapter. Examples of financial practices have been made current.

New, and, at times, more challenging problems and questions have been provided with each chapter.

There has been a considerable restructuring of the material, in terms of improved placement of chapters and materials within chapters. The discussion of margin, turnover, and earning power (operating profit return) has been moved to Chapter 4, where it is appropriately integrated with the discussion of financial models and ratios. The chapter on financial planning and budgeting has been shifted forward, where it logically follows the chapter on financial analysis and leads into the chapters on working capital management. The discussion of short-term financing now follows the section on working capital management, so that we deal with current assets and current liabilities in direct sequence. The material on the valuation of business firms has been moved from near the end of the book into the discussion of cost of capital and maximization of the market value of the firm. The chapter on intermediate-term financing has been shifted out of the section on short-term financing and moved back, so that it now follows (as it should) the discussion of financial structure and money and capital markets. Since leases are another form of intermediate-term financing, the analysis of leases is now included in this chapter. Material on the accelerated cost recovery system provided in the Economic Recovery Tax Act of 1981 has been included.

Two new chapters have been added. Since the discussion of the time value of money was rather cryptic in the fourth edition, it now has its own home in Chapter 11. The added room permits discussion of future values of single investments and annuities, compounding of interest over various time intervals, and the impact of accelerated depreciation methods on the time value of cash flows. Also, there is an entirely new chapter on international corporate finance, a field of growing importance to most financial managers. This chapter covers exchange rates and their influence on financial decisions, forward contracts, management of corporate foreign exchange risk, and international financing and management of funds.

Several theories or concepts not present in the fourth edition are introduced and carried through major sections of the book to integrate the analysis. The concept of the cash operating cycle, or time-to-conversion, is introduced in the discussion of cash management (Chapter 6) and then carried through the analysis of the management of accounts receivable, inventory, and trade credit. The principles of total risk (variability) and systematic risk are introduced in Chapter 3 and implemented, along with the capital asset pricing model, in the chapters on capital investment and cost of capital. Other topics or concepts new to this edition are the various inventory accounting methods relevant to our inflationary economy, the term structure of interest rates and the supporting theories, the risk premium structure of interest rates, and warrants and listed options.

More current techniques of financial management are introduced; for instance, the percent-of-sales method is introduced as another means of estimating balance sheet items. The discussion of management of accounts receivable is improved by introduction of credit scoring, and the monitoring of accounts receivable by use of the receivable balance pattern or collection pattern.

Presentation of other material has been expanded and clarified. More attention is given to the macroeconomic environment of the firm, including the money and capital markets, tax liabilities, and the investment tax credit. There has been a considerable expansion of the section on the techniques that may be used to adjust for differences in risk among capital budgeting projects, including the risk-adjusted discount rate and—new to this edition—the certainty equivalent technique and decision-tree analysis. The forms of leases, their income tax implications, and the appropriate analysis of the borrow-purchase vs. lease decision are presented in much greater detail and with more care. The trade off between dividends and retained earnings is discussed more fully, with more explicit attention to the underlying theory.

As a teaching technique case examples are carried forward from chapter to chapter. For example, Tracy Products Company is used in Chapters 6 through Chapter 9 as a continuing illustration of working capital management and short-term financing.

Whereas in earlier editions, entry into the material of each chapter was at times abrupt, more attention is given to setting a framework for the analysis, so that the reader has a better grasp of the issues and the decision-making apparatus to be presented.

Ancillary Materials

The new edition is accompanied by a study guide written by George Aragon of Boston College, and a test manual written by Roger Huang of Purdue University.

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The reception accorded previous editions has been most gratifying. We strive to make this edition as appealing to our many financial management

colleagues and the students they are teaching. We encourage readers to bring any errors and deficiencies to our attention. We can be reached by writing to us at our respective universities.

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INTRODUCTION

PART

I

1 The Role of the Financial Manager

This book is written from the viewpoint of the financial manager—the person who has a major role in planning a business firm's needs and uses for funds, raising the necessary funds, and then putting those funds to effective use. Nonprofit organizations have many of the same types of financial problems that business firms have. Thus, although we will concentrate on the financial management of business firms, most of the concepts and procedures can be applied to nonprofit organizations, such as governments, hospitals and schools.

Our objective is to enable the financial manager to make sound decisions. This requires a knowledge of the "real world" in which he or she operates. That is, some understanding of the macroeconomic environment and certain financial institutions, together with the instruments and securities available in the financial markets, is necessary. Within this framework, we will examine the ways in which financial managers prepare financial plans, make decisions to acquire and manage assets, and raise the funds necessary to carry out the plans and finance the assets.

THE ROLE OF FINANCE IN THE ECONOMY

Ours is a free enterprise, capitalistic economy, sometimes referred to as a "market" economy. What does this mean? Most importantly, it means that resources—materials, labor, capital—are allocated in accordance with a free price system. Restricted supplies of resources are more or less automatically rationed among users through the price system. As the price of steak rises, some consumers reluctantly drop out of the steak market; a decline in price will encourage additional purchasers. Just as there are markets for wheat, shoes, and steaks, so there are markets for short- and long-term debts and equities (common and preferred stocks). Through these financial markets, called the *money market* and the *capital markets*—funds are allocated by a free price system.[1] Efficient operation of these financial markets is important to the success of our economy.

Of equal importance to our economy is the existence of an efficient savings and investment process. Individuals, business firms and other organizations save when current income exceeds current expenditures (including income tax payments). Governments also can save when their tax revenues exceed expenditures. However, since individuals and other savers do not always directly invest their savings in business firms and other investments (for example, home mortgages), our financial system has developed a network of financial institutions designed to channel savings into investments. For example, individuals deposit savings in commercial banks which, in turn, invest these savings by making loans to businesses. Savings and loan associations invest the savings deposited by individuals in real estate mortgages. Individuals also save by purchasing life and fire insurance. This permits these insurance companies to invest in the stocks and bonds issued by business firms.

The allocation of resources in our economy is automatic, in contrast to other economic systems where some governmental authority decides what amounts of various products and services will be made available. Under our system, consumers make their decisions to buy more or less of various products and services largely independently of one another. Similarly, an automobile manufacturer decides on a production schedule without knowing what the soft drink or computer manufacturer plans, although they are also competing for consumers' dollars. These decisions influence the decisions of all other products and consumers as well. Ultimately, the interactions of products and consumers establish prices in the marketplace, and these prices, in turn, influence future decisions to produce and consume in a "market" economy.

FINANCE IN A BUSINESS ORGANIZATION

The products and services a firm produces and the level of its operations are largely determined by the prices (costs) of the factors (land, labor, and capital) used in producing the goods and services, and by the prices consumers are willing to pay—or by the quantity consumers are willing to buy at the prices set by the firm. In contrast, the decision-making process within the firm is fragmented and removed from direct contact with the price system.

First, the large scale and complexity of most business organizations has forced a division of the managerial functions. Decision-making areas are often

1. It is common practice to view the *money market* in terms of the origination and trading of financial instruments and securities with maturities of one year or less. In contrast, the *capital markets* involve securities and instruments with lives that are greater than one year, such as bonds, stocks, and real estate mortgages.

marked out according to the functional nature of the decision—for example, manufacturing or production, personnel, marketing or sales, and finance. Second, allocation of resources within the firm is not handled "automatically" through a free price system, as in the market economy. Instead, the allocation must be made by orders emanating from the chief executive officer (CEO) or president, in response to advice from the various functional specialists.

Organizational Structure

The fragmentation of decision making within a firm has important implications for the training and development of those individuals who are to operate the firm. Exhibit 1-1 represents a partial organization chart for a typical manufacturing firm. Vice-presidents for sales, personnel, manufacturing and finance are identified, along with the firm's secretary. A firm's organizational structure serves to limit the decision-making areas of each senior officer. However, the nature of the decisions involved are frequently not as neatly categorized as an organizational chart suggests. For example, deciding whether to allocate funds to a new machine or to more sales personnel involves the areas of production and marketing as well as finance. The multifunctional nature of the decisions faced means that each of the senior officers must have a basic understanding of the other areas of management. In other words, the sales manager, production manager, and others should have some familiarity with the principles of financial management. Similarly, the financial manager should reciprocate by attaining some basic knowledge of the other fields.

EXHIBIT 1-1. Partial Organization Chart for a Typical Manufacturing Firm